

### The Division of Operational Studies - Its Role

The AAMC's Division of Operational Studies has served as the staffing unit for the Business Officers' Section (aka GBA). From the time that "Gus" Carroll joined the full-time staff of the Association in 1962 until his death in 1968, he served as Assistant Director of the Division. It fell largely to "Gus" to carry out the broad charge of his Division, i.e., to verify, organize, interpret and evaluate financial and general operating data coming to the Association from its constituent medical schools.

In the words of Mr. Carroll the “value of the services that the AAMC can provide to its member colleges depends importantly upon its ability to furnish individual schools with timely and useful financial and operating information.” [INFORMATION FOR AAMC STAFF MEETING, January 4-5, 1968, Carroll]. Critical to this were the several surveys -- appropriately designed and tested.

The medical school business officer, assisted by his/her staff, has remained fully involved with providing answers to the AAMC's questionnaires. Therefore, from the onset of the BOS (GBA), the representative has continued to be a significant participant in the exchange of administrative information.

Recognizing the need for guidance from its constituents, the Association established a steering committee for the Division of Operational Studies (DOS), and on September 15, 1967 this seven-member advisory group met for the first time. It is significant that two of its members were drawn from the ranks of medical school business officers – Red Stover (Utah, later North Carolina) and Joe Diana (Michigan).

Subsequently, as the business officers established their organization, a regular committee was recognized as important and became part of the initial bylaws: Committee on Fiscal and Statistical Reporting (later changed to Standards). Its charge was to coordinate and plan with AAMC staff the various national questionnaires and information forms asked of medical schools. Specifically, it was to review the various fiscal and statistical reports required and to suggest improvements.

Mr. Carroll saw the value of careful organization of the information gathered from the schools, and he stated in his 1968 statement for AAMC staff that the DOS carry out the following: bringing “the facts and figures of a specific school into significant relationship; compiling quantitative information to reflect the total national picture; and arranging information to facilitate easy and proper comparisons of one school with another, and of one school with national minimums, maximums, maximums, averages, medians, etc.” Carroll strongly urged that his Division’s annually collected data be organized, interpreted, and reported in different ways so that it could be used more extensively by individual schools and special groups of schools. This would require more arranging and re arranging of the information and new combinations of facts and figures. Again, the business officers through its Committee on Fiscal and Statistical Reporting became very helpful with this effort.

## Data to Support the Accreditation Process

As the medical school business officer gained in stature as a true professional on the dean's staff, this individual became increasingly involved in the periodic accreditation of the school. The process of accrediting medical education programs leading to the M.D. in U.S. and Canadian medical schools has been conducted jointly by the Association of American Medical Colleges and by the American Medical Association. This occurred via site visit to the institution. The joint body responsible for the review was the Liaison Committee on Medical Education (LCME). For each school it usually occurred every seven years unless there were reasons to have the assessment take place more frequently.

The business officer became an increasingly invaluable provider of administrative and program data about his/her school. Each year, the LCME has collected data about the structure and operations of each accredited medical school. The information has been used for continuous monitoring of the school in the interval between the formal accreditation visits. Aggregate data have also been found useful to support public policy making and to provide accountability to the public on the content and methods of medical education. The collective information resides in the AAMC institutional database for use through a number of reporting mechanisms.

From the outset, the Business Officers' Section (GBA) took an active interest in assuring the accuracy and consistency of the data sent to the AAMC. The questionnaires were in two parts, sent to the schools at different times of the year. First, the LCME Part I-A (Annual Financial) Medical School Questionnaire has collected data on the revenues and expenditures of the school. This survey was administered initially by the AAMC's Division of Operational Studies, later the Division of Institutional and Faculty Studies. Currently the questionnaire is mailed each year in mid-September to medical school deans and designated principal business officers with a due date of mid-December.

A LCME Part I adjunct (Part I-B) relates to student financial aid and collects data on financial assistance, grants, loans, work-study, and educational indebtedness for medical students.

The second survey form of the LCME series is Part II. It collects data on operational characteristics of the educational program leading to the M.D. degree, including details of the curriculum, the demographics and academic antecedents of students admitted to the program, and resources involved with the educational program such as faculty, residents, educational sites, library. Collective data are summarized in an annual report published in the *Journal of the American Medical Association (JAMA)* in September. The Part II questionnaire is administered by the American Medical Association's Department of Research and Data Analysis and is mailed out each January, with a due date of mid-April. Though medical school business officers have had less general involvement with Part II, many have been responsible for some of the data elements that reside in their respective school's computerized information system.

## Faculty Data

With the increasing dominance of faculty numbers and salaries in medical school budgets, growing attention focused on this component in financing schools of medicine. The AAMC began collecting data on faculty salaries in the early 1960s. As they set

salary levels for their full-time faculty – both clinical and basic scientist – the Association’s constituent institutions became increasingly dependent on reliable salaries reported as averages by rank and discipline. The focus of this annual survey became a dominant program discussion item at many early BOS (GBA) meetings – both nationally and regionally.

Distinctions between *strict* and *geographic* full time became vague; the influence of faculty practice plans on reliable faculty salary reporting became increasingly problematic at some schools – especially at private institutions, or where there were separate corporate structures. The importance of developing organized structures for the *capture* of practice-derived clinical faculty income, and the *uses* of such revenue dominated medical school management in the 1960s. This became a central issue at many conferences – regionally and nationally --, especially as potential income to the schools increased exponentially with the entry of federal/state Medicare and Medicaid programs. At a NYC meeting of medical school business and fiscal officers in October, 1967, “Gus” Carroll spoke about medical practice plans and cautioned that “it is neither possible nor desirable to devise a single plan that will absorb every problem of every school. If your school has no medical service plan, or if it has a faulty one, you sooner or later will have to design a plan to serve your special needs. This is strictly a do-it-yourself project. The worst mistake you could make would be to adopt certain policies and practices because they seem to have worked for someone else.” The medical school business officer was in “the thick” of discussions at his/her school, and these carried forward at many of the early national and regional BOS (GBA) meetings. Because of the Section’s interest in the topic, one of the first four workshops established under the sponsorship of the Kellogg Foundation was on the topic of faculty practice plans.

For many years the AAMC had been gathering data on the characteristics of paid faculty at allopathic medical schools for many years. However, it was not until 1966 that the Association, through its Division of Operational Studies, initiated an *organized* system for collecting and analyzing such information. The new structure was to be known as the Faculty Roster. It soon became an invaluable data system to support national policy studies, and to provide feedback on faculty attributes. When individuals are first appointed to faculty positions, medical schools submit educational, employment, and demographic data to the Faculty Roster, and updates are made as needed. Institutional participation in the Faculty Roster has always been voluntary. Each of the nation's medical schools has contributed to the quality of the Faculty Roster by appointing a Faculty Roster representative to coordinate data reporting. Often, the medical school’s business officer has served in this capacity.

The information has been submitted on a departmental basis and sent to the schools for distribution to departmental secretaries who were charged with the responsibility of verifying and updating existing information and providing information items not previously contained in the Faculty Roster. In addition to the bibliographic information on full-time faculty members, the departments were asked to provide head counts of part-time faculty at all ranks and such supporting personnel as interns, residents, professional staff without faculty rank and all other administrative, clerical and technical personnel. Extensive data processing of this information was undertaken by the Association to establish an historical file of medical faculty staffing to be updated on an annual basis. In the initial year, the Faculty Roster had information on approximately 17,000 fulltime faculty members.

## Integrated Management Information Systems

During the 1960s computer technology and application possibilities for management decision-making provided medical school managers with new ability to monitor and forecast their school's direction. At an October 1967 gathering of medical school business officers in NYC. "Gus" Carroll spoke to the prospects of this development, there "seems to be no limit to the potential uses of computers and data processing." He cautioned that examination of "existing administrative data processing systems with a view toward computerization, a look at what other medical schools and medical centers are doing, and information obtained from computer salesmen will start you thinking, *but any move into computer applications must be preceded by careful study and expert planning.*" Carroll also warned that some medical schools' information systems were subsumed by the parent university's system, thus leading to the danger "that the process of coordinating university and medical school management data requirements would lead to an over-simplification of the problems of the medical school." He envisioned the invaluable information exchanges that would occur among medical college business managers.

This topic became a regular business officers' program item at both national and regional meetings. The thrust at these early gatherings was to share the experiences of problems, obstacles, approaches and accomplishments in the design of internally useful management tools.

In partnership with its constituents, the AAMC about 1970 began promoting a generally recognized concept of *the integrated medical center information system (IMCIS)*, and with input from the Business Officers' Section developed a series of workshops around subjects whose contents would strengthen and extend the management capabilities of the medical schools' administrators. One such topic "The Development of Integrated Medical Center Information System" resulted from this program [Presentation of Integrated Medical Center Information System (IMCIS) Papers, Business Officers Section, AAMC Regional Meetings - 1971 (Washington, D.C., Association of American Medical Colleges, 1972)]. An IMCIS' steering committee, composed of knowledgeable medical school and health center business officers, was charged with the organization and presentation of this workshop. In preparing for this, the group spent the first year or so developing a data base dictionary and addressing the following areas of concern: standard data definition; data ownership, responsibility and control; data base management software; and system resource sharing.

This subject was the substance of one of the workshops supported in part by the W. K. Kellogg Foundation. Accompanied by comprehensive workbooks and led by an enlightened number of managers from the medical educational community, the subject was presented over the next few years to responsive audiences receptive to up-to-date information useful to operations and planning at their institutions.

Representative of the receptivity of this topic was the May, 1971 meeting of the Southern Region and Midwest-Great Plains Region, held in Arlington, VA. The theme of the seminar – "Medical Center Information System" – spoke to the problems of developing a computer-based data gathering and collection system, and the manner in which the information must be handled to be useful to all levels within the academic medical center

organization. At the previous year's national AAMC meeting, the BOS featured the topic during its program section of the meeting.

The BOS' Committee on Information Resources continued to generate interest in data gathering, organization and dissemination as information useful college and health center business policies and procedures.

#### AAMC Medical School Profile System

For its part, the AAMC devoted increasing attention to the collection and management of meaningful data on medical schools. "Gus" Carroll and others who followed him in the Division of Operational Studies recognized the desirability of organizing the vastly increasing quantity of medical school data being collected by the Association in the most meaningful way for its own analytical uses and as feedback to its constituency. It had long been accepted that each school was unique and dissimilar from most other schools. Yet, there were logical groupings of institutions that as a sub-set could be internally compared. Carroll had long accepted the unique nature of each medical school, making it difficult and risky to undertake inter-comparative reviews without careful thought and selectivity. However, he recognized that there were logical groupings of institutions – schools owning and operating a teaching hospital; schools on the campus – or in close proximity to a parent university versus those without an affiliation or at some distance from its parent institution; private from public schools; those with strict full-time clinical faculty and medical service plans versus with geographic faculty with quasi-private-group arrangements. If the Association could cluster "like" institutions in logical groupings and array the data so that comparisons could be made within the group, Carroll reasoned that information could be meaningful to those inter-group schools.

The AAMC, through its Division of Operational Studies developed the Institutional Profile System (IPS) in 1972 as a database and reporting system designed to compare medical schools in a number of areas. [Subsequently it has been renamed the Medical School Profile System (MSPS)] Its major value to the medical school has been to allow its administrators to perform intra- and inter-institutional comparisons, develop time-series data and support accreditation activities. Also, it was recognized that the data could be used in support of strategic planning, to create comparative data analyses, and to track national trends for advocacy purposes – both nationally and regionally.

The major portion of the data come from the Liaison Committee on Medical Education (LCME) annual surveys, and thus includes data pertaining to medical school revenues and expenditures (LCME I-A), student financial aid and indebtedness (LCME 1-B), student enrollment, faculty counts, and curriculum (LCME Part II), and tuition and fees (Tuition and Fees). For a number of years annual reports have been available, initially by mail, but lately online, to any individual who is affiliated with any of the AAMC member institutions. Ad hoc reports can be requested by AAMC constituents, and also by other parties with a legitimate need for medical school information.

#### The Business Officer as a Writer

The BOS (GBA) early on recognized the need for self-evaluation and professional improvement. In 1969-70, the new Committee on Professional Development was inaugurated to advance the skills of those engaged in the fiscal management of medical education. This individual's journalistic potential was recognized. In 1971, Marvin

Siegel, Chairman of the Section's, urged his colleagues to write articles of national interest in various professional journals. Some did, for example, in the AAMC's *Journal of Medical Education* [later renamed, *Academic Medicine*]. Following are samples:

Hilles, W. C. (1973). Program cost allocation and the validation of faculty activity involvement. *Academic Medicine*, (AAMC) 48: 805-813.

Siegel, B. (1978). Medical service plans in academic medical centers. *Academic Medicine*, (AAMC) 53: 791-798.

Hilles, W. C. & S. K. Fagan (1972). A comparison of the patterns of financing for private and public medical schools in the last decade. *Academic Medicine*, (AAMC) 47: 579-583.

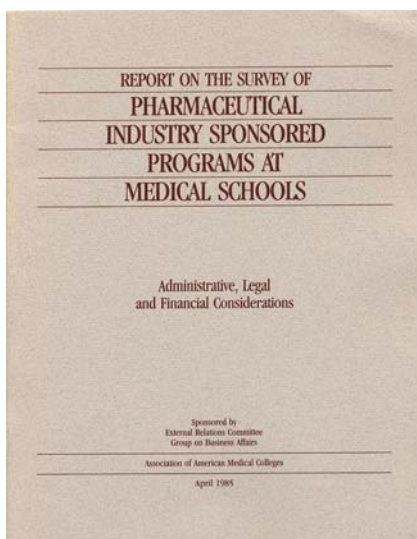
Ridley, Gordon T., Susan E. Skochelak, and Philip M. Farrell (2002). Mission Aligned Management and Allocation: A Successfully Implemented Model of Mission-based Budgeting. *Academic Medicine*, (AAMC) 77:124-129.

Deufel, J. H. (1971). Managing Teaching budgets and research grants. *Academic Medicine*, (AAMC) 46: 554.

Kutina, K.L., E.A. Bruss, and M. Paich (1985). Impact on academic medical center of reduction in reimbursement of indirect research costs. *Academic Medicine*, (AAMC) 60: 669-676.

Goodwin, M.C., W.M. Gleason, and H.A. Kontos (1997). A pilot study of the cost of educating undergraduate medical students at Virginia Commonwealth University. *Academic Medicine* (AAMC) 72: 211-217.

Holmes, Edward W., Thomas F. Burks, Victor Dzau, Michael A. Hindery, et.al. (2000). Measuring contributions to the research mission of medical schools. *Academic Medicine* (AAMC) 75: 304-313.



In April 1985, the AAMC published “Report of The Survey of Pharmaceutical Industry Sponsored Programs At Medical Schools”. The study was sponsored by the external relations committee of the GBA, The members included Tom Fitzgerald, Chairman, Roger Deshares, Louisiana State University, John Dorfmeister, University of Chicago, David Mendelow, Stanford University School of Medicine, Robert Rose, Bowman Gray School of Medicine, and Clarence “Red” Stover, University of North Carolina at Chapel Hill.