

Chapter Five
AAMC/GBA Studies:
“Cost of Medical Education”

The National Pressures

A push for acceptable approaches to ascertaining the costs of medical education surfaced during the late 1950's and early 1960's. The late Augustus (“Gus”) Carroll became the “guiding light” for studies that tested a methodology for determining these costs. This was the time when governmental bodies – both Federal and state – and private enterprise were asking for meaningful information regarding the financial resources required to educate a medical student.

Seventy-six medical schools reported spending \$100 million for their teaching and research activities in 1951. Twenty years later, ninety-two schools reported a seventeen-fold increase to \$1.7 billion for their academic operations. Though inflation can account for some of this increase, the primary explanation lay in the sudden and extensive commitment by the Federal government to underwrite the cost of advancing new knowledge in the bio-medical area.

The vast majority of our academic health centers are components of universities, and in the early 1970's many were sinking deeply into the bed of financial quicksand. In his classic study of the financial plight of 41 U.S. academic institutions, Dr. Earl Cheit, Professor of Business Administration, University of California, Berkley concluded in 1971 that nearly three quarters of those academic centers were either "headed for trouble" financially or had already reached that point. The administrators of those institutions proposed a number of solutions, among which were better methods of identifying priorities and allocating resources, improved unit-cost analysis, more attention to measuring output and increased long range planning. [Cheit, Earl F., The New Depression in Higher Education: A Study of Financial Conditions at 41 Colleges and Universities (Berkeley, The Carnegie Commission on Higher Education and the Ford Foundation, 1971) p. 139].

Although the Cheit study did not include financial data from medical schools per se, the participating universities where medical schools were present -- 12 of the 41 institutions studied -- were given the opportunity to comment on the degree to which they felt the presence of such schools contributed to their financial troubles. Although the responses varied, several of the universities viewed the medical school as a significant financial drain. It can be safely stated that very frequently the cost of operating a medical school at a university represents sometimes half or more of the total institution's budget.

Following up his studies two years later, Dr. Cheit observed one predominant benefit of financial adversity – a growing cost-consciousness on campus resulting in a "major management movement, complete with a new vocabulary...." For many years academicians viewed decentralization and autonomy from entrepreneurship as a stimulus for need to be managed. In sudden contrast, however, the financial depression into which many institutions of higher education had fallen in the early 1970s lead to a growing acceptance of the managed college or university. As a result, this led our academic health centers to a growing respect for the contributions of management science and technology.

Much of the dilemma at the time could be attributed to sharp and dramatic shifts in Federal support. As a consequence of cutbacks in such support, notably research, the extent to which those funds were used to support basic operating budgets was brought to light. The use of overhead funds for broad institutional purposes and the support of tenured faculty with "soft money" had been conditions long established and forgotten.

In Want of Valid Information – Program Cost Finding

The far too frequent response by university administrators to the ever present medical school/ university financial problem in the 1970s – and probably still exists in more recent times – was either to wish away the medical school completely or to make it autonomous, yet within the university structure so that the school alone could absorb its own income shortfalls and expense overruns.

Far too often, troubles came to those slavishly traditional institutions of higher education which refused to recognize the need for financial data beyond the conventional budgetary and accounting reports established for control purposes according to object classification. This has been an institution that does not recognize that faculty activities were becoming increasingly interdisciplinary, crossing departmental or school lines. To those visionaries who followed the precepts of administrators like Gus Carroll, it became apparent that there needed to be tools to provide management with cost information according to program, not just in answer to fiduciary requirements.

Both day-to-day administrative decision-making and long-range planning require the existence of credible information. Such credibility relates probably less to absolute accuracy than to a reliable means for its collection. Dr. Walter Rice, Director for Medical Center Planning at the University of Michigan, remarked that information is the "life blood of planning, and anemic plans will be the result of anemic data"[Rice, Walter G., M.D., Unpublished paper entitled "The Elements of Medical Center Planning"].

Medical school faculties are accustomed to collecting information for medical or scientific decision-making and the need for accurate data for organizational decision-making is no less valid.”

Enter the AAMC

The Association of American Medical Colleges has had a long history of interest and activity in the field of cost finding. For more than 30 years the AAMC has been aware of the inadequacy and the incomparability of medical schools' financial data.

During the late 1950's the late Augustus J. Carroll – regarded as one of the foremost experts on medical school fiscal affairs -- published his classic report on medical school costs. This study of 19 medical schools developed a uniform method and criteria acceptable to these medical schools in reporting financial data [Carroll, Augustus J., A Study of Medical College Costs (Evanston, Ill., Association of American Medical Colleges, 1958)].

During the following decade, Carroll and his successors at the AAMC instigated a series of cost allocation studies by functional output. The Association established a set of procedural guidelines and in many instances provided consultation to a number of schools undertaking these studies. It is estimated that more than 70 such institutional studies were undertaken.

Fundamental to the success of this effort was the beginning and growing involvement of the Association's Business Officers' Section (now Group on Business Affairs). From the very first, at both national and regional forums of this body, the topic of program cost allocation was on the agenda. Also, at this time, a study was under way by the AAMC jointly sponsored by the Division of Grant Administration Policy of the U.S. Department of Health, Education, and Welfare. This first formal Cost Allocation Study examined program cost information systems to determine their adequacy and suitability to meet both the requirements of university medical center administration and the accounting and reporting requirements of various granting, contracting, and funding agencies. The study was made in the following seven medical centers: Bowman Gray School of Medicine of Wake Forest College; University of Iowa; Jefferson Medical College of Philadelphia; University of Michigan; New York University; Ohio State University; and University of Utah.

More specifically, the objectives of the study were:

1. To identify the existing methods medical centers used in determining costs and related information required by granting, contracting, and funding agencies.

2. To determine program costs in each of the participating medical centers by a uniform system of program cost allocation.

3. To determine if the system or portions thereof proposed in Item 2 above met the needs better than the reporting systems then used by the 7 medical centers. If the uniform cost finding system or portions thereof was determined to be more useful than existing systems, suggestions were solicited for improvement?

4. To determine if the uniform cost allocation system would provide the fiscal and related information required by granting, contracting, and funding agencies in a manner acceptable to hospitals and medical centers and to the agencies involved. If the information produced by the system was found not to meet present requirements, it was asked if the system should be revised so that the information produced would meet these requirements; or whether the granting agencies should revise their requirements?

5. To consider development of a program cost finding system on the basis of the findings of this study.

6. To describe the cost allocation procedure and other administrative programs relevant to these objectives in a final report.

In view of the shortage of physicians and the medical schools that trained them, the methodology of finding the costs of educating doctors was being examined with great interest nation- and state-wide.

A most significant national outcome surfaced from these early studies and from the promulgation of the accompanying methodology developed by the AAMC. A system of capitation support was initiated by the Bureau of Health Manpower, NIH, that provided per-student financial support to the medical schools as an incentive.

After the initial cost study at the seven medical centers, and the published reports of this effort, other institutions initiated studies, using the AAMC's cost-finding methodology. It was emphasized that the primary value from these efforts was the development of useful information for the individual institutions, not in developing comparable data to be used in making inter-institutional comparisons.

First, data from the studies was shown to be invaluable in explaining to lay boards of trustees and legislators the nature and complexity of health center functions. The explanations were in output-oriented programmatic terms, with which outsiders could more easily identify. Further, the information from these studies provided the parent university with a reliable estimate of the annual cost per student of medical and other health education, thus enabling external agencies to increase capitation support. One medical school was able to double its capitation support from outside states, which because they had no medical school, sent their students to this particular institution. Cost studies led to the development of systems for program budgeting and control as well as long range planning projects using modeling simulation of techniques. Some of the studies have provided insights into the cost of reciprocal services provided in organizational units previously assumed to be equal trade offs but now recognized as uneven and requiring a system of monetary payments or credits. An affiliated teaching hospital in more than one instance was costing the university medical school a considerable sum in unreimbursed expenses. The cost study identified the extent of this amount and payment was subsequently made.

Information resulting from cost studies was able to show management where its deficit programs were and the extent of the deficit. This led to appropriate program cutbacks. Further, the results of program cost studies were used as back up documentation for various contracts or grant negotiations. Schools in financial distress were able to use the study information to support requests for special "disaster" funding. Within the medical school, chairs of academic departments were sometimes able to use such cost data as a tool for better budgeting and management. Consequently, they were been better able to explain their needs and the activities occurring in their departments.

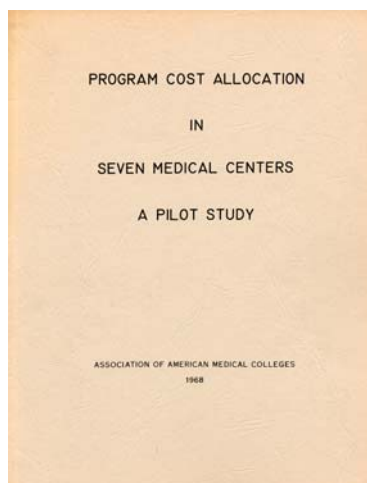
Although the AAMC recognized the primary value of cost allocation studies as internal institutional management tools, the Association undertook a broader inquiry into the complex programmatic and fiscal circumstances governing the nation's medical schools. In 1973 it published a report concerning the cost of resources required for the education program leading to the MD. [Undergraduate Medical Education: Elements - Objectives - Costs, Report of the Committee on the Financing of Medical Education (Washington, D.C., Association of American Medical Colleges, 1973)]. The report revealed guideline measures of the cost of this program based on an intensive review of education at 12 U.S. medical schools. The annual cost per medical student in 1972 was found to range from \$16,000 to \$26,000 for this group of schools. It was further found that the variation in cost reflected the schools' program objectives and educational approaches to the training of medical students.

These 12 schools embraced the spectrum of diversity in education techniques essential for the flexibility required to educate students with differing interests, career aspirations and educational and social backgrounds. The report discussed the relationship of the medical education program to the other activities of the contemporary medical school. The report

also delineated the complex activity and organizational arrangements surrounding the provisions of the undergraduate medical education program.

The data limitations and conceptual issues involved in deriving measures of the cost of one activity as interrelated with the other activities of the school were also fully explored in the report. A particularly interesting feature of this publication was the development of a model which purported to help resolve the problems of distributing the cost of functions and activities that serve more than one end purpose. The model drew specific empirical data from the 12 medical school studies and recognized a series of assumptions regarding the activity distribution of a hypothetical faculty member who is fully involved in the school's education program. Essentially the model was constructed for the purpose of determining the cost per undergraduate MD student for the research, clinical, and other administrative, scholarly, and professional activities of the faculty which may be considered necessary for the support of an affective educational program. In determining the cost, the model took into account the "degree of involvement" of the faculty member in instruction of the undergraduate medical student as well as the cost of conducting research or clinical activity at the institution.

Funding support from both the W. K. Kellogg Foundation and the NIH Bureau of Health Manpower Education during the 1970s enabled the AAMC to promote the use of the Carroll cost-finding model at a widening circle of the nation's medical schools. Grants from these organizations also made it possible to use a number of medical school business officers as consultants to the Association. Especially those administrators who had strong accounting backgrounds were used on teams of site visitors to schools undertaking the cost studies. They also were invaluable to the Association as faculty for workshops held nationally and regionally to instruct personnel from medical colleges interested in conducting self-studies.



See Appendix Four – Pages 93 –94.