# ASSOCIATION OF AMERICAN MEDICAL COLLEGES 

 SUITE 200, ONE DUPONT CIRCLE, N.W., WASHINGTON, D.C. 20036
## COUNCIL OF ACADEMIC SOCIETIES

 ADMINISTRATIVE BOARDApril 3, 1975

| 8:30 a.m. | Administrative Board <br> Business Meeting <br> (Coffee and Danish) | Plaza Room <br> Dupont Plaza Hotel |
| :---: | :---: | :---: |
| : |  |  |
| 1:00 p.m. | Joint CAS/COD/COTH/OSR Administrative Boards |  |
| . | Luncheon | Dupont Room Dupont Plaza Hotel |
|  | Executive Council Meeting (All Administrative Board members invited to stay as late as their travel schedule permits) |  |
| 4:00 p.m. | Adjourn |  |

AGENDACOUNCIL OF ACADEMIC SOCIETIESADMINISTRATIVE BOARD
April 3, 1975
I. REPORT OF THE CHAIRMAN
II. Action Items:

1. Approval of Minutes of CAS Administrative Board Meeting of January 15, 1974 ..... 1
2. All action items in the accompanying Executive Council Agenda
III. Discussion Items:
3. American Academy of Family Pathologists ..... 8
4. Division of Faculty Development Program Plans ..... 10
5. Medical College Admissions Assessment Program Developments ..... 11
6. Biomedical Research Panel Meeting ..... 12
7. Longitudinal Study of Faculty Graduating in 1960 ..... 13
IV. Information Items:
8. Society Representation at CAS Meetings ..... 15
9. Response to Academic Anesthesia Chairmen (Separate Enclosure) ..... 18
10. Resolutions Received from American Academy of Orthopaedic Surgeons on:
a. GAP Report ..... 19
b. AAMC FMG Task Force Report ..... 20
c. CCME Primary Care Physician Report ..... 20
11. 1974-75 CCME, LCGME and LCME Members ..... 21
12. 1974-75 AAMC Groups - Steering Committee Members ..... 27
13. Future Meeting Dates ..... 28

MINUTES
ADMINISTRATIVE BOARD COUNCIL OF ACADEMIC SOCIETIES

January 15, 1975
AAMC Headquarters Washington, D.C.

## PRESENT: Board Members <br> Staff

Jack W. Cole
Chairman (Presiding)
Robert M. Berne
F. Marion Bishop
A. Jay Bollet

Rolla B. Hill, Jr.
Thomas K. Oliver, Jr.
Leslie T. Webster

ABSENT: Board Members
David R. Challoner
D. Kay Clawson

Carmine D. Clemente
Ronald W. Estabrook
Robert G.: Petersdorf*

Mary H. Littlemeyer
Thomas E. Morgan
Mignon Sample
August G. Swanson

## I. Adoption of Minutes

The minutes of the CAS Administrative Board meeting held September 19, 1974, were adopted as circulated.

## II. Orientation of New Members

Opening the first meeting of the new Administrative Board, the Chairman asked Dr. Swanson to review the governance structure of the Association by way of an orientation for the new members. The CAS Directory, which contains information on the manner in which the CAS relates to AAMC, had been sent to the new Board members prior to the meeting.

In the case of both the CAS and the Council of Teaching Hospitals, the Administrative Board is advisory to its four representatives to the AAMC Executive Council. Nine of the 11 members of the Council of Deans are representatives to the Executive Council. One individual from the Organization of Student Representatives and one Distinguished Service Member also serve on the Executive

[^0]Council. Others on the Executive Council are the Chairman and Chairman-Elect of the Assembly and the President and Vice-President of AAMC. The officers of the AAMC and Members of the Executive Council for 1974-1975 are shown below:

Chamanan: Sherman Mi Mehinkolf. UCLA

Charman. Council ol Deans: Nan L. Bennete. Jr., Nen York Unimersin:
Chamatan Council oí Academic Sociclies: Jack W. Cole. Yale Ummeridy
Charman, Comeil ol Teaching Hospitals: Sidnes Lewine Momin Sinai Hospibal ol Clevidanid
Charperson: Organzation ol Student Represematives: Mark: Camon, Madical College of hiveomsin

COUNCIL OF DEANS
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COUNCIL OF ACADEMIC SOCIETIIS
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 COUNCIL OF TEACHING HOSPITALS
 (Harles B. Womer D Wa, Iale Vace Hamen Mossint




President: Johr A. D. Cooper, AAMC. Washimbon, D.C.
The Executive Committee of the Executive Council consists of the Chairman and Chairman-Elect of the Assembly and the Chairmen of the three Councils and the President and Vice-President of the AAMC. The Executive Committee meets with key AAMC staff annually following the annual meeting at which time AAMC programs and priorities are assessed. The report of the December 1974 retreat was included in the agenda.

Dr. Cole suggested that a graph depicting AAMC representation to the Liaison Committee on Medical Education, the Liaison Committee on Graduate Medical Education, and the Coordinating Council on Medical Education be prepared. A summary of the representation on the National. Board of Medical Examiners, of which AAMC is a member, appeared in the agenda.

## III. Action Items

## A. Appointment of a Secretary-Treasurer

ACTION: The CAS Administrative Board unanimously approved the recommendation (as set forth in the Executive Council Agenda on p. 18) that the Executive Council appoint Mr: Sidney Lewine as AAMC Secretary-Treasurer.

## B. Ratification of LCME Decisions

The CAS Administrative Board discussed at length the LCME accreditation decisions with reference to how the Board could strengthen in a positive way the LCME position in accreditation. It was suggested that in instances in which less than full accreditation was granted the CAS Administrative Board receive more detailed information. Dr. Swanson described the intricacies of the distribution among the various agencies and pointed out that the CAS

Administrative Board who serve as representatives to the Executive Council receive complete reports, etc., under the established mechanism.

ACTION: Regarding the ratification of LCME accreditation decisions (as set forth in the Executive Council Agenda on pp. 19-22), the CAS Administrative Board adopted the following statement:

Based on information available concerning recent LCME accreditation decisions, the Administrative Board of the CAS expresses concern about accrediting medical educational programs of apparently submarginal quality. Where there is evidence of major educational deficiencies, the CAS Administrative Board recommends that involved programs be denied accreditation or placed on probation. This action is intended primarily to provide a stronger stimulus for educational improvement and, secondarily to assure continuing credibility for accreditation decisions.
C. American Association for Accreditation of Laboratory Animal Care Request for Financial Support

Dr. Swanson reviewed the current thinking regarding the recommendation that the AAALAC request for financial support be denied. This reflects in no way on the value of the program of the AAALAC but is based on the belief that the medical schools, from which a sizeable amount of the AAALAC revenue is currently derived, should not be assessed twice, as they would be were AAMC to add to the revenue.

ACTION: The CAS Administrative Board unanimously adopted the recommendation (as set forth in the Executive Council Agenda on p. 23) that since the medical schoois are currently providing a substantial portion of the AAALAC revenue, it is recommended that the request for financial support be denied.
D. CCME Actions

ACTION: The CAS Administrative Board unanimously approved the actions of the CCME (as set forth in the Executive Council Agenda on p. 29)
E. CCME Report: The Primary Care Physician

ACTION: The CAS Administrative Board unanimously approved the recommendation (as set forth in the Executive Council Agenda on p. 30) that the Executive Council approve the modifications proposed by the Physician Distribution Committee as editorial changes.
F. CCME Report: The Role of the Foreign Medical Graduate

The CAS Administrative Board discussed the recommendation (on page 33 of the Executive Council Agenda) that the Executive Council disapprove
the Report of the Coordinating Council on Medical Education, Physician Manpower and Distribution: The Role of the Foreign Medical Graduate, (pp. 34-64 of the Executive Council Agenda) and discussed the comments and observations (pp. 32-33) upon which this recommendation was based. While the CAS Administrative Board agreed with the concerns expressed, it felt that the report could serve as a useful working paper in a national invitational conference.

ACTION: The CAS Administrative Board voted unanimously that the Executive Council accept the CCME Report, the Role of the Foreign Medical Graduate, in principle and recommend that a national invitational conference be sponsored for which the CCME Report, among others, would serve as a working paper.
G. .t. The National Intern and Residency Matching Program

At its September meeting the CAS Administrative Board approved a recommendation to the Executive Council that it direct the LCGME, after appropriate review, to take punitive action in cases of recognized violations of the NIRMP.

In the Report of the NIRMP Subcommittee of the LCGME (pp. 6770, of the Executive Council Agenda) the NIRMP Subcommittee "unanimously rejected the idea that accreditation of residency training programs and/or institutions should be used as a sanction for violations in the matching process..." (see paragraph 4a).

Dr. Swanson reviewed the current monitoring system which has disclosed few violators, most of whom were allegedly both innocent and ignorant of their wrong-doing. In view not only of this aspect but also considering the complexities of the system, the Board took the following action.

ACTION: The CAS Administrative Board, after considering the GSA Recommendations and the draft of the LCGME MIRMP Subcommittee Report (as set forth in the Executive Council. Agenda on pp. 65-70), voted unanimously to recommend to the Executive Council the appointment of a study group that would include students, grass-roots faculty, and hospital program directors to consider the problems in the NIRMP system.
H. Report of the Ad Hoc Committee to Review the JCAH 1971 Guidelines for the Formulation of Medical Staff Bylaws, Rules, and Regulations

ACTION: The CAS Administrative Board voted unanimously to accept the recommendations of the Ad Hoc Committee to Review the JCAH 1971 Guidelines for the Formulation of Medical Staff Bylaws; Rules, and Regulations (as set forth in the Executive Council Agenda on pp. 72-82).
I. Report of the Task Force on Groups

Dr. Swanson reviewed the establishment of the first AAMC Group in the mid-1950s when what was then known as the Continuing Group on Student Affairs was formed. This original group, renamed in the 1960s as the Group on Student Affairs, has in more recent times been one of five similar groups which have come into being to provide a national forum for individuals with special responsibilities in these several areas in their institutions.

Because the Board felt that the CAS should be exploring more fully the talents of the Group on Medical Education, it took the following action:

ACTION: The CAS Administrative Board voted unanimously to approve the Report of the Task Force on Groups (as set forth in the Executive Council Agenda on pp. 84-86).

In additon, the CAS Administrative Board decided that in an attempt to foster improved communication; it would in the future invite the Executive Secretary of the Group on Medical Education to meet with the Board regularly and report on GME activities. Also, the Chairman of the GME will be invited to report to the fall meeting of the full Council.
J. OSR Actions of September 1974

ACTION: The CAS Administrative Board voted unanimously to approve the four recommendations (as set forth in the Executive Council Agenda at the bottom of p. 87) regarding the statements approved by the OSR Administrative Board at its September 14, 19.74, meeting.
K. CAS Policy Regarding CAS Administrative Board Members Who Become Deans

The recent acceptance of deanships by two members of the CAS Administrative Board was announced to the CAS Administrative Board. Inasmuch as all Deans by virtue of their appointment, automatically become members of the Council of Deans, a number of complexities arise. First, any member of any council has access to the AAMC governance structure through that council. Secondly, it is possible that a member in such a position could be elected to serve on the Administrative Board of his/her second Council. It was felt, therefore, inappropriate for an individual on becoming a Dean to continue to serve as a member of the CAS Administrative Board. For this reason, the Administrative Board took the following action:

ACTION: The CAS Administrative Board voted unanimously:

1. That any person serving as a member of the CAS Administrative Board should, upon taking office as Vice President, Dean, or equivalent administrative officer in an academic medical center/medical school, cease to serve as a member of the CAS Board; and
2. That any seat so vacated should remain unfilied until the next Annual Meeting of the full Council at which time the established election procedures would pertain.
L. Policy on Designation of New Specialties and Approval of New Specialty Boards


#### Abstract

Dr. Swanson said that in the past the mechanism for establishing a new specialty board has been by action of the Liaison Committee on Specialty Boards of the American Board of Medical Specialties and the American Medical Association with the recommendations of that Committee then being approved by the A.M.A. House of Delegates and by the A.B.M.S. The question has now been raised as to whether the Coordinating Council on Medical. Education with its five parent organizations should be the agency to approve the establishment of new specialties.


ACTION: The CAS Administrative Board expressed the opinion that, in principle, the Coordinating Council on Medical Education should eventually be responsible for authorizing the establishment of new specialty boards. However, the institution of this responsibility at this time might be too stressful to the smooth evolution of the Coordinating Council; therefore, efforts to achieve this principle should proceed with caution.
M. Consideration of Resolution from the Society of Academic Anesthesia Chairmen

This resolution requested that the CAS acknowledge the critical shortage of accademic anesthesiologists and strongly support efforts to rectify this deficiency in specialty distribution of physicians.

A number of issues were discussed. While AAMC would be able to generate data from the Faculty Roster Information System that could be useful to this or any such group, the underlying bases for a shortage in any specialty would require a different kind of research effort and one that could be very complex.

It was decided that a letter should be written to the SAA Chairmen indicating that the CAS Administrative Board discussed their resolution and are sympathetic to theirs and similar concerns, pending an exploration of a role that AAMC might play in generating data via the Faculty Roster Information System that they might find useful in analyzing the problem.
N. Reconsideration of NBME Rankings

This item was on the last agenda but was reintroduced due to local implications reported by a New York school. It was decided that the matter of NBME rankings should not be reconsidered but that the AAMC, as a member of the NBME, would have every right to present to the NBME its concern with regard to the inappropriate use of rankings.

Also, the schools have a responsibility to report to the NBME their experiences in inappropriate use of rankings.
0. Quality of Medical Education

Dr. Berne reviewed the background of the development of the Resolution of the Association of Chairmen of Departments of Physiology which reflected the concern that research activities were inadequately assessed in the medical school accreditation process. The distribution of this resolution had been limited to the CAS.

ACTION: With regard to the resolution "that the evaluation of medical schools for purposes of accreditation include an identifiable component which addresses itself to the quantity and quality of biomedical research and that the AAMC ensures that all accreditation survey teams include at least one recognized investigator in the biomedical sciences," the CAS Administrative Board unanimously recommended that:
1.: The Association of Chairmen of Departments of Physiology forward this resolution (if they have not already done so) to the Liaison Committee on Medical Education; and
2. That the resolution be forwarded to the Executive Council for its March agenda.

## IV. Information Items

The CAS Administrative Board received the following information items:
A. Letter from American Academy of Family Physicians declining invitation to meet with CAS Administrative Board
B. Executive Council Task Force on NBME GAP Report with modifications recommended by CAS and OSR
C. Modification of membership on the NBME
D. Report of the AAMC Officers' Retreat
E. Status Report on NRC/NAS Feasibility Study of Biomedical Research Manpower Monitoring

## V. Adjournment

The formal meeting was adjourned at 12:50 p.m.
The Board met jointly with the other two Boards for luncheon at the Dupont Plaza Hotel and an afternoon session with key AAMC staff for a discussion of the status of health manpower legislation.

## AMERICAN ACADEMY OF FAMILY PATHOLOGISTS


#### Abstract

The accompanying letter from the American Academy of Family Pathologists has identified a new organization which seems to have significant new concepts in the area of primary care. Advice is sought from the Administrative Board regarding whether this society should be contacted regarding membership in the CAS.




TILE AMERICAN ACADEMY OF FAMILY PATHOLOGISTS

## 915 East First Street

Duluth, Minnesota 55805

John A. D. Cooper, M.D., Ph.D.
President
Association of American Medical Colleges
One Dupont Circle, N.W.
Washington, D.C. 20036
Dear John:

The Association of American Medical Colleges deserves commendation for its leadership in organizing the recent Institute on Primary Care. As you noted at the time, there is a diversity of approaches to primary care. Various specialists are identifying their interest in this area, and the family pathologist is among these. The American Academy of Family Pathologists considers that its members practice Primary Care or Primary Medicine, as it was defined in connection with the Institute:

1. Primary Medicine is first-contact medicine. The Family Pathologist is, of course, often the first contact physician in cases of homicide, automobile accidents, etc. He generally cares for those who "approach the health care system" with the diagnosis of "D.O.A."
2. Primary medicine assumes longitudinal responsibility for the patient. Perhaps in our context the term "horizontal responsibility" would be more appropriate. Nevertheless, wive do concern ourselves with $\because$ continuing the continuing care of the patient.
3. Primary medicine serves as the "integrationist" for the patient. Implicit here is a broadness of responsibility, and our concern is for the "whole" patient. Nor do we restrict ourselves to the integrationist role but consider the role of "disintegrationist" to be equally important.
The American Academy of Family Pathologists has informed the American Academy of Family Physicians that it views the primary care issue with grave concern. We also wish the Association of American Medical Colleges to be aware of our Academy's interests and of our willingness to cooperate in all efforts to bring the benefits of Primary Medicine to the people.


DEDICATED TO CONTINUING TIE CALL OF THE HORIZONTAL PATIENT

Hilliard Jason, M.D:, Ed.D., joined the Association in September as the Director of a new Division of Faculty Development. Dr. Jason previously has been a consultant for the National Library of Medicine for two years and prior to that was Director of the Office of Medical Education, Research and Development at Michigan State University.

A proposal to establish a program to assist faculty in analyzing their capabilities as educators and to provide assistance to faculties wishing to improve their educational skills was presented to the Commonwealth and Kellogg Foundations and has been funded for a period of three years. Dr. Jason has recruited three staff members and will be developing his program plans in the near future. He will discuss these plans with the Board.

The Medical College Admissions Assessment Program is now in the process of developing a new cognitive examination which will replace the Medical College Admissions Test in the Spring of 1976. This new set of cognitive instruments will provide assessment of applicant students'"reading and quantitative skills and achievement in physics, biology and chemistry. The scope of the examination and the new variables measured will provide opportunities for better assessment of the applicant candidates. At the present time criteria for establishing what is relevant to the assessment of students seeking admission to medical school are being reviewed by a large group of experts drawn from CAS society members and from the undergraduate community. Drs. James Erdmann and James Angel will be available to discuss the status of development of the new cognitive series. This will be a follow-up to their presentation at the CAS Spring Meeting the previous. Tuesday.

## BIOMEDICAL RESEARCH PANEL MEETING

Discussion will be needed to analyze the general outcome of the Biomedical Research Panel Meeting and particularly to assess the attitudes expressed by CAS members regarding their concerns in the realm of biomedical research.: Tom Morgan is anxious to make as careful assessment as possible and to consider the need of having a more prolonged discussion at the Administrative Board meeting in June.

The AAMC Longitudinal Study includes 2821 freshmen from 28 medical schools who entered in 1956. The AMA identified 2516 of these as practicing physicians in 1972. The AAMC Faculty Roster includes all physicians who have held a faculty position in any one of our medical schools in 1967 or thereafter. The Faculty Roster includes Active and Inactive Faculty since 1967.

We have found that 469 of our Longitudinal Study physicians are also listed in our Faculty Roster. For these 469 , we thus have a considerable volume of data relating both to their characteristics as medical students and to their roles as faculty physicians.

We thought that we could conduct several studies of faculty physician careers with our currently available data. (of course, the Follow-up of the Longitudinal Study is planning to develop a special segment for our general Physician Survey dedicated to faculty, and this will generate additional data and research studies:) Some studies possible are:

1. Development of a Faculty Career. We have data on indications of choice of a faculty career ( $p$ lanned or actual) at 5 different times/points in the life of our physicians. There are physicians (drop-ins) entering faculty status at each time/point. Some of the physicians who entered a faculty career at Time 1 may "drop-out" at Time 2 or later. Some who dropped out may re-enter or drop-in later. We are interested in these Drop-outs and Drop-ins. We expect that there is a "stable" group of physicians who have persisted as faculty. We would like to know the personality and other background characteristics of such faculty. We could, of course, compare full-time with part-time faculty, and we could compare the "stable" group with a "control" group of physicians who never-ever chose a faculty career.
2. Faculty careers and academic achievement, using MCAT scores, NBME scores, and peer ratings.
3. Faculty careers and scores on attitudinal tests, such as Allport-Vernon-Lindzey (values), Edwards Personal Preference Schedule (needs), Strong Vocational Interest Blank (interests), and Career Attitudes Inventory.
4. Faculty careers and institutional factors, using LCME data such as student body, faculty ratio, research budget.
5. Preparation for faculty careers in terms of family background, assistantships/research work in medical school, professional degrees other than M.D., and post-doctoral fellowships.

## SOCIETY REPRESENTATION AT CAS MEETINGS

At the Administrative Board meeting in January, it was suggested that we analyze the attendance record of member societies at CAS meetings. The accompanying table demonstrates that there are a significant number of societies that do not send representatives to CAS meetings. On the other hand, there are a significant number who have been in attendance since their entrance to CAS. If time permits, there should be a discussion of the reasons for non-attendance.

## CAS MEMBER SOCIETIES NOT REPRESENTED AT BUSINESS MEETINGS, 1972,-1974



[^1]

## ACADEMIC ANESTHESIA CHAIPMEN RESOLUTION


#### Abstract

Subsequent to the action of the Administrative Board on the Academic Anesthesia Chairmen's resolution, we have received a copy of the report on which their resolution was based. It would appear that analytic information available through the Faculty Roster can be provided which will compare the plight of academic anesthesia to other disciplines. It is anticipated that a report from the Division of Data Processing will be available. The Academic Anesthesia Chairmen's report is enclosed for your information.


Board of Directors action 0ctober 7 and 8, 1973:

## MOTION:

(4) It was moved, scconded and passed that the following response to the GAP:Report be adopted, that it be published in the BULLETIN, and that it be distributed to the NBME and all other organizations and committees to which it is pertinent:
"The Board of Directors of the American Academy of Orthopaedic Surgeons has revie:יed 'Evaluation in the Continuum of Micdical Education,' a report of the Committee on Coals and Priorities of the National Board of Medical Examiners, and finds the implications of its contents of such great importance that it is called upon to establish a position.
"While recognizing the expertise of the National Board of Miedical Examiners in construction and administration of examinations in undergraduate education, the Academy is of the opinion that passing or failing an examination is not a valid comprehensive measure of all-inclusive individual competence.
"The Acadeny opposes the concepts that educational standards, research in medical education, determination of quality of health care, regulation of manpower or its distribution, and designing of curriculum should ever become primary responsibilities of the Nationa! Board of Medical Examiners.
"At the same time, the Acacismy supports the concopt of a continuum of medical education, but recognizes that this continum is not yel an established foct, and that for its effective accomplishrment, all interested and concerned medical organizations must work togother."

This statement was approved after review of the attached material and of the Report by the Board of Directors.

## American Academy of Orthopaedic Surgeons

## COMMITTEE ON GRADUATE EDUCATION

Wilson reported and presented a number of recommendations, action on which was taken as follows:

## MOTION.

(1) After discussion, and with the agreement of the Chairman of the Committee on Graduate Education, it was moved; seconded and passed that the Board of Directors accejt the Task Force. Report on the FMC of the AAMC, known as the Crispell Report in its entirely, and that the Presidents of the $A A A C, A O C$, and ABOS be advised of this action.

$$
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## MOTION:

(8) It was moved, seconded and passed that the report of the Coordinating Council on Medical Education, August, 1974, entitled "Physician Manpower and Distribution - The Primory Care Physician", be approved; that the recommendations in this report be adopted as Academy policy; and that the report be distributed to the Board of Councilors, the AOC, and the CMSS.

## Coordinating Council on Medical Education

William G. Anlyan, M.D. Duke University
*John A.D. Cooper, M.D. Association of American Medical Colleges

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C. John Tupper, M. D:
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Liaison Committee on Graduate Medical Education
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William D. Holden, M.D. Case Western Reserve Univ.
*James A. Pittman, Jr., M.D. University of Alabama
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## A SURVEY OF ACADEMIC ANESTHESIOLOGY

Part I - Survey Page 1
Part II - Recommendations for Anesthesia Faculty ..... Page 10
Submitted byASA Subcommittee on the Task Force on Academic Anesthesia Manpower

John E. Steinhaus, M.D., Chairman Robert M. Epstein, M.D. William K. Hamilton, M. D. C. Philip Larson, Jr., M. D. Robert M. Lawrence, M.D.

# A SURVEY OF ACADEMIC ANESTHESIOLOGY 

## Submitted by

Subcommittee on the Task Force on Academic Anesthesia Manpower
John E. Steinhaus, M.D., Chairman, Robert M. Epstein, M.D., William K. Hamilton, M.D., C. Philip Larson, Jr., M.D., Robert M. Lawrence, M.D.

An assessment of the manpower situation for academic anesthesiology was approached by means of an extensive questionnaire concerning the present and future faculty size, the clinical and educational work load, and the budgetary support.

Replies to this questionnaire regarding anesthesia department staffing and personnel practices were solicited from 109 medical schools in the United States and Puerto Rico. Seven (7) schools reported that they did not currently have a Department of Anesthesiology, 12 schools must be classified as "non-respondents", and replies from 4 schools were received too late to be tabulated. Therefore, the responses from 86 schools of medicine currently organized to include a Department of Anesthesiology comprise the basis from which the information for this report has been drawn.

An overwhelming majority of the schools, $86 \%$, described their anesthesiology departments as "autonomous departments". Only a small number, 10 of 86 , indicated that the anesthesiology department was a "division of surgery" or shared autonomy jointly with surgery.

## CLINICAL WORK LOAD

University hospitals average just over 12 anesthetizing locations and report 7,590 anesthetics administered each year as shown in Figure 1. In their affiliated hospitals, which vary in number from 0 to 6 per medical school, an average of an additional 6.7 anesthetizing locations and 5,214 anesthetics would be added. Variation in the size of clinical loads at the different school:s makes it difficult to provide a simple evaluation from the above figures. The extreme differences are illustrated by comparing one program which had only 5 anesthetizing locations, 2,500 anesthetics and no obstetrical load, to a huge complex which listed 51 anesthetizing locations and 46,700 surgical anesthetics administered plus 5,800 obstetrical anesthetics. Nevertheless, the average figure does provide a reasonable estimate for use by medical schools in planning and providing adequate clinical material for education without an undue burden of clinical responsibility. Previously applied standards for medical school approval have been based on 4 hospital beds/clinical student, which would mean 800 beds for a medical school with classes of 100 students and consequently 200 in the clinical years. Such a hospital would probably provide 10,000 anesthetic administrations yearly, not far from the averages shown above.

Figure 1
WORK LOAD IN MEDICAL SCHOOL HOSPITALS


## FACULTY PERSONNEL IN ANESTHESIOLOGY

A total of 1,044 faculty positions was reported from 86 medical schools. As indicated in Figure 2, the faculty distribution is low at the Associate Professor level and proportionately high at the Assistant Professor level. Such a distribution is most likely explained by a preponderance of recent additions to the anesthesia faculty. A high loss rate from anesthesia faculty is largely replaced with beginners who have not yet had time to advance up the academic ladder. The average academic faculty numbers 12.93 (Table I) and is faced with a clinical work load which includes 19.3 anesthetizing locations as well as obstetrical anesthesia, research, teaching, respiratory care and other duties. This serious disproportion between work load and number of academic faculty personnel should be carefully evaluated and on the surface justifies a program providing substantial corrective measures.

Figure 2
NUMBER OF FACULTY AND VACANCIES


TABLE I
AVERAGE STAFF POSITIONS - MEDICAL SCHOOL

|  | Budgeted | Filled |
| :--- | :---: | ---: |
| Professor | 2.63 | 2.37 |
| Associate Professor | 2.63 | 2.15 |
| Assistant Professor | 6.25 | 5.30 |
| Instructor | 2.70 | 2.25 |
| Fellow | 1.00 | .86 |
|  | -15.21 |  |

Volunteer faculty (Figure 3) was reported for less than 30 medical schools and due to the nature of anesthesia practice probably provide little relicf for the heavy load of patient care since this faculty is located at other hospitals.


Less than 30 medical schools reported this type of appointment.

Figure 4 shows a distribution indicating a young faculty, which substantiates an opinion held by most observers.


## NON-PHYSICIAN PERSONNEL

Non-physician personnel employed for clinical anesthesia service is largely composed of CRNA's and totals 743 persons. This group is approximately $50 \%$ that of the residents in training. The combined residents and nurse anesthetists total approximately 2,000 , which is about twice that of the faculty personnel. Other personnel assisting the anesthesiologist number approximately 1,000 which averages over 10 persons per medical school reporting.

TABLE II
NON-PHYSICIAN PERSONNEL EMPLOYED FOR CLINICAL DUTIES

|  |  | NUMBER OF SCHOOLS <br> RESPONDING |  | AVERAGE <br> PER SCHOOL |
| :--- | :---: | :---: | :---: | :---: |
| Certified R.N. Anesthetist | 732 |  | 79 | 9.3 |
| R.N. | 300 | 24 | 12.5 |  |
| Physician's Assistant | 11 | 4 | 2.75 |  |
| Technician | 207.5 | 59 | 3.4 |  |
| Anesthesia Aides | 292 | 60 | 4.9 |  |
| L.P.N. | 13 | 5 | 2.6 |  |
| Other | 104.5 | 16 | 6.5 |  |

The changing pattern and increased complexity of the modern medical center are shown in Table III with other full-time persomel now carried on the Department of Anesthesiology payroll. Ranging from highly trained research personnel (pharmacologists) to professional administrators, this personnel demonstrates a new dimension of medical school departments.

TABLE III

> NON-ANESTHESIA PERSONNEL
Pharmacologists ..... 25
Engineers ..... 16
Administrators ..... 23
Other ..... 157

## RESIDENTS IN TRAINING

The resident in anesthesiology, like all clinical trainees, represents both personnel for the care of patients as well as an educational obligation. The clinical care provided by a resident is very uneven, since it would be largely non-contributory during the first two or three months of training, but with increasing experience and the long hours of call, he carries a very substantial load that is greater than the nonphysician anesthetists who work a 40 hour week. Assignment to special areas, Table IV, where education is primary and the clinical load becomes secondary, reduces the resident's contribution to the routine clinical anesthesia load.

## TABLE IV



Table $V$ would indicate that there is an average of 16 residents per medical school and its affiliated hospitals distributed over four years in an uneven fashion. Although the surgical anesthesia occupies $70 \%$ of the resident's 24 month period of clinical anesthesia training, obstetrical anesthesia, recovery room, I.C.U. and other activities take a significant fraction of his time. Foreign medical graduates account for almost half of this group but may well decrease markedly with the new proposed regulations.

## TABLE V

## RESIDENTS IN TRAINING

| Year | Interns \& Residents | FMG |
| :---: | :---: | :---: |
| $1972-1973$ | 1223 | $45 \%$ |
| $1973-1974$ | 1376 | $43 \%$ |

## UNDERGRADUATE TEACHING LOAD

The Anesthesia Clerkship was available in $100 \%$ of the schools reporting. $45.3 \%$ had a required clerkship for all students. An average figure of 61.5 medical students per medical school had such a clerkship distributed almost evenly between third and fourth years. The hours of teaching are displayed in Figure 5.

Figure 5
FACULTY HOURS OF TEACHING


Medical StudentsClass sessions ( 75 schools)
Teaching conference ( 55 schools)

Anesthesia faculty teaching in other departments is shown in the following tabulation, which gives the percentage of departments reporting.
Pharmacology ..... 82.6
Physiology ..... 46.5
Anatomy ..... 18.6
Biochemistry ..... 14.0
Pathology ..... 5.8
Community Medicine ..... 4.7

As might be expected, there is a very high participation in pharmacology and a substantial contribution to physiology. When compared to surveys made in 1964, this contribution to teaching in other departments has increased. Further increases are probably not possible unless there are substantial increases in anesthesia faculty.

## SOURCES OF PROFESSIONAL INCOME

In Table VI the source of Professional Income is shown as an average for the medical schools reporting. It should be noted that fees from patient.care are the largest single source.

## TABLE VI

SOURCES OF THE PROFESSIONAL INCOME FOR THE FACULTY
PERCENT
MEDICAL SCHOOL ..... 28.5
TEACHING HOSPITAL ..... 19.2
AFFILIATED HOSPITAL SALARIES ..... 6.6
PATIENT GENERATED INCOME (FEE FOR SERVICE) ..... 42.5
GRANTS OR FOUNDATION MONIES ..... 2.1
CONTRACT FOR HEALTH SERVICES ..... 1.1
PREDICTED CHANGES IN WORK LOAD AND PERSONNEL
There was almost unanimous agreement in the questionnaires that the overall work load will increase approximately $25 \%$ in most areas of anesthesia. The specific average increases are shown below.

TABLE VII
Percentage Increase

Additional O.R.'s
Outpatient Anesthesia
Increased Anesthesia Schedule
I.C.U.

Other Outside O.R. Duties
31.6
22.9
22.5
21.7
22.8

Personnel to handle this increased load in the next five years was estimated as 6.1 anesthesiologists, which will be added to the present average staff of 12.3 or an average increase of $40 \%$ for the academic anesthesiologist faculty positions needed. Nurse anesthetists and/or physician assistants were anticipated as being needed in equal numbers. This projected increase in personnel would be utilized as shown:

Clinical Care
Teaching or Research
Administrative

35.48
9.6 6

In a question asking for judgment as to the capability of other professional personnel in relieving the anesthesiologist of clinical duties, the response indicated that nurse anesthetists could relieve the anesthesiologist of $34.8 \%$ of his duties with lesser amounts for other clinical personnel, down to a figure of $1.6 \%$ for the non-anesthesia trained nurse.

## SUMMARY AND RECOMMENDATIONS

The construction of a questionnaire which properly states the questions and produces accurate data is difficult. Nevertheless, we believe this survey provides useful information to evaluate the current manpower situation in academic anesthesiology, even though the presentation of such data as averages does not provide a true picture of the wide range in numbers of faculty existing at the various medical schools. The clinical anesthesia load of the operating room is the single most important factor in determining the size of faculty. Since a questionnaire can at best provide information of the situation as it presently exists, the personnel needed at approved medical schools for satisfactory levels of anestlesia care, educational programs, research and other clinical activities, e.g., respiratory care and pain therapy, must be determined by another method. Therefore, it is recommended that the American Society of Anesthesiologists take steps to establish a guideline for the faculty numbers necessary to provide quality patient care, as well as the faculty needed to provide medical education in anesthesiology and adequate research effort. Our obligations in respiratory therapy, pain therapy and other related areas of clinical care for the approved medical school should be determined. Furthermore, the American Society of Anesthesiologists should provide this information to the American Medical Association, American Association of Medical Colleges, governmental agencies, and all other appropriate organizations. It is the intention of the Task Force to provide a further document with specific recommendations related to the above guidelines.

## INTRODUCTION

Recommendations for physician manpower requirements have frequently been based on surveys of present personnel, and the conclusions concerning the adequacy of physician coverage are drawn from a deviation in numbers of such physicians from national averages, based on population. Such studies have limited usefulness since the national averages themselves may reflect excessive or inadequate numbers of physicians for a given educational or medical need.

In Part I of our report on academic anesthesia manpower a 15 -fold variation in number of anesthetic administrations from 86 medical centers was found while a 5 -fold difference in ratios of faculty to anesthetizing locations was shown. The proportion of anesthetic administrations to the size of the medical school class differed markedly as illustrated by six well-established medical schools, three schools revealing high ratios of 21,24 , and 35 and three showing low ratios of 3,4 , and 5. During a period in which the cost of medical education and the quality of medical care are serious public and legislative concerns, the limitation of using such variable averages as standards for manpower requirements is obvious.

It is the purpose of this presentation to assess the faculty requirement for academic anesthesiology based on this faculty's assigned work load of clinical care in anesthesiology, teaching, research and administration. Obviously the large proportion of patient care provided by anesthesiologists ( $65 \%$ to $85 \%$ ) is surgical anesthesia. Nonetheless, obstetrical anesthesia, respiratory therapy, pain the rapy, intensive care and resuscitation are other essential areas in which anesthesiology has a logical and proper responsibility.

## SURGICAL ANESTHESIA

Although the academic institution draws its purpose from education and research, the pressure on the academic Department of Anesthesiology has been predominantly directed toward the provision of clinical anesthesia care for the surgical patient. The size of the clinical anesthesia work load for surgical procedures varies to a much greater degree than does the educational work load (as indicated by class sizes) with both factors appearing to vary independently. Since quality patient care is an essential requirement of clinical education, faculty size for the provision of quality care for the surgical and obstetrical patient would appear to be also a prime element in determining the faculty requirements for academic centers.

A long established "rule of thumb" for evaluation of residency programs in anesthesiology has been a minimum ratio of one anesthesiologist in attendance in the OR, for each two residents. Clinical anesthesia capability of residents ranges from that of the rank beginner to the almost fully trained anesthesiologist. Furthermore, patient care demands include the very sick patient scheduled for open heart surgery as well as the healthy young man having a hernia repair. Weighing carefully this
variability in clinical circumstances, it was the final judgment of the Task Force that regular staffing of the surgical anesthesia program slobould be based on one anesthesia faculty in attendance in the O. R. Suite for each two residents administering anesthesia. Consequently a ten room O.R. Suite in full operation would require at least five anesthesiologists in attendance for tre provision of quality anesthesia care. As it is undesirable both for the teaching of medical students and for maintenance of professional competence for the faculty to provide no direct personal patient care, approximately $20 \%$ of the operating rooms should be covered on a $1: 1$ basis. This will permit either admission of anesthesia personally by the faculty or the direct close and continuous supervision of a medical student administering anesthesia. This provision would raise the minimum number of anesthesiologists for a 10 room suite to 6 . If funding for anesthesiia care by third party payers requires continuous personal attendance by the ancesthesia faculty as opposed to the anesthesia care team, this faculty requirement would double ( 10 anesthesiologists). The Task Force also agreed that direct attendance of the patient by murse anesthetists (C.R.N.A.'s) would necessitate the same ratio, namely, one anesthesia faculty per two scheduled O.R.'s (simultaneous anesthetie administrations). A survey on this question conducted at a meeting of the Society of Academic Anesthesia Chairmen is shown below:

Academic Departments of Anesthesiology
$\frac{\text { Agree }}{59}$
59

Disagree
1 should require a minimum of one faculty in attendance per two scheduled O.R.'s (anesthetizing locations).

The question might be raised that uncomplicated surgery such as herniorraphy or dilatation and curettage would permit a lesser ratio of faculty to anesthetizing location if trained nurse anesthetists were assigned. However, the anesthesiologist can only direct, manage complications of and take responsibility for a limited number of simultaneous anesthetic administrations out of the sheer necessity of being present at multiple places for unscheduled critical times. Furthermore, increasingly complex surgical procedures such as coronary bypass, vascular prothesis, and kidney transplant require the complete attention of one anesthesiologist and frequently the assistance of an additional anesthetist. Consequently combining patients requiring $1: 1$ coverage with those needing a less demanding anesthetic attention provide an average anesthetic coverage for the overall O.R. suite of a $1: 2$ ratio of anesthesiologists to anesthetic administrations for the overall O.R. Suite.

## OTHER CLINICAL NEEDS

## Obstetrical Anesthesia

In many hospitals and medical centers of this country, the provision of anesthesia care for the expectant mother and new baby has never reached an appropriate level from either a humanitarian or societal point of view. For the provision of adequate
clinical teaching material, obstetrical authorities have cited the need for 2000 to 4000 deliveries per year for medical schools with class sizes of 100 students or more. Accepting these judgments, eight obstetrical deliveries daily as well as the need for a faculty member devoting full professional attention to this critical area would affirm the need for at least one full time faculty assigned to this duty. Even with the allocation of one anesthesiologist to obstetrical anesthesia, the demanding evening and night obstetrical work would require participation by other members of the anesthesia faculty, as is the case for emergency surgery.

## Respiratory Care, Intensive Care, and Pain Therapy

There is no uniform pattern for handling the clinical demands of these anesthesia related clinical services at many medical school centers and in some instances expert physician service is not even available. Each of these services should be provided by the medical educational center which is dedicated to furnishing comprehensive quality medical care. In many locations anesthesiologists have initiated these clinical services, and there is strong and logical support for the assignment of these responsibilities to the Department of Anesthesiology. Should the anesthesia faculty assume such responsibilities, a manpower allotment must be added to adequately serve the clinical and educational demands thereby created. In small medical centers these functions may be performed by part time faculty assignments; however, professional and academic leadership will come from those institutions which have faculty members who devote full time to these areas.

## Administration

Additional faculty time must also be allocated to administration in the modern medical center with its multiple demands for clinical service, education, planning and research. Financial support from numerous sources, continuous evaluation of the quality of patient care, and increased demands of personnel management have all contributed to the work load carried by the clinical faculty. The survey previously quoted reveals that the average medical school department has a total of fifty personnel in all categories.

## Emergency Call Coverage

The emergency loads of the active medical centers usually require additional allocations of faculty time or positions. If an anesthesiologist works 24 hours providing anesthesia care for emergency patients, additional faculty must be available to cover his normal work assignment for the next day. A very active open heart program, high numbers of obstetrical deliveries or surgical emergencies may increase the need for such faculty time and position. Such faculty allocations would be determined by the size of the emergency service.

## ANESTHESIA RESEARCH

A medical school committed to research as a part of its program must allocate faculty time on the basis of resources available and the strength of its research commitment. It is difficult to believe that an academic department can be truly effective and occupy its proper place in the medical center without at least a modest research effort. With the sophistication of medical research today and the competition for research funding, part time efforts will have limited success, especially if the research activity is merely added on to a day spent in clinical or educational activities. Since leading medical institutions will undoubtedly adopt a higher research commitment than the modest $20 \%$ effort used in our projected model, additional manpower for research activities would be required.

## NONCLINICAL ACTIVITY

In addition to the above suggested allocations of faculty positions or time, it was the unanimous opinion of the Task Force that a MINIMUM of one day per week or its equivalent should be designated for each faculty member for the purposes of scholarly activities outside of the operating room suite. Without such an allocation it is difficult to justify the academic position which is completely devoted to clinical care as being "academic" in character even though it is obviously justified as patient care responsibility. The obvious difference in financial remuneration between private practice and the academic position will make the recruitment of an adecquate faculty purely for clinical work virtually impossible as long as there are unmet needs in the private practice sector. Should the availability of manpower in anesthesiology improve markedly in the future, the academic faculty will be left with the least desirable physicians unless their professional responsibilities and opportunities include not only patient care but also nonclinical, scholarly work such as classroom teaching and writing. In the survey of the membership of the Society of Academic Anesthesia Chairmen mentioned above, the following opinion was expressed:

All academic anesthesia staff should

Agree 59

## Disagree <br> 1 .

 have at least one day of non-clinical assignment each week.
## FULL TIME EQUIVALENCY - F.T.E.

Call coverage has compounded the traditionally long working hours of the physician. When medical work is paid for on a fee for service basis, as in the private practice of medicine, financial remuneration is increased with additional hours of work. However, in salaried positions, which are common in academic institutions, duties are assigned and vacation, sick and professional leaves are standard provisions.

As shown below, most hospitals schedule surgery 250 days each year. A full time
faculty assigned to clinical anesthesia will provide 0.85 full time equivalents (F.T.E.) for this work demand when vacation and leave allowances are as shown. If one further deducts one day each week for nonclinical activity, each faculty position will then provide. $68 \mathrm{~F} . \mathrm{T}$. . f. for clinical anesthesia duties. Computed in reverse, each regularly scheduled faculty assignment will require 1.5 faculty positions. Such calculations always make the presumption that vacation, professional and sick leave, fall into a nicely scheduled pattern, which of course is never the case.

FULL TIME EQUTVALENCY CALCULATION

## Regularly Scheduled O.R. Days Yearly

260 O. R. work days (Monday - Friday)
-10 Holidays
$\overline{250}$ Regularly scheduled O.R. days
Days Worked by Full Time Faculty
250 Hospital work days
-22 Vacation (1 month calendar time)

- 5 Average sick leave
-10 Professional leave
213 Work days by each staff yearly
FTE/each Faculty Member
$\frac{213}{250}=.85 \mathrm{~F} . \mathrm{T} . \mathrm{E}$. for each staff

Non-Clinical Allowance
$20 \%$ time allowed for nonclinical activities (teaching, committee work, organization, administration 1 day/week)
$.85 \times 20 \%=0.17$
.85
$-.17$
. 68 F.T.E. per academic staff position
Faculty Positions Needed to Provide 1.0 F.T.E. (O.R. Coverage)
1.470 Faculty positions needed
$.68 \sqrt{1.000}$

## ANESTHESIA FACULTY PROJECTION

The method of calculation which has been described can be employed for determining the size of the faculty required and can be modified to fit any particular anesthesia load, research commitment, or selected special clinical duties. The following proposal based on ten regularly scheduled O. R.'s represents a modest but reasonable faculty for an average medical school with a class size of 100 students. This proposed faculty would provide adequate personnel for quality patient care, clinical instruction and other academic requirements such as administration, committee work, etc. It should be noted that a major academic obligation, namely research, would be limited to a modest $20^{\circ} \mathrm{F}$ of the total activity.

Since clinical anesthesia for surgery is the major determinant in staffing, a further rule of thumb can be derived from this model by utilizing an overall ratio of 1.8 faculty positions for each regularly scheduled O.R. (anesthetizing location) as a simple indication of a minimally acceptable standard. It should be noted that this ratio is probably a little low for the smaller clinical program and possible a little high for the larger clinical center since neither educational nor research demands will decrease or increase proportionately with the surgical anesthesia load. The elimination of obstetrical anesthesia, respiratory care, pain therapy and research would leave a faculty to O. R. ratio of 1.0 and a "stripped" academic anesthesia program with limited effectiveness. Any reduction of faculty numbers represented by low ratios will dilute physician contribution and thus diminish the quality of patient care by reducing it to a level not compatible with the stated goal of quality care. The faculty projection presented will not provide the expected quality care if the hospital design is substandard and the anesthetizing locations are widely scattered. The above projection presumes that the anesthetizing locations are contiguous.

It should be emphasized that the faculty staff described is in no way luxurious and in fact represents a "bare boned" projection if we are sincere about our teaching, research and clinical care goals. Provision for a full-time faculty position dedicated to education or the adoption of a not uncommon request for $50 \%$ of the faculty time for teaching and research would require a substantial increase in the faculty numbers.

> MINIMAL ANESTHESIA FACULTY PROJECTION

Medical School Assumptions

500 Beds
10 Regularly Scheduled O. R.'s

400 Medical Students
2500 Obstetrical Deliveries

Anesthesia Duties
*Possible Additional Positions
$\begin{array}{ll}\text { Sabbatical Leave } & 0.5 \\ 50 \% \text { of faculty eligible } & \end{array}$
Recommended Guide
Faculty to O.R. Ratio 1.5
Faculty Positions
8 O.R.'s (3:2)
2 O.R.'s (1:1)
Obstetrical Anesthesia
Respiratory Care
Pain Therapy
Administration
Research
Call Duty
6. 0
3.0
1.5
1.5
1.0
1.0
3.0
$\frac{1.5}{18.5 *}$

Y TO O.R. RATIO SURVEY
Using data collected in the survey of academic anesthesiology, the faculty to O.R. ratio was calculated for 91 out of 106 medical schools. Statistics were not available from a number of new schools which have not as yet established all of their clinical departments. Ratios ranged from a high of 3.5 to a low of 0.25 with a median of 0.75 faculty to each regularly scheduled O.R. The following table shows the distribution of schools into four levels of staffing:

TABLE I
Distribution of Faculty to O.R. Ratio

| Faculty <br> to O.R. | $<0.50$ | 0.51 to 0.75 | 0.76 to 1.00 | 1.01 to 1.50 | $>1.51$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| \# Schools | 14 | 32 | 20 |  | 3 |

Should all budget positions be filled there would be approximately a $10 \%$ movement to higher ratios. A number of the low ratios were medical schools with very large patient loads and anesthesia care characterized by severely limited physician participation. Conversely, medical schools with limited patient loads often had higher ratios since fewer faculty were required for administration of anesthetics. While interpretation of this data must be limited, it appears that $75 \%$ of the medical schools in the survey have faculties of anesthesiology below the minimal standards which have been adopted by academic anesthesiologists.

## QUALITY OF PATIENT CARE IN ACADEMIC ANESTHESLA

As judged by "Peer Review," the quality of academic anesthesia care revealed by this study is not adequate and certainly falls below the level available in the private practice of medicine in many sectors. If one looks for possible errors in the survey and its findings, one might assume that the number of anesthetizing locations are overstated by $20 \%$. If such is the case the highest $25 \%$ of the schools would be moved to a ratio approaching the 1.5 figure recommended by the model study. Similar adjustments with the lower three-fourths would do little to correct the deficiency of anesthesiologist participation in the patient care in our medical centers.

Another possible factor in this analysis leading to the indication of deficiency in anesthesia care is the proposed standard that one faculty is needed for each two simultaneous anesthetic administrations. Considering the role of life systems support (patient safety) in the provision of quality anesthetic care and the likelihood that a cardio-pulmonary arrest will produce irreversible brain damage in three minutes, the hazard to the elective patient of inadequate anesthesiologist participation must be faced openly. If the medical community or society allows cost considerations to dictate a lesser assignment of physician manpower to academic anesthesiology, then a permissible anesthetic death rate should be established. At the present time our courts of law leave no room for error in medical practice and as a consequence the anesthesiologist finds himself facing the threat of the highest malpractice judgments in medicine, the most expensive insurance premiums, and even refusal by insurance companies to sell him malpractice insurance. The legal problem is particularly serious since a high proportion of cardiac arrests resulting from anesthesia are preventable and consequently contain the elements of successful malpractice actions. Absence of the anesthesiologist at the critical time of the cardiac arrest episode is almost indefensible in a malpractice action unless the failure of heart function can be proved to be due to other disease processes.

Another characteristic of clinical anesthesia training of residents and medical students is the heavy demand on anesthesia faculty during the first six months of training, and a ratio as high as one faculty for each two anesthetic administrations is only possible because $50 \%$ of the residents have had a year's training. The shortage of residents and the costs of training preclude medical centers from carrying the numbers of residents necessary to utilize only experienced residents in the independent administration of anesthesia. The pressure to provide anesthesia care has led to the recruitment of substandard personnel as evidenced by resident staff that are completely composed of FMG's.

Another factor potentially affecting both the number of anesthesiologists required to staff an anesthesia schedule and the provision of quality care in the community hospital is the use of the trained nurse anesthetists or physician assistants in supplying anesthesi:, care not needed for training purposes in the residency training program. Although the technical proficiency of this group is high, the medical background is limited and consequently must have anesthesiologist direction and support. As mentioned previously
the ratio of anesthesiologist to nurse anesthetists (simuditaneous anesthetic administrations) will depend on two factors -- complexity of surgical procedure and the disease state of the patient. In a situation in whirch the patient is healthy and the operating procedure reasonably short and simple, such as cystoscopy or electroconvulsive therapy, a minimum of anesthesia facwlty time is needed if trained personnel are utilized. The minimum anesthesiologist contribution to such an anesthetic procedure would include patient evaluation and management and/or assistance with complications. In the judgment of experienced anesthesiologists, it is doubtful that a ratio of less than one faculty to three anesthetics could be justified if quality care is to be maintained, even with relatively low risk procedures. Batanced against these relatively simple procedures is the most demanding cardiovascular and pediatric surgery requiring the complete attention of one or even two anesthesiologists along with additional assistance from $a$ resident or nurse anesthetist. The distribution of surgical procedures in most academic centers is weighed in the direction of complex surgical procedures and seriously $n l l$ patients and would certainly justify the recommended one faculty to two simultaneous anesthetic administrations as a minimum. Furthermore, statutes regulating the clinical activity of physician assistants in most states usually specify a limit of two $\Phi$. A.'s to one physician. This judgment in broad areas of medicine seems to support the recommended assignment of one faculty (anesthesiologist) for each two anesthetic administrations.

## DIVISIUN UF FACULTY DEVELUPMENT

## BACKGROUND

Faced with rising enrollments, growing costs, and declining financial support, medical schools must find ways to increase the efficiency of their educational programs, while continuing to improve their quality. These events occur at a time when there is growing recognition that although medical faculty members have spent many years in preparation in their discipline, they have typically devoted little or no time learning how to plan, implement, or evaluate their instructional efforts. In keeping with its mission to provide programs and services in response to the identified needs of its member medical schools, in September, 1974, the Association of American Medical Colleges created a Division of Faculty Development, within the Department of Academic Affairs.

## PROGRAM GOALS

The overall intention of this new Division is to contribute to raising the quality and efficiency of medical school educational programs, primarily by helping faculty members enhance their effectiveness as teachers. Toward this end, the following goals will be pursued:

1. To help stimulate faculty interest in educational issues, and to encourage their pursuit of self-improvement activities in this area.
2. To provide an opportunity for medical faculty members to gain a confidential, individual assessment of their level of awareness, knowledge, and competence in the area of education.
3. To provide assistance to faculty members in the solution of educational problems.
4. To identify and develop resources for assisting faculty members to enlarge their understanding of educational issues, to enhance their competence in educational design and implementation, and to broaden their awareness of options that are available in solving educational problems.

## PROGRAM ACTIVITIES

## A. Self-Assessment Program

The first major activity of this Division is the design and implementation of methods that will enable faculty members to undertake self-assessment of their educational responsibilities and effectiveness. There will be self-report forms, problem-solving tasks, and student report forms, which will be scored and interpreted to provide confidential, individual feedback to those who choose to avail themselves of this service.

## B. Workshops

Short-term workshops (2-4 days) dealing with focused topics are being designed and will be offered to general faculty members as well as to specialized groups, such as curriculum and admissions committee members. Possible topics for general faculty are: Evaluation Design, Simulation, and Clinical Supervision. Possible topics for specialized groups are: Curriculum Design, Student Selection, and Grading Policy Issues.

## C. Instructional Packages

Self-instructional units are being developed on topics involving basic instructional concepts. These packages will serve to introduce specific topics or to reinforce selected presentations at the workshops. They will also be available to faculty members for use in their home settings.
D. Information Sharing

1. Clearinghouse

A clearinghouse service is being established as an effort to reduce the current level of excessive duplication of effort in educational planning. It will provide information about: a) faculty development programs, b) funding sources for support of instructional innovations, and c) a vehicle for the sharing of unpublished documents, such as high quality committee reports.
2. Curriculum Directory

This has been an annual AAMC publication since 1972. It contains organized information about current medical schools curricula. Its purpose is to facilitate the exchange of information on academic programs, providing descriptions and identifying trends of importance to faculty, students, deans and curriculum community members.
3. AAMC Education News

This AAMC newsletter is published five times during the school year and is mailed without charge to nearly 36,000 full-time medical school faculty members. Its primary goal is to report on instructional innovations, assessment and current trends in medical education.

## E. Consulting Services

The Division of Faculty Development will identify individuals with a wide range of complementary skills, who could serve, individually or in teams, as consultants to medical schools seeking to analyze or modify their current educational programs.

## F. Coordination and Facilitation

The Division will develop a close working relationship with, and provide support to, existing faculty development programs. It also intends to aid and support the establishment of new university-based centers, dedicated to the improvement of medical school instructional programs. Support will include consultation services (staff or external consultants), coordination of resources, and provision of exchange opportunities for trainees. Ultimately, many of this Division's contributions will be indirect and decentralized, being provided through its facilitation and promotion of the work of university-based centers.

PROGRAM SUPPORT

- General support for the programs of the Division of Faculty Development is being provided from the AAMC's operating budget, a four year grant from the W.K. Kellogg Foundation, and a three year grant from the Commonweal th Fund. Additional funds for specific activities are being provided by a contract with the Bureau of Health Resources Development, Health Resources Administration, DHEW. The National Fund for Medical Education has provided primary support for the publication of AAMC Education News.

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[^0]:    *Ex Officio
    NOTE: Dr. Theodore Cooper, Director of the National Heart and Lung Institute, was the guest of the Board for cocktails and dinner at the Dupont Plaza Hotel. An informal discussion with Dr. Cooper which followed was very informative. The session was concluded at 10:00 p.m.

[^1]:    *Withdrawn from CAS

