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**education for
health
administration: a
reconceptualization**

b. jon jaeger, ph.d.

**A 10
perspectives**

The Center for Health Administration Studies conducts a program of research and education in the social and economic aspects of the health care system.

The Center, a part of the Graduate School of Business of the University of Chicago, has as its purposes, to expand basic research in health and medical care, to communicate this basic research to public and private agencies, to train practitioners in health administration at the Master's level and to prepare selected individuals at the doctoral level for research and teaching in health services.

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FOREWORD

"THE PRESENT supply of hospital administrators and the kind of training available for them is of concern to laymen and women as well as to physicians and professional hospital workers throughout the country." So wrote Michael M. Davis in 1929. Since that time millions of words have been written about and thousands of hours spent in the discussion of the appropriate, most meaningful, most effective method of training administrators for health enterprises. Yet the questions of the nature of the educational process, the setting for the activity, and even the content to be taught remains a matter of debate.

In this study, the author describes the growth, development, and maturation of the field of education for health administration and evaluates the strengths and weaknesses of the current state of affairs. Then, drawing on his background in both academic and practical settings, he proposes a series of curricula, at the undergraduate, graduate, and doctoral levels, which, he argues, will best train administrators of health care institutions for both present and future contributions to the improved provision of health care.

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FOREWORD

This monograph represents the tenth in the Perspectives Series published by the Center for Health Administration Studies. Its purpose is to broadly disseminate not only results of research projects, but also to provide a vehicle for the extrapolations and opinions of authors concerning implications of their investigations. *Education for Health Administration: A Reconceptualization* presents the thoughts of the author based on his experience in and observations of the field. As such, it constitutes a contribution to knowledge and, more importantly, will serve as a basis for subsequent (and, one hopes, productive) discussion of the issues involved.

J. JOEL MAY

November 14, 1972

EDUCATION FOR HEALTH ADMINISTRATION: A RECONCEPTUALIZATION*

INTRODUCTION

WHILE THIS presentation is intended to point out major changes that are occurring in the performance of the profession of health administration, relating these to specific curricula issues in the education of individuals entering the field, its ultimate purpose is more general. It is hoped, indeed intended, that it will provoke thoughtful debate on the current status and future direction that such education must take in order to provide the best possible preparation for our future colleagues. And although various commentaries on this subject have already appeared, for a healthy profession it is essential that such dialogue continue.¹ The result to be expected from this type of reassessment is improvement in the quality and relevance of the educational process, thereby enhancing the performance of the profession itself and ultimately the value of the profession's contribution to our society.

I

Since its inception almost fifty years ago, education for hospital administration has undergone an amazing transformation. Originally a highly pragmatic, situationally oriented instruction format, course curricula by successive stages have now become increasingly theoretical with increasing reliance upon empirical rather than intuitive

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¹ Among the more recent are a series of articles contained in the June, 1970 issue of *American Journal of Public Health* (v. LX); and the entire Fall, 1967 issue of *Hospital Administration* (v. XII).

decision methods. And while the advantages attributed to older approaches are still wistfully remembered, the forces that have brought about the current orientation are rooted in the basic changes occurring in our twentieth century society. Resistance to these changes is no more possible than is resistance to the shifts occurring in the role of our entire system of health care and, indeed, our whole social structure.

It is the very existence of these changes that compels the profession, and in particular that sector engaged in education of new entrants into the field, to reassess its efforts periodically. This process has been accomplished in the past and resulted in three significant shifts in emphasis and direction. For purposes of perspective, the growth of education in this field, and the impact of these shifts, will be briefly traced.

Although earlier papers calling attention to the need for specific training for the field are recorded,² the first significant report on the subject was released in 1922 by the Committee on the Training of Hospital Executives.³ However, it is a report by Davis that is generally credited with the successful initiation of education for the field.⁴ As a result of these various efforts, successful programs specifically designed to provide educational preparation for this emerging profession appeared in 1930 at Duke University and in 1934 at the University of Chicago. Both graduate level programs, the former awarded a certificate, the latter a Master's degree. One other program was started before the end of World War II.

The end of the War marked the end of the initial, legitimizing period in health administration education. With the potential of this education activity now fully recognized, a considerable number of new programs emerged. A consistency of philosophy and procedures appeared during this second stage of expansion as a result of the influence of the Prall report in 1948 and the Olsen report in 1954.⁵

Throughout both of these two periods great emphasis was placed

on the art of administration, most usually in terms of the hospital setting, and all programs incorporated a residency at least one full year in length. Then, at the beginning of the 1960's a new stage emerged as programs began to shift to full-time teaching on campus and the partial or complete elimination of the residency requirement. This change was brought about by the need to incorporate an increasing amount of methodological and behavioral material into course curricula.⁶ The art of administration was being forced to yield its dominating influence on core content to new material arising from the developments in behavioral science and quantitative analysis.

The contention of this paper is that still another stage is needed to make our graduate education programs coincide with the changes in our society. This new stage is one that must complete the transformation brought about by the incorporation of behavioral and quantitative methods and yet reinstate the importance of qualitative instruction. The nature of this synthesis of the new with the old is more than just another change; more accurately it is a reconceptualization of the entire process of formal education for the profession.

However, it is not necessary to attempt to analyze the entire set of changes occurring throughout our society in order to determine the best approach to professional education. Changes within the profession itself have closely paralleled the changes of our larger society. For the profession must be responsive to these societal changes to survive, that is, to prevent increasing encroachment into its domain of expertise by other existing or emerging professions. Even a cursory observation of the performance of the profession suggests that health administration has more than just survived, it has slowly increased its own jurisdictional responsibility within the health field. Therefore, the essential question becomes one of assessing how the profession is likely to maintain this successful pattern of increasing status and responsibility.

² Ira A. Kipnis, *A Venture Forward*, Chicago: American College of Hospital Administrators, 1955.

³ Willard C. Rappelye, *Report of the Committee on the Training of Hospital Executives*, Chicago: The Committee, 1922.

⁴ Michael M. Davis, *Hospital Administration: A Career*, New York: [Rockefeller Foundation], 1929.

⁵ Joint Commission on Education, *The College Curriculum in Hospital Administration*, Chicago: Physicians' Record Company, 1948; and The Commission on

University Education in Hospital Administration, *University Education for Administration in Hospitals*, Washington, D.C.: American Council on Education, 1954.

⁶ E.g.: George Bugbee, "New Curriculum Developments: A Two-Year Program," *Hospital Administration*, XII (Fall, 1967); and Gerhard Hartman, "Growth and Development in Graduate Education: Iowa's New Design," *The Journal of Medical Education*, CXXXVIII (May, 1963).

Anticipating how health administrators will be expected to conduct their professional role, then, is essential to knowing what structure the educational process should assume in order to maximize its contribution to those beginning a career in the field. To gain insight into this question of professional role it is necessary to look at the margins of role performance. For it is at the margins that one is most likely to see the kind and direction of changes that are taking place. The nature of these changes, together with the more stable areas of continuing performance indicate how the profession, as a whole, is likely to be conducting itself in the future. Indeed, as one examines the profession's role at its margins, a number of highly significant events are taking place. It is these events that will have major impact on the future of the profession and, therefore, must be incorporated into educational programs designed to prepare individuals for entering the field.

Changes in Professional Activities

What, then, are these events that can be expected to play such an important role in the future of the profession? Basically there are two, although these are accompanied by a series of closely related changes. These two are both activities of consolidation, or more correctly, integration. For both horizontal and vertical integration is beginning to take place within the health services establishment. In some locations only one or the other is occurring at the present time, but in other areas both are occurring simultaneously. Both are occurring as a result of the economic efficiencies that they can promote. In the case of horizontal integration, social efficiency is also a principal objective as patients can receive the health care they require more easily through an integrated series of services than when they are independent and unconnected. And as pressure from the public, third-parties, and government increases, both forms of integration will continue to grow. These patterns of integration will most likely be the dominating characteristics of change in the field over the next generation. The multiplicity of forms taken by these patterns emphasizes their common importance and dispels any alleged uniqueness.

Examples of the integrative process have been around for a number of years. They range from the obvious, such as the Kaiser health

program, to the less obvious, but equally relevant approaches adopted by groups such as Mayo, Ochsner, HIP, GHA, San Joaquin County Medical Foundation, and a host of others. Mergers, shared services and outreach services also represent additional forms of the integrative process. Many of these differ enormously from one another in size and complexity, but on reflection these differences are only of degree, not of kind. They resemble one another far more than they resemble the older patterns of unorganized collections of individualized units with the patient shuttling back and forth to obtain necessary services as best he can.

Contrary to much popular opinion, the movement towards either kind of integration did not occur as a result of political programs such as Comprehensive Health Planning, Regional Medical Programs or Medicare, since almost all of the above examples predate these programs. Similarly, newer examples such as the expansion of services, the increasing number of mergers and use of shared services are developing spontaneously in response to needs that are evident to the organizations and communities involved. Certainly the movement received much favorable publicity and encouragement from governmental programs such as the above. But they primarily served to bring to the forefront of public and professional attention a condition that had long been accepted by most economists—health services was an area where efficiency and effectiveness could be promoted through integration in both its horizontal and vertical forms.

In 1970 two ideas took shape that acknowledged and reinforced the need for integration. One of these was the development of the concept of the Health Care Corporation by the American Hospital Association.⁷ The other was the emergence of the concept of the Health Maintenance Organization, an idea officially promoted by the federal government.⁸ The essential conclusion represented by both concepts is that the process of integration must take place if the health services system is to meet the performance requirements

⁷ Special Committee on the Provision of Health Services, *Ameriplan: A Proposal for the Delivery and Financing of Health Services in the United States*, Chicago: American Hospital Association, 1970.

⁸ Department of Health, Education and Welfare, *Towards A Comprehensive Health Policy for the 1970's*, Washington, D.C.: U.S. Government Printing Office, May, 1971.

demanding by the nation. It is also highly significant that the manner in which this was to be accomplished and the structural form that was to be developed were both left purposely flexible in these two concepts. This flexibility is significant because it indicates that the essential thing is that integration takes place, not that a unique system of integration must be developed.⁹

This growing movement towards integration and the emergence of more complex forms of organization will reinforce and promote other trends that also have been occurring within the profession. Foremost among these, and the second major trend, is the increasing specialization of effort that is taking place just below the top executive level. More and more health organizations now have among their administrative staffs individuals who concentrate their attention on matters of either financial management, manpower management, planning management, or information management. Indeed, if the organization is large enough it will also employ specialists in a host of related areas, legal affairs, computer services, industrial engineering, and community relations, to name but a few. However, this latter group represents a different set of professions that are applying their expertise to the problems of health services delivery. Because they do represent "outside" professions, they are mentioned simply because the health administrator, to be effective, must know how to communicate with them and utilize their skills in his organization. Should they choose to change professions and become health administrators, the general arguments of this paper then would also apply to them.

Thus, four major areas of concentration within health administration are accompanying the evolving patterns of health services delivery. Financial management was perhaps the first to be recognized as an area that needed full time attention. Certainly it is now accepted that health care is "big" business. With over 70 billion dollars being channeled into what is now one of America's largest industries, financial decisions are critical in achieving the efficient and effective use of this money on all levels of the health care system. Further-

more, for the first time in their history, providers of health services are now being expected to generate their own capital. This is a dramatic change from the time when government and philanthropy provided almost all the capital that was required. This shift to self-generation of capital has increased the fiscal problems of health services providers enormously. One need only reflect on the current expectation that a HMO may require up to ten years to achieve a break-even financial position in order to understand the dimensions now surrounding financial management within the field.

Similarly, the importance of effectively managing the manpower within health services organizations has taken on new dimensions not anticipated even a decade ago. Health services organizations have been and are expected to remain highly labor intensive. Depending on the purpose of the organization and methods of accounting, one-half to nine-tenths of its expenditures are allocated to wages and salaries. But events within the past few years have compounded the problems associated with this industry characteristic. Government has now included health organizations under almost all labor laws and regulations. Unique health occupations continue to emerge in growing numbers. And, perhaps most importantly, unionization is spreading throughout the industry. Thus, extensive knowledge and skill is now necessary to effectively manage the contribution of all personnel within this new milieu.

Planning as an area of importance was first given official recognition with the passage of the Hill-Burton Act. Following that legislation, internal institutional planning began to become increasingly sophisticated as numerous facilities were rebuilt, expanded, or modernized to accommodate new ideas and technologies. With few exceptions, however, planning in its broader sense was not given much attention until the mid-1960's. Such planning is a critical element in the development of the integrative process described earlier. Coupled with the more stringent dimensions that accompany the expenditure of self-generated capital, difficult but carefully formulated decisions will be necessary to insure the best combination and environment for the use of available resources. Such planning will require a mixture of knowledge of both the behavioral and technical conditions that must be satisfied to accomplish effective change. It

⁹ For an interesting insight into this trend, see: David B. Starkweather, "Beyond the Semantics of Multihospital Aggregations," *Health Services Research*, VII (Spring, 1972).

also can be expected to produce a new consciousness of the ultimate purpose of health care organizations that is not always encountered within the health system today.

And finally, the process of integration will vastly expand both the availability of, and need for, information concerning the operation of the organization. Technology has provided a tremendous number of methods of communication, but it has also posed new problems. The costs associated with the acquisition, processing, evaluation and use of information are paralleling the growth in sophistication of these methods of communication. Constant attention and review by management is necessary in order to insure that efficient and effective transmission of information takes place. Sheer growth in size of health services organizations can be expected to compound the complexity of adequate information flow in all directions: up, down, and across the organization, as well as to and from its environment. Thus, the management of information will take on an increasingly important role in the future performance of health administration.

The integration of health services is also likely to intensify the relationship between social policy and health care. Again, Hill-Burton provided the first national recognition of this relationship as applied to personal health services. Together with the long acknowledged linkage of public health activities, this meant that the entire health care field was beginning to be a central element in the process of social policy evolution. The result of this new relationship is that the economic, political, social and cultural parameters of health care and its delivery are receiving a scale of attention that was virtually unknown a decade ago. New social forces are at work that directly affect the future of health services. The health administrator must not only be aware of these forces, but must understand them and be able to adapt the operation of his organization in response to them. Insufficient ability to predict and prepare for the changes implied by these forces means that the administrator will become captive to them; they will control his opportunity to manage effectively his organization.

The impact of these emerging social forces and their impact on evolving social policy requires that the health administrator have a broad working knowledge of the history and interplay of social thought. The social sciences are at best imperfect descriptions of the

real world, but they do contribute immeasurably to the understanding and appreciation of the complexities involved in developing and assessing decision alternatives and their consequences. By any standard, the proportion of social parameters surrounding these decisions within the context of health care is already large and is likely to increase. Therefore, the profession can be expected to grapple increasingly with the complex issues involved in the formulation and implementation of our evolving social policies. In a real sense, this professional contribution may represent the most challenging area confronting the future practice of health administration.

Related to the intensifying relationship of the provision of health services to social policy is an uncomfortable observation. Not a few members of the profession have reacted to the changes occurring around them by focusing on the technical considerations of their activities to the seemingly total exclusion of the human considerations that are involved. Unfortunately this narrow view is currently promoted within much of our educational establishment itself. Not wishing or unable to cope with the "soft" dimensions of human requirements, many faculty members have resorted to aggrandizing the easier (though not implying "simple") solution of increasing greater abstraction and its related quantitative approximations. Little attention is given to the application of these ideas, and therefore their relevance. It is not surprising that those in the field who do not incorporate a recognition of the human element and its frailties into their thinking are often bewildered at the lack of success of their theoretically correct solutions. Such unsuccessful solutions are, in fact, incomplete because they do omit relevant social factors. Above all else, the organization and delivery of health services is a "people" business. Decisions in this field must account for the emotions and attitudes of participants, patients and the public, the parties to whom the results of these same decisions ultimately are accountable.

The professional health administrator must be more than a highly efficient decision-maker, he must be able to effectively identify relevant problems and implement their solutions. To do this, the attitudes, preferences and needs of the participants, patients and the public must be constantly interwoven into his decisions on organizational matters. In so doing, the intuitive decision rather than the "scientific" one will frequently emerge as the most effective. Certainly

an ability to utilize both kinds of decision-making is extremely important, but neither is sufficient without the other. The good health administrator of today and the future is that individual who is skill-full in the recognition and incorporation of the relevant aspects of both the hard and soft areas of knowledge to the organizational problems he encounters.

The first part of the presentation has described major trends occurring within the profession. In the second part, specific implications of these trends are explored with regard to their inclusion in formal educational training for the field.

II

At this point the constant use of a generic title for the practitioner of administration in health organizations has been evident. This title, "health administrator," is a reflection of the major theme of this paper. The process of integration as well as the other trends now occurring within the field makes the desirability of categorical programs in health administration obsolete. Many program titles have emerged over the years because of the acknowledgement of specialized interests: Hospital Administration, Medical Organization, Public Health Administration, Health Services Administration and Comprehensive Health Planning. But the essential characteristic of integration is that it requires administrators who are conversant with the needs and requirements of all of these categorical areas.

The older categorical perspective was based on the conclusion that health care delivery is really a grouping of specific systems that only loosely relate to one another. In contrast, integration implies that these groupings are really sub-systems of a more general system; components that fit tightly together, frequently with considerable overlap in objectives and functions. This perspective sees the process of integration as a means of streamlining organizational structure and increasing the effectiveness of its functions. Thus the concept of a single unified system in which a given organization may perform a varying range of the total possible functions takes precedence over the concept of multiple systems, each with its own claim to a fixed range of unique functions.

Rather than ignoring the conceptualizations that contributed to the development of the categorical approaches, however, a holistic

view of the health system provides within itself the resolution of once conflicting objectives. For when these older conceptualizations are decomposed and then structured differently, it becomes evident that there are two complimentary fields in health administration. The first of these is health services organization and is concerned with the study and implications of alternative systems of delivering health services to populations and individuals. The other is health services management, a field that focuses on the implementation and management of alternative systems of delivering health services to populations and individuals. Both perspectives are essential to health administration; each is simply a different dimension of the same system. Together they have a synergistic effect on understanding the purpose and operation of health services in our society.¹⁰

This conceptual difference with regard to the organization and management of health services delivery has an enormous impact on the manner in which education within the field should be conducted. Attempts to incorporate in part this conceptual approach have been reported,¹¹ but to date it remains largely ignored in most program formats. This unfortunate state is the result of vested interests, conservatism and, most importantly, a misunderstanding of what is occurring in the changing role of the health administrator. Vested interests relate to the manner in which existing faculty were trained, their ideological bias, their reluctance to reformulate material that they have spent years in developing and polishing, and the challenge to intellectual egotism certain to accompany the expansion and broadening of the educational base. Conservatism relates to the reluctance of universities to make available the resources required to encourage a strong and viable faculty of the size and breadth necessary to ensure adequate teaching and research. Many existing programs have too few faculty to carry out properly their present responsibilities, let alone incorporate the added functions which a systems orientation requires. Concomitantly, most programs have had to exist almost exclusively on "soft" (external) money budgets while university administrations channeled their "hard" (internal)

¹⁰ See also: Alexander Cloner, "The Influence of Systems Theory in Educating Health Services Administrators. The University of Southern California Experience," *American Journal of Public Health*, LX (June, 1970).

¹¹ Thomas P. Weil, *et al.*, "An Approach to Training Health Managers: The University of Missouri Program," *Hospital Administration*, Fall, 1967.

funding into other educational areas. And misunderstanding of the changing professional role is echoed throughout this paper. Altering this state of affairs is likely to be unsettling, and for some traumatic, as faculties and universities adjust to the changes that are absolutely required to meet the needs of their students and the profession.

How then is an integrated, holistic approach to be incorporated into the educational format of health administration? Two major adaptations must occur, each of which will be developed at length below. The first of these is the reorganization of pertinent faculty resources. The second is the reorganization of the material and methods of instruction.

Having described the need for a unified, systems approach to the teaching of health administration that covers the full range of health care activities, it seems necessary to examine the frequently raised question: "is health administration a unique area of study?" Fifteen reasons supporting an affirmative answer to this question have recently been described.¹² Each individual who reviews these reasons may assign varying weights of importance to the specific arguments, but the final sum of these weights will still support the separate identity of this educational effort.

Because of the professional, rather than academic, orientation of this field, however, a significant amount of course work can best be provided in university divisions other than one specifically oriented toward health administration. The success of a program in developing a meaningful interplay between these outside courses and those within its own division is perhaps the most important problem that constantly will confront program directors. The easier solutions of in-house provision of these courses, or alternatively sending students to other divisions without attempting to insure that a meaningful relationship to health administration is established, result in a sub-optimal education for the student. The more difficult solution of developing close-divisional working relationships will always provide the best educational results. It will minimize redundancy and meaningless effort while maximizing opportunities for cross-divisional interplay of student and faculty knowledge and research.

A major implication follows from establishing health administra-

tion as a unique field of study. That implication is the structuring of the program into a departmental form of organization. Departments within university settings have traditionally implied a high level of budgetary and authoritative autonomy, as well as visible recognition of their contribution to the university as a whole. In contrast, program status suggests at best that the efforts of such units have not yet reached the stage of educational contribution worthy of full academic equality. It is recognized that local conditions may necessitate internal groupings of faculty to provide for the likely diversity of interests inherent within the field. However, such groupings should be subject to the needs of a unified department and not the reverse.

Thus the critical external question is one of the designation, and treatment of this area of study as a department. Internally, the critical issue is the comparability of standards applied to the acceptance of students, their curriculum, and expectations with regard to their level of academic and field performance. Continuation of current dissimilarities in the way that these matters are handled under the categorical approach can only create unnecessary dissimilarities in the quality of the product. Placing the student in such a position is intolerable in view of the professional requirements of the field.

A different kind of question that always arises during any discussion of the organizational parameters of health administration education is that of the proper location of this endeavor within the university. Such locations traditionally are schools of business, medicine, and public health, although other sites are also used. However, once the two critical issues mentioned above are settled, departmental status and uniform standards, location becomes relatively unimportant. All of the possible sites can make a fully acceptable contribution to the educational milieu; all will likely be involved as educational and professional resources. This perspective suggests that location depends primarily on local conditions. (And of course, that the chosen site does not impose requirements that dissipate or dilute the efforts of the program, such as unrealistic requirements for unrelated core curricula.)

Coinciding with a reorganization of faculty resources, a reorganization of material and methods of instruction must occur within the curriculum. This latter task may be performed in at least two ways. The first is to view the system by type of health services—preventive,

¹² Cyril O. Schuler, "Some Unique Characteristics in Health Administration," *Hospital Administration*, XVII (Winter, 1972).

acute, long-term and restorative. The second is to view the system by the method of delivery—community (meaning a population rather than personal focus), ambulatory, and institutional. In each case, a given topic would be presented in its total setting with attention to the differences as well as similarities between settings. Furthermore, the various influences that affect the topic and their implications must also be presented and developed.

For example, the role of the physician can be viewed by the kinds of services he provides within the context of the community (immunizations, screening, etc.), the ambulatory setting (office, clinic, OPD), and the institutional setting (hospital, nursing home, rehabilitation facility, etc.). Different influences on the physician and their effects in each setting would include his education, form of practice, method of payment, degree of autonomy, productivity, etc. The physician is thus seen as a component of a much larger system and environment that reacts to his inputs just as he responds to the actions of other components of the system and environment. Normative values, ideological preferences, legal constraints, and other dimensions of the physician's thinking and milieu are all seen as important variables in his responses. This example, although simplified, illustrates the utility of an approach that is concerned with all of the interrelationships that confront a given process, role group, or function. Developing material in this manner allows the student to begin assessing the probable changes that might be expected from altering the conditions that, in this case, affect the physician and the conduct of his role in the delivery of health services.

The use of a systems perspective, however, is not the only curriculum change that is needed. Although it goes a long way towards meeting the new demands for understanding the process of integration, other trends within the profession must also be accounted for in the curriculum. These include social parameters, quantitative methods, and management specialization.

The growing importance of social parameters with regard to the health field has already been described. Both social policy and social behavior must be adequately exposed to the student within the context of the provision and organization of health services. Two alternatives are available to do this and merit can be argued in favor of either. The first is to integrate a selection of directly applicable ma-

terial from the most pertinent social sciences, for example medical economics and medical sociology. The second is to permit the student to develop competence within a single social science discipline, especially as it relates to the problem of health. The alternative chosen will most likely be determined by local preferences and resources.

In contrast, the application of quantitative methods to the analysis of information for decision-making purposes is fairly clearly centering around two related course areas. One is statistics, the other frequently termed management science. The first centers on questions of probability and likelihood, the other on maximization of outcomes. Each is needed to handle most operational problems. But in addition to analyzing historical and current information, the ability to predict future events is also necessary. Therefore, forecasting must also be included to round out the application of quantitative methods to problem solving. And with the increasing expensiveness within the health services setting of proceeding with many kinds of decisions formed under conditions of uncertainty, a general understanding of the use of model-building also is highly desirable.

The observation that the profession, in practice, is increasingly specializing its managerial effort as one looks down from the top of its organizational settings, suggests that the generalist is yielding to the specialist. The individual who knows a little about all of the organization is rapidly becoming less effective than the individual who has a strong foundation in one area from which he can expand his knowledge into other areas. Furthermore, the individual who begins as a generalist will have little opportunity to develop specialized knowledge in the field, whereas the specialist, if motivated, can fairly readily broaden his knowledge about the total organization.

Recognition of this change means that the "little-bit-of-everything" format must be reformulated around specific areas of management concentration. These areas have previously been identified: financial, manpower, planning, and information management. Although it is desirable that each program offer all four alternatives, it is most important that the concentration approach be adopted.

Putting all of these academic objectives together can be accomplished through the development of "block sequences" within the curriculum. Each of these blocks would be composed of a sequence

of courses designed to provide a strong knowledge of a particular subject area. A student would elect early in his program the combination of blocks he feels would best fulfill his personal objectives. (This student participation in the planning of his own education is itself a highly desirable process in terms of ultimate results.) Any one individual's curriculum thereby is a self-tailored, but balanced blend of general, specific and complementary course material. The education that a student thus receives is one that will enable him to be productive in any specific health services organization without restricting his opportunity for interorganizational mobility as his interests change. Furthermore, this ability to make such organization cross-transfers will likely become essential as the process of integration expands across the field.

Clearly, a curriculum such as that just outlined cannot be presented in less than two academic years. Probably it would require five semesters or seven quarters to complete. An idealized version of what such a curriculum would look like, showing representative course titles, is presented in Figure I.

It is apparent that this curriculum design allows no provisions for a thesis or project paper. This exclusion is intentional. Few papers in health administration written to satisfy such a requirement have measured up to the standards for graduate level research expected in most universities. This difference has commonly been defended on the grounds that its main purpose is to provide the student with experience in writing a major report. Such a purpose, however, is poorly served by attempting to adapt an instrument that is primarily designed to demonstrate a student's ability to do research. Although the objective is commendable, the misdirection of student time and effort that it entails overrides its utility. Instead, report writing should be integrated into all appropriate courses in the curriculum, an approach that provides the student with far more opportunities to develop this necessary skill. Reinforcement for eliminating the thesis requirement also can be found in the practices of other programs where the objective is professional education, not the development of research capability. For example, law, medicine, and business require report writing but usually defer true research effort to the post-graduate phase where it can be properly and adequately developed.

FIGURE I
IDEALIZED CURRICULUM FOR MASTER'S PROGRAM
IN HEALTH ADMINISTRATION

| | |
|--|---------------|
| <i>Health Services</i> | |
| History of Health and Medical Services | 3 hrs. |
| Comparative Health Systems | 3 hrs. |
| Community Health Services | 3 hrs. |
| Ambulatory Health Services | 3 hrs. |
| Institutional Health Services | 6 hrs. |
| Health Law | 1½ hrs. |
| Medical Terminology | 1½ hrs. |
| | <hr/> 21 hrs. |
| <i>Social Parameters</i> | |
| Medical Economics* | 3 hrs. |
| Sociology of Health and Illness* | 3 hrs. |
| Organization Theory* | 3 hrs. |
| | <hr/> 9 hrs. |
| <i>Information Analysis</i> | |
| Statistics | 6 hrs. |
| Management Science | 6 hrs. |
| Forecasting | 3 hrs. |
| Econometrics -or- Simulation* | 3 hrs. |
| | <hr/> 18 hrs. |
| <i>Management Concentration</i> | |
| Finance | |
| -or- | |
| Manpower | |
| -or- | |
| Information | |
| -or- | |
| Planning | |
| | <hr/> 15 hrs. |
| Plus Practicum and possible Residency. | Total 63 hrs. |

* Similar courses may be substituted.

The process of integration also sharpens and promotes an entirely different dimension of education for the field of health administration. That dimension is the need to produce practitioners at all levels of higher education. The principal thrust of educational programs to date has been designed to provide graduates at the master's level. Until recently this narrow focus was quite realistic in terms of the availability of resources and opportunities within the field. But resources are expanding and changes in the job-structure of the field are demanding a much broader range of educational achievement.

The arguments presented in this paper are equally applicable to these new conditions.

For some time the need for motivated individuals to advance through the doctoral level has been recognized. These individuals are needed especially to fill the expanding number of teaching and research positions in educational institutions. But they are also being sought out for employment in an increasing number of positions outside of academia. Public and private agencies alike have a growing need for professionals trained in research or with expertise in specific areas of health care delivery. Both staff and line positions are represented in these new opportunities. Therefore, programs with the resources adequate to provide the high caliber of training necessary for doctoral education should be encouraged to do so. Such programs will also gain considerable benefit from the interaction of such candidates with their faculty and other students. Furthermore, it is highly desirable that doctoral programs not confine their attention solely to the production of research scholars; it is likely that in the field of administration a greater need exists for training professionals at the doctoral level.

This latter need leads to an important digression. Universities are notorious for their conservatism in academic matters. One of the most obvious areas of educational commitment that they have failed to properly recognize is that of administration. The traditional faculties of Philosophy, Law, Theology and Medicine need to be supplemented. In the context of this discussion, and in recognition of the changes in our society and culture, a new faculty is needed, one that devotes itself to the subject of administration. The degree of highest achievement for students under such a faculty would be the professional degree of Doctor of Administration, or A.D.

A number of disciplines currently exist that could be brought together under this new faculty: business administration, public administration, education administration, judicial administration and health administration. Many of these fields presently offer studies that culminate at the doctoral level, but most offer only specialized doctorates (D.B.A., D.P.A., etc.), with few making any attempt to integrate their efforts with related interuniversity programs. Others have improperly resorted to the use of the Doctor of Philosophy, a degree that should be reserved for scholarly rather than professional

purposes.¹³ These two purposes, although often highly complementary, are distinctly different. Development of a Doctor of Administration degree would clarify and reassert this distinction, permit integration of total effort among related programs, yet provide the opportunity to fully develop the potential for high quality professional study in administration.

All of the specific administrative areas of concentration share a generic core. All study a specific sub-system of our society, including its interaction with other systems. All employ quantitative and conceptual methods of approaching problems. All are sensitive to behavioral parameters. All are rooted in a common focus: decision-making. They are all concerned with the ways in which decisions are made, alternative decisions, and the consequences of decisions. It is these various elements that form the body of knowledge and techniques around which a faculty of Administration should be developed. However, until resolution is undertaken of this fundamental issue in education, the arguments presented in this discussion of health administration remain valid.

Therefore, with regard to doctoral level training for health administration, and regardless of the type of emphasis that a university selects, academic or professional, it is essential that its program incorporate the opportunity for candidates to develop significant strength and competence in a substantive area of knowledge. The challenge to programs offering study at the doctoral level is not that they relate that work to the administration of health services, for that is expected. Rather, it is that these areas of study be based on a substantive body of knowledge. The most expeditious manner in which this fundamental requirement is likely to be satisfied is by developing joint disciplinary training. This approach makes possible the melding together of the applied and theoretical knowledge essential in a professional field.

Despite the increasing need for graduates at the master's and doctoral level, the area of need that is expanding at the fastest rate requires individuals trained at the baccalaureate level.¹⁴ Size, com-

¹³ Compare: Ralph Westfall, "Educating for the Future," *Hospital Administration*, XIV (Summer, 1969).

¹⁴ This idea is not new; Marquette University operated a short-lived undergraduate program in the mid-1920's. Its importance was also recognized by

plexity and technology have all contributed to creating numerous new staff positions in management. In addition, many small organizations cannot economically justify or fully utilize the talents of individuals with higher levels of education.

Contrary to the opinion of most observers who have described the need for undergraduate programs, this training should not be oriented towards producing middle management such as department heads. The specialized and professional nature of most departments in health organizations imply that specific knowledge of the subject matter involved is mandatory for their successful management. It is this very characteristic that makes the central administration of these organizations so demanding and complex. Therefore, although baccalaureate trained administrators may be assigned to such departments, their role would not be in line management, rather it would be in a staff capacity within the department—but essentially performing their functions therein as an extension of central administration. Thus the entire thrust of an undergraduate program should be based on a realization that the future career patterns of its graduates would be identical to that of its master's program graduates, except in smaller organizations or in less demanding positions. And even this singular distinction may be removed by many through personal development and experience.

However, these new baccalaureate-level positions in the long run will become the largest consumer of manpower in the field of health administration. Nevertheless, to date only one graduate program has an associated undergraduate division.¹⁵ Although a few additional undergraduate programs have been undertaken at universities without graduate programs, the results of these latter efforts have not yet been fully evaluated.¹⁶ The present gap that exists at this level

Davis in 1929 (Cf: Davis, p. 88). Representative of more recent thinking are: David B. Starkweather, "A Multi-level Approach to Education for Hospital Administration," [AUPHA] *Program Notes*, XXXVII (March, 1971); Marshall W. Raffle, "Education for Health Services Administration," *American Journal of Public Health*, LX (June, 1970); and R. C. Williams, "Formal Training for Hospital Administrators of the Undergraduate Level," *Hospitals, JAHA*, XXXI (May 16, 1957).

¹⁵ Northwestern University initiated its program in 1943 with both levels of education, but subsequently ceased its undergraduate effort. Cf: Olsen Report, p. 11.

¹⁶ For an assessment of the current status of these efforts, see: Myron Michael

of professional education must be addressed by all graduate-level programs. Reluctance to do so is illogical. Not only do such programs already have a foundation on which to expand into undergraduate training, this expansion would make possible enlarged faculties that would provide increased educational breadth and quality to all levels of their students.

As is the case with graduate education, undergraduate professional education is best developed by use of the joint majors approach. Such programs should emphasize not only health administration, but also a complimentary field. Accounting would probably become the most frequent second major, but the requirements in the field are too diverse to limit student choice in this matter. Statistics, urban studies, industrial engineering, and computer sciences are but a few of the relevant examples. The important thing again is that the student not only have a broad knowledge of the field, but that he also have an area of special competency in which to begin his career. It should be recognized that some students also may select a health administration major to compliment their primary interest, e.g., statistics or marketing, to further enhance their potential for a career, for example, in the health insurance industry.

It is essential, however, that in the development of an undergraduate program that it not be designed as an end in itself. It should not be so structured that it leads to a terminal degree. If it does so, its quality and objectives would be open to very serious question in view of the dynamic nature of this field. The interests and opportunities of individuals change over time. To preclude their opportunity for ready acceptance for graduate level studies in health administration, or in any other field, would be the greatest singular disservice that we in the profession could invoke. It is also likely that such action would mitigate most, if not all, of the tremendous potential for the field now possible through development of undergraduate programs.

An example illustrating the expansion of professional education described above, together with representative specialties, is shown in Figure II. It is recognized that not all programs can achieve the

Kraff, *Undergraduate Education in Hospital and Health Care: Dimensions and Future Directions*, Iowa City: University of Iowa, unpublished dissertation, August, 1971.

FIGURE II
EXAMPLE OF FIELDS OF CONCENTRATION BY
ACADEMIC LEVEL

| |
|---------------------------------|
| Baccalaureate: |
| Accounting |
| Statistics |
| Computer Sciences |
| Health Data Maintenance |
| Personnel Management |
| Industrial Engineering |
| Urban/Rural Studies |
| -etc- |
| Master's: |
| Financial Management |
| Manpower Management |
| Information Management |
| Planning Management |
| Doctoral: |
| Business: |
| 1) Marketing |
| 2) Finance |
| 3) Industrial Relations |
| 4) Management Science |
| -etc- |
| Social Sciences: |
| 1) Economics |
| 2) Sociology |
| 3) Political Science |
| -etc- |
| Professional: |
| 1) Preventative Health Services |
| 2) Acute Health Services |
| 3) Restorative Health Services |
| 4) Comparative Health Systems |
| -etc- |

balance inherent in such a broad-based plan. The plan does, however, suggest an ideal towards which all programs should strive.

A different consideration is the important role played by research. Research is an intrinsic factor in the process of high-quality education. Existing programs have been slowly developing their research capacity and these efforts should be encouraged further. It should be noted that the applied nature of many of the investigations undertaken in professional areas, including health administration, is

best conducted on a multi-disciplinary basis. Such activities thus present another way of reinforcing the cross-divisional ties necessary for offering the student a strong educational environment. Therefore, opportunities to develop these types of projects and relationships should be actively cultivated.

However, a deficiency that is becoming apparent in all programs is the increasing separation between teaching and practice. This separation began after the first generation of program faculty yielded to their younger colleagues. All individuals engaged in teaching and research need firsthand contact with their subject matter in order to keep abreast of changes, trends, and problems. The method of maintaining this contact varies according to the nature of the discipline. Health administration, like other professions, can provide this necessary contact only through participation in the activities of the field. Such participation can be provided by maintaining ongoing administrative or consultative relationships with institutions and agencies that deliver health services. Avoiding this responsibility to maintain first-hand knowledge of the problems and practices of the field considerably reduces the ability of a faculty member to maximize his contribution to teaching and research.

This separation of teaching and research from practice is not unlike the increasing dichotomy between knowledge and practice in program content. Years ago students found the majority of their formal education centered around a clinical experience—the residency. The value of this experience to the student varied enormously. This variance occurred because of two problems. First, the student was usually expected to be only an observer, a passive performer with a minimum sense of personal participation and responsibility. Second, the residency was frequently located at a distance from the program, preventing effective evaluation and control of the content and quality of the experience. These two difficulties raised serious questions with regard to the overall merit of the residency as a component of formal education. Rather than attempt to remedy these problems that existed with the residency, programs instead shifted their emphasis to increasing the didactic content of their curricula and simply reduced or eliminated the opportunity for practical experience.

The essential point that is overlooked in considering the use of a

residency is its primary purpose. It was never intended that this opportunity should be designed to teach health administration. Its underlying purpose was to place the student in an environment where he could observe the interplay of forces that realistically constrain the application of theory. Thus it serves as a frame of reference for the development of sound judgement. In short, its purpose is to develop judgement as well as to provide professional socialization. This is exactly the reason that medical students are rotated through wards and clinics where they are involved in the give and take required to blend together the many types of knowledge necessary in the realistic practice of medicine. Therefore, opting to forego the residency component during the period of formal education means that a program is not assuming its full professional (in contrast to its academic) responsibility for the training of health administrators. To defer the completion of this task to later experience is much like teaching surgery solely in a classroom, expecting that graduates can acquire practical experience after their graduation. Obviously it can be done, but it is not the best method.

Responsibility for professionalization can be reassumed during the period of formal education, however, by restructuring the method of clinical involvement. All programs have access to health delivery environments; these settings represent laboratories for administrative education. As such, students should be placed in positions that demand judgement and responsibility, even if exercised at a fairly low level. Examples of these types of positions within institutions include acting as ward administrators, registrars in emergency rooms, operating room coordinators, and clinic registrars. Agencies provide alternative opportunities. Positions like these are focal points for highly visible combinations of people, resources, and problems. Other examples of this type of involvement used by various programs include hospital surveys conducted by students, using students to assist in gathering data for research, and involving students in the solution of specific management problems. Most importantly, the student can make occasional poor decisions in these positions, a process necessary in the development of judgment, with little real cost to the organization. A familiar analogy to this process is the laboratory/classroom combination used in many academic courses that provides a feedback link between both practical and theoretical

experience and instruction. In all of these situations, the student can test the application of his knowledge, see its outcome, and assess alternative ideas and behavior. These kinds of experiences can be structured throughout most if not all of the period of formal education.

This practicum formal differs in one critical aspect from that of the older form of residency. This difference is that the experience provided should be closely monitored and tightly controlled by the educational institution, not the sponsoring health delivery organization. This change is necessary to ensure that the major purpose is educational, not simply service to the organization. The only manner in which this monitoring and control can be effectively accomplished is by on-site supervision from program faculty. This intimate involvement of faculty in the activities of health delivery organizations also resolves the earlier mentioned dilemma created by the increasing isolation of faculty from professional practice. Clearly it represents a melding of professional and teaching rolls. Thus a faculty member would assume full responsibility to the sponsoring health organization for the continuous and proper conduct of specific functions required by the sponsor, although much of the actual work would be carried out by students. This direct supervision means that the student is no longer left to the vicissitudes of experiential opportunity to learn about his professional role. It also means that the didactic content of his education will be significantly enriched through the personal involvement of faculty in the ongoing practice of their profession.

Those students for whom the further development of judgemental skills is desirable can proceed, following graduation, into a formal one-year residency. This residency should be of a rotating nature and include exposure to at least one agency and one institution. As such it is not unlike the multi-setting residency that has been described elsewhere.¹⁷ It does have two differences from that model, however. The first is that each student's residency experience should be individually designed so that the selected organizations strengthen and help to round out his chosen area of management concentration. Maximum accomplishment of this objective requires careful coordi-

¹⁷ *The Hospital Administrative Residency*, Chicago: American College of Hospital Administrators, 1965, p. 50.

nation and review between student, faculty and preceptors. The second difference is that the student can now be given increased responsibility by his preceptors because he has already completed the academic portion of his training. This level of responsibility should be identical to that given to an Administrative Assistant (a position that he otherwise would be qualified to perform). This revised approach to the residency, therefore, represents the initiation of an "executive development" program similar to the successful concept used by many business firms. Thus it serves to increase the graduate's ability to move towards a challenging role in the field of health administration.

Finally, the involvement in continuing education by programs in health administration needs considerable expansion. Although some programs have made a serious effort to supplement and update the knowledge of those now engaged in practice, all should do so. The type and pace of change that is argued throughout this presentation is just as relevant for those already in the field. The maintenance and improvement of high standards of professional performance demands exposure to new ideas and techniques that affect the delivery of health services. Professional associations, journals and seminars can provide only some aspects of this necessary exposure. Practitioners also need the opportunity to acquire new perspectives on the total environment in which their organizations operate. This kind of exposure is best provided through resources that are most likely to be found in a university setting. In return, the university that becomes involved in continuing education gains another opportunity in which its faculty members can address themselves to problems that bridge theory and practice. Thus continuing education programs provide the last segment that completes a total educational commitment by health administration programs to the profession.

In summary, the type of change and its momentum observed in the performance of the profession of health administration indicates that a major reconceptualization is necessary in current formal education for the field. Combining traditionally separate points of view, redesigning curricula, expanding the levels of professional training, and redeveloping the contribution of experience to education will not be easy. Vision and understanding must supersede ego, always a difficult posture to maintain. But the avoidance of change will im-

pose a costly burden on the profession and on society. A profession educated to meet the challenges of the past will have little opportunity to meet the requirements of the future. The dimensions of these emerging requirements are so stimulating, so challenging, and so relevant to the demands of our society, that the gauntlet they throw at the feet of our profession must be quickly seized and the proper preparation of our successors begun immediately.

SELECTED BIBLIOGRAPHY

- Allen, Richard G. "Resources for Continuing Education for Hospital Administration," *Hospital Administration*, XII (Fall, 1967) 101-111.
- Axelrod, Solomon J. "A Historical View of the Teaching of Medical Care Administration," *American Journal of Public Health*, Supplement (part I), LIX (January, 1969) 61-66.
- Bachmeyer, Arthur C. "Educating the Administrator," in *Hospital Trends and Developments, 1940-46*. Arthur C. Bachmeyer and Gerhard Hartman, ed. New York: The Commonwealth Fund, 1948.
- Berman, Howard. "Financial Management: Necessity or Nicety?", *Hospital Administration*, XV (Summer, 1970) 84-90.
- . "Mergers and Consolidations: A Solution?", *Hospital Administration*, XVI (Winter, 1971) 54-60.
- Bingham, Fletcher Havens. *Graduate Education for Hospital Administration: A Critique and a Program*. Iowa City: Graduate Program in Hospital and Health Administration, The University of Iowa, Health Care Research Series No. 4, 1967.
- , and Gerhard Hartman. "Two-Year Graduate Education: The Mounting Cost of Excellence," *Hospital Administration*, XII (Fall, 1967) 65-73.
- Brown, Ray E., ed. *Graduate Education for Hospital Administration*. Chicago: Graduate Program in Hospital Administration, University of Chicago, 1957.
- Bugbee, George. "New Curriculum Developments: A Two-Year Program," *Hospital Administration*, XII (Fall, 1967) 74-81.
- Callaghan, Donald F. *Graduate Education for Hospital and Health Administration: A Pattern for the Future*. Iowa City: Graduate Program in Hospital and Health Administration, The University of Iowa Health Care Research Series No. 16, 1970.
- Chester, Theodore E. *Graduate Education for Hospital Administration in the United States: Trends*. Chicago: American College of Hospital Administrators, 1969.
- Cloner, Alexander. "The Influence of Systems Theory in Educating Health Services Administrators. The University of Southern California Experience," *American Journal of Public Health*, LX (June, 1970) 995-1005.
- Davis, Louis E. "Professional Development Needs in Hospital Administration," *Hospital Administration*, XV (Summer, 1970) 65-83.
- Davis, Michael M. *Hospital Administration: A Career*. New York: [Rockefeller Foundation], 1929.
- Dickey, Frank G. "Accreditation: A Hallmark of Quality," *Hospital Administration*, XII (Fall, 1967) 166-178.
- Duce, Leonard A. "Graduate Education in Administration—Some Recent Developments," *Hospital Administration*, XI (Winter, 1966) 28-41.

- Dunaye, Thomas M. "Community Planning for New Partnerships in Health Administration," *American Journal of Public Health*, LX (June, 1970) 987-995.
- Dunn, Donald W. "Thoughts for Educators of Hospital Administrators—From a State Association Executive," *Hospital Administration*, XII (Fall, 1967) 159-165.
- Gentry, John T., et al. "Perceptual Differences of Administrators Regarding the Importance of Health Service Programs. Implications for Education for Health Services Administration," *American Journal of Public Health*, LX (June, 1970) 1006-1017.
- Gilliam, Robert. "Education in Hospital Administration in Australia," *Hospital Administration*, XII (Fall, 1967) 92-100.
- Griffith, John R. "An Educational Challenge for the Programs and the Practitioners: The New Role of the Administrator," *Hospital Administration*, XII (Fall, 1967) 127-142.
- Hartman, Gerhard. "Growth and Development in Graduate Education: Iowa's New Design," *The Journal of Medical Education*, CXXXVIII (May, 1963) 369-373.
- Johnson, Everett A. "The Continuing Evolution of the Hospital Administrator," *Hospital Administration*, XI (Spring, 1966) 47-59.
- Joint Commission on Education. *The College Curriculum in Hospital Administration*. Chicago: Physician's Record Company, 1948.
- Kast, Fremont E. and James E. Rosenzweig. "Hospital Administration and Systems Concepts," *Hospital Administration*, XI (Fall, 1966) 17-33.
- Kipnis, Ira A. *A Venture Forward*. Chicago: American College of Hospital Administrators, 1955.
- Kralewski, John Edward. "Training Administrators for the Health Care Field," *Hospital Administration*, XII (Fall, 1967) 143-158.
- Kraff, Myron Michael. *Undergraduate Education in Hospital and Health Care Administration: Dimensions and Future Directions*. Iowa City: University of Iowa, Unpublished dissertation, August, 1971.
- Mason, Ronald W. *An Analysis of the Master's Degree Graduates From the Iowa Program in Hospital and Health Administration*. Iowa City: Graduate Program in Hospital and Health Administration, The University of Iowa, Health Care Research Series No. 10, 1968.
- Matzick, Kenneth J. *A National Survey to Evaluate Continuing Education in the Field of Hospital Administration*. Iowa City: Graduate Program in Hospital and Health Administration, The University of Iowa, Health Care Research Series No. 5, 1967.
- McNerney, Walter J. "Formal Education Beyond the Master's Degree," *Hospital Administration*, V (Winter, 1960) 71-88.
- National Commission on Community Health Services. *Health Administration and Organization in the Decade Ahead*. Washington, D.C.: Public Affairs Press, 1967.
- Patrick, Floyd A. "The Master's Thesis in Hospital Administration as an Educational Tool," *Hospital Administration*, X (Summer, 1965) 31-41.
- Pattullo, Andrew. "Preface," *Hospital Administration*, XII (Fall, 1967) 8-12.
- Prall, C. E. *Problems of Hospital Administration*. Chicago: Physicians Record Co., 1948.
- Raffel, Marshall W. "Education for Health Services Administration," *American Journal of Public Health*, LX (June, 1970) 982-987.
- Rappelye, Willard C. *Report of the Committee on the Training of Hospital Executives*. Chicago: The Committee, 1922.
- Roemer, Milton I. "Education for Medical Care Administration," *Hospital Administration*, X (Summer, 1965) 6-18.
- . *Medical Care Administration: Content, Positions, and Training in the U.S.*, San Francisco: Western Branch, American Public Health Association, 1963.
- . "Medical Care Administration in the United States: Personnel Needs and Goals," *American Journal of Public Health*, LII (January, 1962) 8-17.
- Schaefer, Morris. "Adapting Education for Health Administration in a School of Public Health," *American Journal of Public Health*, LX (June, 1970) 1017-1022.
- Schuler, Cyril O. "Some Unique Characteristics in Health Administration," *Hospital Administration*, XVII (Winter 1972) 9-25.
- Special Committee on the Provision of Health Services. *Ameriplan: A Proposal for the Delivery and Financing of Health Services in the United States*. Chicago: American Hospital Association, 1970.
- Starkweather, David B. "A Multi-Level Approach to Education for Hospital Administration," *Program Notes*, XXXVII (March, 1971) 1-6.
- . "Beyond the Semantics of Multi-hospital Aggregations," *Health Services Research*, VII (Spring, 1972) 58-61.
- Stotts, Michael J. *Long-Term Care Administrator Education*. Washington, D.C.: Association of University Programs in Hospital Administration [1972].
- The Commission on University Education in Hospital Administration. *University Education for Administration in Hospitals*. Washington, D.C.: American Council on Education, 1954.
- The Hospital Administrative Residency*. Chicago: American College of Hospital Administrators, 1965.
- Thompson, John D. and Gary L. Filerman. "Trends and Developments in Education for Hospital Administration," *Hospital Administration*, XII (Fall, 1967) 13-32.
- U.S. Department of Health, Education, and Welfare. *Towards a Comprehensive Health Policy for the 1970's*. Washington, D.C.: U.S. Government Printing Office, May, 1971.
- Weil, Thomas P., et al. "An Approach to Training Health Managers: The University of Missouri Program," *Hospital Administration*, XII (Fall, 1967) 112-126.
- Westfall, Ralph. "Educating for the Future," *Hospital Administration*, XIV (Summer, 1969) 81-89.
- White, Rodney F. "Preparation for Careers in Hospital Administration in Great Britain," *Hospital Administration*, XII (Fall, 1970) 82-91.
- Williams, R. C. "Formal Training for Hospital Administrators at the Undergraduate Level," *Hospitals, JAHA*, XXXI (May 16, 1957) 51-53.
- Wren, George R. "Graduate Education for Hospital Administration: A Comparison of Public Health and Business School Programs," *Hospital Administration*, XII (Fall, 1967) 33-64.