Meeting Dental Needs in the 1970's
Threshold or Precipice
The Specialties and General Practice

APRIL 1969
Contents for April 1969

ROBERT I. KAPLAN NAMED EDITOR . . . . . . . . . . . . . . . . . . . 75

"MEETING DENTAL NEEDS IN 1970's" AND THE RECOMMENDATIONS 76

THRESHOLD OR PRECIPICE,

THE SPECIALTIES AND GENERAL PRACTICE—A PANEL DISCUSSION 100
Robert I. Kaplan Named Editor

At its last meeting, the Board of Regents appointed Robert I. Kaplan of Cherry Hill, New Jersey, to the office of Editor. Doctor Kaplan, who practices children's dentistry, is Assistant Professor of Pedodontics at the University of Pennsylvania School of Dental Medicine, and a diplomate of the American Board of Pedodontics.

He is a graduate of Temple University Dental School and saw service in World War II with the 35th Infantry Division, retiring with the rank of Major. He is a member of the American Academy of Pedodontics and a past President of the New Jersey Society of Dentistry for Children and the Academy of Dentistry for the Handicapped. He also holds membership in Omicron Kappa Upsilon honorary dental society, The Federation Dentaire Internationale, The American Academy for Cerebral Palsy, and Alpha Omega dental fraternity.

Doctor Kaplan has been active in dental journalism, having just completed ten years as Editor of the Journal of the New Jersey State Dental Society. In 1966-67, he was President of the American Association of Dental Editors.

He has recently been installed as Vice-President of the New Jersey State Dental Society. He is a delegate of the 4th ADA district and serves as a member of the Council on International Relations of the American Dental Association.

Doctor Kaplan brings to this important office perspectives of private practice and teaching as well as experience in journalism. He is indeed well qualified.—R.J.N.
THE workshop was held in the Chase-Park Plaza Hotel, St. Louis, Missouri, on December 10 to 13, 1967. One hundred and thirty-five persons, representing general practitioners, specialists, educators, administrators, employees of health departments, hygienists, dental assistants, laboratory owners, federal employees and one dental student attended.

Nine papers were presented. Five Study Groups came forward with many recommendations which were then discussed further in a general assembly. Out of these discussions finally came 69 recommendations. These recommendations were further reviewed by the Committee on Social Characteristics of the College, which reduced the number of recommendations from 69 to 40 "by combining those of similar intent, scope and suggested action." These then became a part of the Report of the Committee on Social Characteristics to the Board of Regents.

The Board of Regents, in turn, reviewed the recommendations and approved them with only slight changes. They were then arranged in groups and sent to the specific organizations or agencies involved for their consideration and possible implementation. (See Journal of the American College of Dentists, Volume 35, No. 3, 1968, pages 248 to 256.)

The following comments have been received:

Secretary Harold Hillenbrand for the American Dental Association

He advises that all councils have been alerted to the recommendations involving their sphere of activity and urged to give consideration to them.
J. A. Salzmann, American Association of Orthodontics Council on Orthodontic Health Service of the American Association of Orthodontists

"The following statement appears in the revised reference to specialties on page 220 of the J.A.C.D. for April, 1968, which is devoted to the proceedings of the Workshop on Dental Manpower:

"Group III recognizes that in all publicly funded programs certain limitations of treatment may be necessary, particularly the areas of recognized specialties."

"The AAO Handicapped Malocclusion Assessment procedure is then cited (p. 221) as an example how 'under publicly funded programs orthodontic treatment should be limited to handicapping malocclusion.'

"Since I am the one who devised the AAO Assessment Procedure which in addition to being adopted by the AAO has been approved also by the ADA Council on Dental Health and Dental Care Programs, I wish to set the record straight;

"At no time was it the intention of the AAO Handicapping Malocclusion Assessment Procedure to limit orthodontic treatment under prepaid or publicly funded programs. The AAO Assessment Procedure was devised to enable those who conduct publicly funded and prepaid programs to determine priority of treatment of handicapping malocclusion in relation to available competent professional personnel and the funds budgeted for orthodontic care. As you no doubt realize, there is a vast difference between priority of treatment and limitation of treatment as an established professional practice.

"In some European countries, the distinction is made between 'social dentistry' and private practice. For dentistry in this country to treat patients on two different levels would be contrary to the American tradition, to say nothing of the harmful effect on the dental profession."

Assistant Secretary Richard D. Morrison, American Association of Dental Schools

"Ben Miller has asked me to respond to your letter transmitting the resolutions approved by the Workshop on Dental Manpower.

"As you are aware, the Association strives within the limits of
its financial and staff resources to cooperate in the conduct of career guidance and recruitment activities. In addition to regular recruitment activities with which you are familiar, the Association has recently endorsed the American Fund for Dental Education's Negro Scholarship Program and has cooperated with the American Dental Association in the development of a recruitment film for careers in dental research. This film will be reviewed, I understand, at the forthcoming ADA annual meeting. We also counsel with the organizations representing the dental auxiliaries in establishing and strengthening their recruitment efforts.

"With regard to the second part of the resolutions you forwarded, we have no direct affiliation with the constituent or component societies. However, we have encouraged our member institutions to become more active, along with the constituent and component societies, in working with universities, junior and community colleges and other agencies in providing leadership for new educational programs in fields related to dentistry. Enclosed is a copy of a recent memorandum sent to member institutions related to this encouragement.

"I've just learned that I will be at a meeting in your offices on July 3 and will be happy to elaborate on any of these at that time if you wish.

"Thank you for transmitting these recommendations to us. You may be sure we will keep them in mind in planning future activities."

MEMORANDUM ON THE ASSOCIATION'S ROLE AND FUNCTION IN THE TRAINING OF AUXILIARY PERSONNEL*

I. INTRODUCTION

Along with other health professions and allied health organizations, the dental profession has been involved for several years in an effort to increase its capacity for the delivery of health care and to improve its system for delivering care to larger sectors of the population. Such an effort requires the successful collaboration of all persons and agencies having an interest in increasing the profession's capacity for service for a growing number of people who expect and demand good oral health. Practitioners, educators, public health workers and allied health organizations have now begun to pool their collective resources in a dynamic effort to avert a threatened manpower shortage.

* Approved by the House of Delegates, March, 1968.
Health Manpower Landmarks of 1967

Since the passage of the Health Professions Educational Assistance Act of 1963, with subsequent amendments, and the Allied Health Professions Personnel Training Act of 1966, member institutions of the American Association of Dental Schools have joined the effort of the profession and the government to expand the nation's educational capacity for the training of both professional and auxiliary manpower. It is anticipated that the number of dental graduates and graduates of accredited dental auxiliary training programs will be substantially increased by 1970.

Some of the signs and trends pointing to the determination of dental educators and practitioners to solve the problems of manpower and care delivery have emerged from several important, late 1967, meetings and conferences of the Association, American Dental Association and national advisory commissions concerned with health manpower needs. In October 1967, a meeting of a Special Committee on Association Role and Function recommended "that the Association must concern itself with the changing relationship of the professional practitioner to the auxiliaries and provide guidance for auxiliary education. For example, educational research in the training and utilization of auxiliaries is an illustration of the leadership which the Association might provide among the dental schools."

In November 1967, the House of Delegates of the American Dental Association received a comprehensive, documented statement prepared by the Councils on Dental Education, Health and Legislation on "The Training and Utilization of Dental Hygienists and Assistants." The Joint Council report presented a broad view of the growing dental economy and included a careful assessment of current educational capacity and future manpower needs. For the second time in two years, the American Dental Association's House of Delegates has urged constituent dental societies and state boards of dental examiners to revise the dental practice laws to permit wider utilization of the services of dental auxiliary personnel. Finally, also in November 1967, the President's National Advisory Commission on Health Manpower released the first volume of a report which, in its Introduction, stated that a national health manpower crisis exists. The Commission report mandates the continued expansion of teaching and research facilities for both professional and allied health personnel.

In view of the foregoing developments, the American Association of Dental Schools believes that it is increasingly important to urge its members to give utmost consideration to the task of training both professional and auxiliary personnel. Despite greatly expanded efforts to meet the impending manpower shortages in dentistry, a continuing effort to achieve these goals must be exerted for some years to come. It can be anticipated that the partnership between the profession and the government in such an effort will intensify further, as new patterns of legislative support for health manpower education are jointly conceived and implemented.

II. ROLE OF THE DENTAL FACULTIES IN IMPROVING AND EXPANDING EDUCATIONAL CAPACITY

The American Association of Dental Schools is confident that its member institution will be able to meet and respond to the demands and expectations of the society for greatly increased service by providing an adequate
supply of educationally qualified professional and allied professional personnel. To achieve this objective, the Association believes that every available training facility of the community and the university should be fully utilized under the leadership and guidance of the dental faculties. To the extent possible, the Association believes that dental auxiliary personnel preferably should be trained in university-based dental schools and health sciences centers but that other educational resources of the community should also be utilized to supplement the resources of the schools of dentistry. For example, the Association believes that one-year technical programs for dental assistants can be offered appropriately by junior and community colleges, by technical training centers and institutes and by public schools in evening adult training divisions. Similarly, the Association believes that associate degree programs for dental assistants, hygienists and laboratory technician programs can be offered in a variety of settings.

Training of Dental Auxiliaries in Non-Dental School Facilities

The Association urges member institutions to give full and vigorous cooperation to educators from other educational institutions who are engaged either in planning new programs or conducting accredited programs for dental personnel. In many communities, it will be possible for dental schools and community colleges, or area vocational schools, for example, to combine their facilities for the training of dental auxiliaries. Dental educators are therefore urged to supply leadership in such instances and to provide qualified consultants, as needed, to assist educators in non-dental school settings to design curriculums and to coordinate both general and technical studies. Faculties of member institutions of the Association are therefore urged to provide consultants and technical assistance to the maximum extent possible to program planners and administrators in institutions which lack the resources of a dental school.

III. ASSOCIATION LEADERSHIP AND RESPONSIBILITY: A PROGRAM OF COUNSELING AND GUIDANCE

The American Association of Dental Schools strongly urges faculties of member institutions to participate actively in the education of all dental auxiliary personnel, whether the programs are conducted in dental schools or medical centers, or in institutions having no direct affiliation with a dental school. As the profession's capacity for training auxiliary personnel continues to expand, and as experimental studies in extending the duties of auxiliaries are further developed, the Association believes it is increasingly urgent that dental educators be prepared to provide leadership in the maintenance of the highest quality of training commensurate with the duties each auxiliary is expected to perform.

As of December 31, 1967, there are 59 accredited dental hygiene, 103 dental assisting, and 13 dental laboratory technology programs in the United States. In addition to these, 20 dental hygiene, 26 dental assisting and seven dental laboratory technology programs are in some stages of active development and seeking accreditation by the Council on Dental Education. An increasing number of new programs and prospective pro-
grams will be located in institutions having no direct affiliation with a dental school. Thus, it is apparent that the need will exist for some time to come for a pre-accreditation and post-accreditation program of consultation and guidance. It is urged that such programs be developed within each member institution, under the direction of the Association, and in cooperation with the Council on Dental Education of the American Dental Association and the educational divisions of the American Dental Hygienists' Association and the American Dental Assistants Association.

Pre-accreditation Counseling Services

While it is comparatively easy for member institutions themselves to develop and establish new programs for the training of auxiliaries, early planning and development of new programs in settings which do not have the full resources of a dental school and staff are often difficult undertakings.

The Association believes that dental educators should be fully responsive to the needs of educational institutions which lack the resources of a dental school in the early planning and development of new programs. Within the area of geographic influence, dental schools are urged to provide consultants as needed to assist planning committees of new programs in developing facilities, curriculums and staffs in dental assisting, dental hygiene and dental laboratory technology.

Some of the needs of planning committees which are most commonly encountered, and which dental faculty consultants might reasonably be requested to provide are the following:

1. Assistance to state and local dental advisory committees with planning and conduct of manpower surveys to determine the extent of the profession's state and local need for auxiliaries;
2. Assistance and guidance with the design and planning of teaching facilities;
3. Counseling in the development of equipment lists and lists of expendable supplies;
4. Counseling related to financial needs for capital and operating funds;
5. Guidance in developing teaching aids and models;
6. Counseling in curriculum planning, preparation of course objectives and course outlines;
7. Assistance in planning student recruitment programs and recruitment of staff and faculty;
8. Assistance and guidance in identifying facilities and offices required for clinical and practical experience in each auxiliary specialization; and
9. Guidance in establishing local advisory committees and in the effective utilization of resource people.

Post-accreditation Counseling and Guidance Services

Many new programs in institutions not affiliated with a dental school are able to meet, and often exceed minimum accreditation standards determined by the dental profession. On the other hand, the incidence is increasing where some of the new programs are able to earn only provisional accreditation from the Council on Dental Education. The Association be-
believes that member institutions should provide leadership and assistance to new program directors and faculties which, in the view of the Council on Dental Education have experienced difficulty in achieving initial accreditation, or which are expected to have some difficulty in maintaining accreditation.

In an effort to provide post-accreditation assistance, if needed and requested, the Association believes that member institutions should be able to provide the following types of services:

1. Counseling in the teaching of the dental sciences and the preclinical and clinical sciences;
2. Guidance in curriculum design and revision;
3. Assistance with the development of clinical and practical experiences and training;
4. Assistance with the development of teaching models, teaching aids and teaching materials;
5. Guidance in improving laboratory and clinical facilities;
6. Counseling in the coordination of general and technical studies;
7. Assistance in providing special consultants for teaching of the dental sciences, the preclinical, and clinical sciences.

IV. CONCLUSION

The American Association of Dental Schools hopes that this memorandum will be used by member institutions as a guideline for action, leadership, and responsibility in the training of dental auxiliary personnel. The lists of services recommended for the pre- and post-accreditation stages of developing programs are not exhaustive. It is hoped, however, that this memorandum will favorably influence the role and responsibility which the dental faculties might assume to maintain the highest standards of educational quality. The growth and expansion of the profession's educational capacity in the past decade has been impressive but the need for educationally qualified auxiliaries continues to be extensive. Only when all member institutions fully assume responsibility for the training of auxiliary personnel will assurance be provided to the dental practitioner that adequate supportive manpower is available to assist him with the delivery of the highest quality of dental care.

Mary E. Switzer, Administrator, Department of Health, Education, and Welfare

"Thank you for your consideration in forwarding us a copy of the Proceedings of the Workshop on Dental Manpower and the resulting recommendations.

"The Social and Rehabilitation Service will give careful attention to the recommendations as dental programs are developed."
Assistant Secretary Thomas F. McBride of the American College of Dentists

Dr. McBride advised that all committees of the College have been asked to review the recommendations with the thought of aiding in their implementation where possible.

Percy T. Phillips, Secretary, The Dental Society of the State of New York

“This Society has recently directed a survey on manpower in New York State and we would appreciate, if possible, six copies of the Proceedings for their use.”

Cromwell Tidwell, Secretary of the Tennessee State Dental Association

“I am in receipt of your communication to Presidents and Secretaries of Constituent Societies.

“For your information, our Association has the following councils and/or committees comparable to those you suggest. These are as follows:

Council on Dental Care whose functions are similar to that of your Dental Health Planning Advisory Committee.

“We have a dental representative on the Comprehensive Health Planning Council. The Association has a Committee on Continuing Education, a Liaison Committee to the State of Tennessee, a Liaison Committee to the Tennessee Dental Hygienists’ Association, a Special Committee to Implement Education and Training Programs for Auxiliary Personnel, and a Special Committee to Study and Possibly Recommend Modification of the Dental Practice Act.

“We are in the process of activating our Tennessee Dental Service.

“Needless to say, I feel that the Tennessee State Dental Association is very much alert in all these areas. We appreciate your calling to our attention the recommendations which resulted from the American College of Dentists’ Workshop on Dental Manpower.”
“American College of Dentists Workshop—A Workshop on Dental Manpower conducted by the American College of Dentists made these recommendations of particular interest to Dental Associations.

1. That constituent dental associations be urged to organize a Dental Health Planning Advisory Committee having the following functions:
   a. To act in an advisory capacity to the State Comprehensive Health Planning Council.
   b. To assist in the planning and implementation of publicly and privately funded programs.
   c. To identify dental health needs.
   d. To review health programs which are active or being planned within the State.

(The members of our Dental Health Planning Advisory Committee that have assumed responsibility for these functions are Larry Lytle, Don Boyden, Leo Thelen, Willard Powell, and Otto Kramlich.)

2. That constituent dental associations seek the appointment of at least one representative to the State Health Planning Council and to Regional Medical programs.

(Floyd Ward is a member of the State Health Planning Council and Willard Powell a member of Regional Medical Program Committee.)

3. That constituent dental associations be urged to organize a Continuing Education Planning Committee.

(While we have not formed a committee for this purpose we are in communication with the Department of Health, Education, and Welfare in an attempt to secure a grant for this purpose.)

4. That continuing education programs should be developed by all means to teach dentists and all their auxiliaries new and established concepts of team dentistry.

5. That each constituent dental association in cooperation with the Board of Dental Examiners proceed with due speed to study its dental practice act and formulate appropriate amendments designed to allow broad interpretation of auxiliary functions. (Our Board is doing this.)

6. That constituent societies should continually promote programs for public health education. (We are developing such programs.)

7. That constituent societies explore methods to develop cooperation and
liaison among Universities, Junior and Community Colleges to design quality education for dentists and Auxiliaries. (The appointment of Darrell Ludeman as coordinator for Dental Education was for this purpose.)

8. That constituent societies provide a staff to maintain continuing administrative structure. (Probably far in the future for South Dakota.)

Glen O. Sagraves, Secretary, Indianapolis District Dental Society

"The Board of Directors of the Indianapolis District Dental Society have advised me to inform you that your Dental Manpower workshop resolutions have been received and carefully considered.

"We have surveyed our area and can assure you that we are presently doing everything possible to implement your resolutions."

Robert B. Raskin, Secretary of the Tenth District Dental Society of New York

"Thank you for the copy of the Workshop on Dental Manpower which was forwarded to me as Secretary of the Tenth District Dental Society. I have been following the College's efforts along these lines with great interest.

"I have requested that this report be reviewed and included in the Tenth District Dental Society Bulletin.

"We look forward to the continuation of such constructive efforts as this by the College and other well versed members of the dental community."

John D. Williams, Secretary, Central Oregon District Dental Society

"Central Oregon District Dental Society has for the past many years maintained a dental clinic for dentally underprivileged youngsters in our three county area. The dental material is paid for by the local Jaycee group and the manpower is donated by local dentists who give one-half day a month. Until recently, a specific clinical location was maintained.

"A re-evaluation of the clinic operation suggested that better service might be rendered the patient if he were treated in the private office of the participating dentists. For approximately one
year care has been rendered in private offices. A token fee of 50 cents is charged each patient.

"In addition to the major dental training facility at the University of Oregon, certified courses to dental assistants are offered at Oregon Technical Institute and Blue Mountain Community College.

"For the past two years the University of Oregon has offered a unique program, Junior Dental Institute, to acquaint students with careers in dentistry. This intensive two-week course, held at the University of Oregon Dental School, should do much good in interesting talented youngsters in the field of dentistry."

John E. Buhler, Dean, Medical College of South Carolina

"I am just back from my vacation and will answer your memorandum received here on June 25, having to do with the report of the College's Workshop on Dental Manpower.

"As you know, of course, we are just in our developing stages here in South Carolina, but I think it is important for you and through you for others to know what we have in mind to do here with regard to the utilization and the training of paradental personnel.

"In our planning it is our expectation that we will start our students in their clinical experiences using dental chairside assistants and that throughout all of their clinical training they will be continuously operating in the 'team concept' and will always be with the services of a chairside assistant.

"We realize that this poses some almost impossible problems if we expect to employ enough dental assistants to meet the manpower need. Accordingly, we are expecting to organize a training program to which we will admit 48 new dental assistant students each year on a two-year program. With such an extended program, it is very possible that we will be able to take those who are in the final stages of their training and assign them—under the supervision of an already trained assistant—to junior students so that we do not find ourselves with a situation of 'the blind leading the blind.'

"As you will note that I have said that this is to be a two-year
program. We do not know whether this will work out or not, but at least this is our present thinking. We also expect that these girls will be trained in the broader concepts of dental assistant utilization—the added responsibilities which have been somewhat controversial over the past several years but which now seem to be more accepted than they have been.

"In addition, we plan to admit 12 oral hygiene students each year to a four-year program leading to a B.S. degree. We feel that our mission here at the Medical College of South Carolina is to train teachers, health educators, public health workers, supervisory personnel, and those who can work more or less independently insofar as the law permits. Over the State of South Carolina, we are developing a number of two-year oral hygiene training programs and it is our anticipation that the products of these efforts will go into the private offices of the practitioners in the state. We can do a job of training oral hygienists at a higher level which cannot be done by the other training centers around the state and at the same time, we do not feel that our resources are adequate to train enough hygienists to satisfy the needs of private practice. Hence, working cooperatively we should here in South Carolina be able to meet the total needs as they are identified.

"Additionally, we expect to admit between five and eight dental laboratory technician students each year and to a two-year program which will prepare them for certification as dental laboratory technicians.

"In addition to all of this, we are reducing the amount of laboratory exercises required of our students both preclinical and clinical and we are devoting the time thus saved to those experiences in training opportunities which we feel are more consistent with modern concepts of dentistry than have been the repetition of laboratory exercises which our students will not be doing after they graduate. We feel that the students' time can best be spent in contact with patients, in contact with clinical problems, and in research. All we feel we need to do is to give our students sufficient training in being able to know what they want from the laboratory technicians to be able to write out the work orders as required and to be able to assess and evaluate the product of the
technician when the device—the bridge, the denture—is returned to him.

"I realize I have not gone through the series of recommendations as they were outlined in your memorandum but I do believe that the report above will give assurance that the School of Dentistry of the Medical College of South Carolina is actually considerably ahead of most all dental schools in the United States in our concept of the utilization of paradental personnel.

F. Earle Lyman, Associate Dean for Graduate Studies, The University of Texas at Houston, Dental Branch

"I have read with considerable interest the Proceedings of a Workshop on Dental Manpower 'Meeting the Needs in the 1970's' in the April 1968 issue of the JOURNAL. The papers presented by the nine essayists together with the five study groups' recommendations leave little doubt in one's mind as to the manpower needs over the next decade. The excellent recommendations which have been made also focus attention quite clearly upon the means whereby these needs may be met.

"I am rather curious, however, about a most important facet of the manpower problem that is not considered and which is the more conspicuous by its absence. I am referring to the manpower needs for basic and clinical science teachers in dental schools during the next ten years. This subject appears to have been given but little consideration, and yet, many of the recommendations made by the Workshop are dependent upon this most significant group of personnel. I am sure you can enlighten me as to why this particular manpower problem was not considered by the Workshop in relation to its significance in meeting the oral health service needs in terms of expanding patient care in the 1970's."

The following comments have been received from individuals:

Maryland

... "This auxiliary business has a place in our profession but not a dominant role as a segment would have it."—G. M. Anderson
Alabama

“Quite often I feel as though the dental profession may be misdirecting its efforts in a search for some of the answers to the problems facing us today. We seem to have seized this thing of expansion of duties of auxiliaries and are pursuing it so fervently that I am afraid we have neglected some of the more meaningful and obvious solutions, such as those you have mentioned in the third paragraph of your article.”—John D. Davis

Washington, D.C.

“It is clear that a great deal of careful preparation went into the conference and its report.”—Arthur J. Lesser

Ohio

“It seems to me that more thought should have been given to expanding the facilities for dental education. The richest nation in the world should be able to provide well qualified men and women to care for the increasing dental needs.

“I am very disturbed over the fact that there are those in our profession who would delegate the certain important operative procedures to auxiliary personnel. The amalgam restoration which is so important in restoring teeth has to be built with a biological knowledge of the vital pulpal tissue. The same is true with other restorations. The suggestion that less trained and educated personnel can build suitable restorations, degrades our profession to a mechanical art.

“American dentistry has reached a professional attitude of the highest quality and respect. Let us keep it that way.”—E. Carl Miller

Louisiana

“I just finished reading your April issue of the Journal on ‘Dental Manpower Needs in the 1970’s.’ Let me commend you on an outstanding accomplishment. In my opinion, this issue should be mandatory reading for every dentist and dental student in the country. It represents a fine analysis of the challenge dentistry
faces in these crucial times. Again, congratulations for what I consider to be an extraordinary contribution to our profession. —Michael T. Romano

It would seem that the deliberations of the Workshop on Dental Manpower have been on a topic that has provoked wide interest and the needs may have fallen on fertile soil. Whether or not the dental needs in the 1970's will actually be met remains to be seen. At least, an effort has been made to discuss the problems involved and this is the first step in their solution.

O.W.B.
Threshold or Precipice*


PRESIDENT Abraham Lincoln once said, "On occasion we must ask where we are and whither are we tending."

President Johnson said in a recent address to Congress, "No great age in history can match our time."

In 1798, the Fifth Congress decided that the health of the American seaman was important, because foreign trade had a great impact on all the States in the Union. Therefore, that Congress established a hospital program to take care of the seaman and authorized a deduction in their pay to finance it.

Last year the Eighty-Ninth Congress passed 24 laws affecting the health of all the American people.

Is there any doubt, "Whither we are tending"?

Now let's take a brief look at "Where we are," so far as our national attitude toward health is concerned.

The average American born in 1900 could expect to reach his 47th birthday. The average American born today has a life expectancy of 70 years. Tomorrow the miracles of man's knowledge will stretch his life span even further. Such advances are the result of spectacular progress in biomedical and clinical research, in public health, and in the medical arts.

The federal government in 1967 invested more than 440 million dollars in the construction of health facilities, 620 million dollars in health manpower education and training, 1.3 billion dollars in biomedical research and 7.8 billion in providing medical care. The citizens of America will spend in 1968 for health care more than 45 billion dollars.

Over the past two decades the Hill-Burton Program has assisted more than 3,400 communities in providing 350,000 hospital and nursing beds, in building health centers and in bringing modern medical and dental services to millions of Americans. The need

* Commencement Address presented at the University of Tennessee Medical Units, Memphis, Tennessee, March 17, 1968.
for assistance from the federal government in financing construction of health facilities has increased, especially with the advent of Medicare, Medicaid and other new programs. The future can hold nothing other than continued expansion of federal government support of the construction and modernization of health facilities.

The Secretary of Health, Education, and Welfare has been directed to establish a National Center for Health Services, Research, and Development. The need for this activity arose from the fact that we have done very little in mobilizing American universities, industry, private practitioners and research institutions to seek new ways of providing medical services. There have been too few experiments in applying advanced methods, systems analysis, and automation to problems of health care.

Our superior research techniques have brought us new knowledge in health care and treatment. These same techniques must now be applied in an effort to bring lower cost, quality health care to our citizens. In 1950, the average cost per patient per day in a hospital was $14.40. In 1965 the cost more than tripled to over $45.00; and it has recently been estimated by the experts that in the near future the average cost per patient per day in a hospital could approach $100.

I mention these statistics to you only to remove any doubt, if any you have, as to "Where we are," and "Whither we are tending."

Of all of the past and present federal legislation related to health, there are, in my opinion, two acts that will have such a great impact on your future that I think they should be mentioned briefly on this occasion. One is Public Law 89-749. This act is known as the "Comprehensive Health Planning and Public Services Act." It is actually an amendment to the existing Public Health Service Act designed to provide for a more effective use of available funds. I quote to you one section which is the Declaration of Purpose of this Act:

"Sec. 2. (a) The Congress declares that fulfillment of our National purpose depends on promoting and assuring the highest level of health attainable for every person in an environment which contributes positively to healthful individual and family living: That attainment of this goal depends on an effective partnership, involving close intergovernmental col-"
laboration, official and voluntary efforts, and participation of individuals and organizations: That federal financial assistance must be directed to support the marshaling of all health resources—National, State and Local—to assure Comprehensive Health Services of high quality for every person, but without interference with existing patterns of private professional practice of medicine, dentistry, and related healing arts."

The partnership for health legislation enacted by the 89th Congress is designed to strengthen state and local programs and to encourage broad gauge planning in health. It gives the states new flexibility to use federal funds by freeing them from tightly compartmentalized grant programs. It also allows the states to attack special health problems which have special regional or local impact.

The Comprehensive Health Planning Act seeks to create an atmosphere in which agencies responsible for the delivery of health services and for the quality of our environment are encouraged to develop specific objectives and priorities for their action as part of a co-ordinated community, state and federal effort. Its concern is the needs of populations defined as individuals and families, rather than concern related to a particular disease. Its goal is the promotion and maintenance of the health of the population through the effective use of all resources at their points of maximum impact which is the community or state level rather than the federal level.

The nation did not come suddenly to the necessity of comprehensive health planning. We have meandered for decades in the thicket of fragmented resources, specialized interest, expedient definitions of preventive and curative services, and all of it at considerable waste of human potential. We have tried to improve public health a piece at a time, like building a house without architectural plans. This Comprehensive Health Planning Act can reduce fragmentation and complexity and open the way for new and more effective relationships among the health professions and health related groups, public and private, local, state and federal. Truly, it is a threshold to assure the highest level of health attainable for every person.

The fact that we now have this attitude and this support at the federal level gives the health professions a threshold of action and possibly a greater freedom of action than we have ever enjoyed be-
fore. However, federal support alone does not solve the problems of professional attitudes and functions. We cannot escape from the fact that services are given to individuals by individuals with certain technical and professional skills. Determining exactly what is to be done is uniquely a professional responsibility. As health professionals, we have become the trustees not only of vast sums of public and private money, but also of a remarkable investment of public trust. The public still offers us the opportunity to design much of the future in health. If, however, we do not overcome our own fears, our rigidity, our lack of foresight, we may not continue to have the opportunity to contribute our professional knowledge in the planning and organization of health services.

It is incumbent upon us, therefore, to forego once and for all the temptation to proceed as if the health professions can insulate themselves against social change, social need, and against an unremitting movement in which the whole of community life is being transformed. I am convinced that the degree of our willingness to adapt and the quality of our responsiveness to the rapidly changing social needs will determine the limits of our success in providing good health for everyone through the development of competent people in sufficient numbers, dedicated to serving the needs of the individuals who make up our Nation.

Perhaps the most significant legislation of all times pertaining to health is Public Law 89-97. This is an amendment to the basic Social Security Act enacted by the 89th Congress. Officially it is Title XIX of the Social Security Act and is known as Medicaid. It is interesting to note that the initial social security bill enacted 32 years ago was composed of 32 pages. Public Law 89-97 as amended contains some 387 pages.

Medicaid—Title XIX replaces the medical provisions of five public assistant titles of the Social Security Act. They include (1) Medical Assistance for the Aged, (commonly referred to as the Kerr-Mills Program), (2) Old Age Assistance, (3) Aid to Families with Dependent Children, (4) Aid to the Blind, and (5) Aid to the Permanently and Totally Disabled. These are independent public assistance programs with different formulas for determining the federal share of expenditures. Each may be administered at the state level by a different agency. Each may use different criteria
to determine who is eligible for assistance. The program may differ in the health care provided. Title XIX seeks to eliminate this diversity, establishing a single program which makes approximately the same health care available to all a state's needy and medical needy.

Title XIX health cost will be reimbursed from federal funds at the rate of the states federal matching percentage. This ranges from 50 per cent to 83 per cent, with the highest federal matching going into the states with the lowest average per capita income. In the state of Tennessee the ratio is approximately 75 per cent federal and 25 per cent state and local funds.

A state is allowed to participate under this program on a gradual basis as far as services rendered and classification of recipients. However, by July 1975, all of the needy and medical needy in the state must be covered by a comprehensive health care program.

Although the term "Comprehensive Care" is still undefined by the Department of Health, Education and Welfare, it is generally being interpreted as meaning complete or total health care service. This would include complete dental care as well as all medical services. It would mean that no longer will there be a medical-dental indigent patient.

There are two very interesting features to health care provided under Title XIX or Medicaid. First, it is encouraged that as far as possible, services be provided by the private practitioner, and he is to be compensated on a usual, customary, reasonable fee basis. The next interesting feature is that quality care is mandatory. In some states the administrators of this program are so determined in this regard they are specifically spelling out the amount of continuing education that a participating doctor must take in order to remain eligible as a participant under this program.

It is interesting to note that the health professions have never seen fit to establish a program of re-evaluation of a doctor's competence. Under the customs of the past, once a doctor is licensed to practice in a state he is licensed for the remainder of his life and his continuing competence is rarely questioned. This has been left entirely to self-discipline. As a participant under Title XIX, evidence of one's continuing competence will be mandatory. This has started many state professional examining boards to con-
sider establishing a similar requirement for all doctors licensed to practice their particular profession. You know, when you stop to think about it, perhaps it is a pretty good thing.

In spite of some political controversy to the contrary, the living standards of the American public are the highest in our history. The educational level of the young citizens of our nation is the highest it has ever been. In spite of "the pill" our population explosion continues to explode. Daily, new and more expanded prepaid health insurance coverage is made available to groups throughout the nation. All of these factors will combine to place greater demand on the health manpower of our nation. We cannot even anticipate sufficient funds, sufficient facilities, sufficient faculty, sufficient numbers of potential students to provide enough health manpower to come close to meeting this need if we stubbornly insist on continuing only our present systems of providing health care.

Discussions have been long; studies have been endless; and it is now time for imaginative action. The pressures which are building up in our society from government, from socio-economic forces, and from the emerging demand of the citizenry for health as a fundamental American right will not be contained in the future. The health professions must act.

A few weeks ago a group of highly respected health leaders completed an 18-month study of the nation's health system and presented their two-volume report to President Johnson. This group, officially named the National Advisory Commission on Health Manpower, commented that we had, here and now, in the United States a health crisis—a crisis which holds every promise of worsening unless major changes are made in the health system. This was not a call for a master federal plan for health. On the contrary, the commission emphasized throughout its report that government alone cannot possibly solve the critical problems we face.

We are at the point where facts and knowledge should begin to be translated into practical forward looking action. Although our perspective seems clear enough, although we speak with authority about change and adaptability, we have thus far hesitated to act. We have been reluctant to undergo the discomfort associated with realignment, alteration, and redirection necessary for the man-
power solutions the future will need, can and must have. We con-
tinue to postpone change until some future time, while in the
here and now we adhere to the familiar and the comfortable.

We must proceed promptly to properly train existing auxiliaries
to assume more of the routine duties that do not require the edu-
cation and technical skill of the doctor. We must develop new re-
lationships and working patterns which will permit both the prac-
titioner and auxiliary the greatest and most productive realization
of their talents, while assuring the patient the finest quality care.

The House of Delegates of the American Dental Association at
our last Annual Session moved the profession a major step in that
direction when it passed a resolution urging state dental societies
and state dental examining boards to consider revision of practice
acts, to eliminate the serial listings of auxiliary functions and al-
low the state boards of prescribe regulations for expanded use of
these auxiliaries.

It is heartening to note that in spite of the formidable barriers
raised by many dental practice acts several states moved toward
liberalization of the statutes dealing with duties of auxiliaries to
permit them to serve more effectively under the supervision of the
dentists. It is encouraging that our own Board of Dental Examin-
ers in Tennessee is currently giving serious consideration to this
important problem. I am advised that they are in agreement with
expanded utilization of auxiliary personnel, but they feel that it
should be relative to the auxiliaries' formal training to perform the
specific task allotted to them.

I congratulate each of you as you enter your respective profes-
sions. I also remind you that through the years the word "profes-
sion" has come to be especially identified with service. This is an
identity that should be deeply cherished by every member of a
true profession. It suggests that a member of a profession serves,
that they measure their achievement in the greatest part, not by
what they have done for themselves, but what they have done for
their fellowman. The supreme motive of a true profession is to
serve mankind. Let us not forget—"He profits most who serves
best." You have a heritage embodied in this philosophy of ser-
vice. If you will uphold this philosophy, it will bring you rich re-
wards, and they will be rewards of the spirit "which rust doth
not corrupt nor thieves break through and steal."
Remember that your education and training alone does not make you a true professional. No matter how vast your knowledge, how competent your skill, it is the manner in which you use them that will determine whether or not you are a true professional.

In addition to your scientific competence, to be a true professional, there are certain arts that must prevail in your daily relationships with your fellowman.

Scientific facts can be taught to us, technical procedures can be explained to us, but the *art of good judgment* cannot be instilled in us by anyone else. Good judgment is one of the most important arts of a professional person. It is a basic art that determines the proper application of all knowledge.

Confidence must be evident in your every gesture for no one can obtain and maintain respect of patients or professional colleagues if they appear apprehensive and uncertain. You must be able to face adversity and emergency situations and do so with assurance that allows no element of doubt to enter the patient's mind. Yes, the *art of confidence* is most important.

As you develop the art of confidence, may I plead that it always be tempered with the *art of humility*. In my opinion, a deep sense of humility is the first mark of a true professional.

I hope that you are to learn early in your professional career that the secret in the care of the patient is in caring about the patient. In the hustle and bustle of the ever increasing sociological changes of the society in which we live, the true professional person must go further than to deal only with factors that can be weighed and measured. Intangibles are often quite substantial. You must have an understanding and appreciation of your patient's emotional problems and know how to deal with them in each individual case. You must take the time to be concerned, to listen, to sympathize, to explain, to reassure. You must take the time to have compassionate interest in each individual patient. This is the *art of empathy*.

Then there is the very important *art of ethics*. Ethics is based on moral and intellectual integrity. Absolute honesty coupled with moral integrity is essential in every relationship, without regard to its effect on one's own personal fate. This is true not only in your professional relationships, but in all personal contacts. Sincerity must be evident in your every opinion, motivation and action. In dealing with patients and professional colleagues alike, it
is well to remember the old proverb—"If your foot slips you can recover your balance, but if your tongue slips you cannot recall your words." Also remember, "One does not impale another upon a thorn of criticism without also pricking themselves."

The healing arts are in a transition period. The health professions are confronted by many formidable challenges. The manner in which we meet these challenges will determine our status as a health profession in the future.

By intelligently facing the changes caused by population explosion, improved living standards, advanced health education, prepaid health insurance, and government sponsorship of health programs we can utilize this period in history as a threshold to better procedures in service, in research, and in education.

A negative approach to these changes could become a precipice over which we might lose our academic and professional freedom.

If you are a true professional, dedicated to providing health services to your fellowman, you stand today on the threshold of the greatest opportunity ever afforded the health professions.

As you face the problems of a war-weary, troubled world, remember, that in addition to your professional responsibilities:

You must take the time to play—for this is the secret of perpetual youth.
You must take the time to laugh—for this is the music of the soul.
You must take time to love—and be loved—for this is a God-given privilege.
You must take the time to worship—for it is the soul's greatest need.

And take the time to pray—it is the greatest power on earth. Do not pray for easy lives, pray to be stronger men and women.

Do not pray for tasks equal to your powers, pray for powers equal to your tasks.

Then the doing of your work shall be no miracle, but you shall be a miracle.

Every day you shall wonder at yourself and the richness of life which has come to you by the Grace of God.
The Specialties and General Practice

A Panel Discussion*

Moderator: Paul E. Boyle, Case Western Reserve University

Panelists

Albert L. Borish, Academy of General Dentistry
Harold E. Boyer, University of Louisville
Roland R. Hawes, Eastman Dental Center, Rochester, New York
Donald A. Kerr, University of Michigan
C. Hanford Lazarus, American Dental Association
Alton W. Moore, University of Washington
Walter J. Pelton, University of Alabama
Gustave J. Perdigon, American Board of Prosthodontics
Carl J. Stark, General Practice, Cleveland, Ohio
George G. Stewart, University of Pennsylvania
Stanley R. Suit, University of Pennsylvania

Dr. Boyle: Each panelist has been asked to prepare answers to two or more questions and other members of the panel have been invited to comment on these particular questions, should they wish to do so.

I believe the audience has been given cards. Please write your questions on the cards which will be collected later on.

We will start immediately with a very pertinent question. "Why Dental Specialties?" Dr. Borish, will you respond to that question, please?

Dr. Borish: Gentlemen, I am in a most unenviable position.—Can you imagine my coming before you, the most sophisticated in our profession, telling you things that are so elementary. While the competent GP, the decathlon performer of dentistry, is the backbone of the profession, the specialist provides the expertise required in the various disciplines.

Complete dental health care demands a complete dental health team. With dentistry's great progress has come even greater de-

* Presented during the American College of Dentists Forty-Eighth Annual Session, October 26-27, 1968, Deauville Hotel, Miami Beach, Florida.
mands upon competency. Improved skills will result from a limited practice and more concentrated attention to limited areas. It is a truism that one may be much more knowledgeable over a small area than one which is quite extensive. However, we must not forget that just as the decathlon performer cannot be ignored because of his many skills, so must the everlearning generalist retain his position in the dental profession.

One must also agree that there is nothing wrong with the wonderful system of generalists and specialists but that the fault, if any, lies primarily with those who make up the team. Just as dialogue is necessary for the solving of problems, interdisciplinary communication is the clarion call for harmony in our profession. I would call for a commission consisting of at least two representatives of each discipline in dentistry to make a thorough examination of the problems of communication within our profession.

Dr. Boyle: Thank you, Dr. Borish.

Our next question is addressed to Dr. Lazarus, the Vice-Chairman, Council on Dental Education. "What is the significance of the American Board Certification in the Dental Specialties?"

Dr. Lazarus: Dr. Boyle, fellow panelists, distinguished guests and all.

I informed the moderator earlier that this question cannot be readily answered in one sentence. There is considerable background information which I think is pertinent, and so I am going to take more than the few minutes allotted to me with everyone's indulgence.

The significance of the American Board Certification for the special areas of dental practice has a singular connotation; that is the superiority of the uniform examining standard of the American Boards rather than the variable standards which must exist when state specialty licensure is involved.

Uniform certification, equivalent licensure and equality of accreditation are noteworthy; certification that is uniform, consistent or undeviating; licensure that is equivalent or comparable; accreditation that is equal or on a parity, give us a base for mutual understanding.

We are responsible for the care of the public, which in turn is demanding more and more. Why? Because we have an affluent
society that is health conscious. We have better educated patients. We have many diversified insurance programs and many private and publicly funded programs.

For these and other reasons, our profession has been catapulted into a state of semi-hysteria from the tremendous demand and/or claims for services.

Therefore, at the specialty level, in order to readily assure and insure better care for the public, it would appear that American Board Certification with its one set of standards would significantly enhance quality care rather than a special license encumbered with the multi-varied standards of various states.

The state specialty laws and their relationship to the American Board, the House of Delegates' pertinent action and the Council of Dental Education methodology of evaluation of advanced education programs are three subjects with direct bearing on this question. I shall cover them briefly.

A review of State Dental Practice Acts which provide for the regulation of specialty practice discloses the following:

1. That a regular and special license are required in all of these states.

2. The education requirements are variable and inconsistent in all but three, and these three accept American Board Certifications as equivalent to their respective special licenses.

3. The standards required for recognition of the specialists are dissimilar.

4. The examination of candidates is conducted by state boards in about one half of the states. Some states select different ranking individuals to examine the candidates, while one requires American Board certified men to conduct its examination, and

5. Three states provide licenses for American Board qualified men who were specializing before enactment of the specialty laws, so examinations by different ranking individuals who use assistants as deemed advisable seem to emphasize the need to encourage the American Board Examination as the singular evaluating agency for certification.

Since 1947, the Council has given increased attention to the specialties, and at that time, its Committee on Dental Specialties concluded, among other findings, that certification by approved spe-
cialty examining boards is the most desirable method of giving public recognition to the specialists.

In September 1959, the House of Delegates approved:

1. A statement of policy on special areas of dental practice, certifying boards, diplomats and specialists in dentistry. In summary, the statement says that specialists and specialties are identified in a profession where the primary objective is promoting the health and welfare of the public and for no other primary purpose.

2. The House approved the requirements for a national certifying board for special areas of dental practice. These requirements spell out the delineation of the area designated as a specialty area and include the guidelines for board operation. As you know, at present, there are eight recognized specialty areas of dental practice.

3. The House approved a statement on statutory regulations of dental specialty practice and dental specialists which recommends the private system for regulating and advancing specialty practice in reference to and over a legal system under state laws.

The statement emphasizes the need that local statutory regulations conform with the existing association requirements or that, where necessary, new regulations and changes will be prescribed in order to meet future association requirements.

These actions by the House, though not explanatory of the significance of the American Boards, do nevertheless establish the standards which individuals, certified by a board, are expected to meet.

The significance of board certification from the Council's point of view has a dual meaning that the certified individual is capable of performing the services of a more difficult nature for which he has been trained, and that he has assumed his rightful responsibility to the public and to the profession. His certification serves as an identification hallmark for the general practitioner who may wish to refer patients.

Council uses several mechanisms for the evaluation of those programs for which it is responsible. In the case of a new advanced education program for the preparation of a specialist, the appropriate ad hoc committee composed of a consultant representing the recognized area of specialty practice reviews the application;
and, if found favorable as satisfying the requirements approved by the House of Delegates, recommends that the Council grant a preliminary provisionary approval until such time as site visits can be made.

For the accreditation of a dental school, the consultant is needed for the advanced programs conducted in that school. It is the consultant's responsibility to study, analyze and examine in detail the program for which he is answerable. His findings and recommendations are rendered to the Evaluation Committee and subsequently to the Council.

In the case of advanced programs taught in settings other than Dental Schools, the evaluation is accomplished by specialty consultants in consort with a Council member and a subsequent report and recommendation reaches the Council through the medium of its Committee B. Participants in any evaluation study neither report nor recommend administrative action. All communications come directly from the Council.

The present mechanism of evaluation of advanced educational programs for the preparation of specialists has been in effect a relatively short time, and the Council is continually reviewing and adjusting the standards and procedures involved.

Development of educational guidelines for advanced training programs is a current project of all specialty boards, and all specialty areas have agreed to submit their proposals on educational guidelines to the Council for consideration at its May 1969 meeting.

The specialist consultants to the Council are selected from various geographic areas of the country as part of the mechanism instituted to broaden the program development administration and certification. It is an honest effort to flavor the certification process with more than a semblance of uniform standards and homogeneity on a national basis. Specialty programs located countrywide in accredited institutions with curricula developed and administered by certified people, whose graduates are examined and certified again by qualified personnel, certainly lend meaning to certification on this national basis. And then, finally, we should recognize the need to continue to support state's rights in examining for licensure within that state. We also need to support the thesis
that the practice of dentistry is quite similar, at least within the borders of our own 50 states. Each state having decided who may practice within its borders ought to support the principle of certification by the American Boards to encourage those best qualified within its boundaries to specialize under a system of uniform standards. Thank you.

*Dr. Boyle:* Thank you, Dr. Lazarus for laying the ground rules out so clearly and succinctly for our further discussion.

I am calling on Dr. Suit to answer the next question.

"In this age of sophisticated specialization, should a limitation of the scope of dental practice be imposed on the general practitioner or should he be permitted to continue to define his own parameters of responsibility and treatment?"

*Dr. Stanley Suit:* This question asks if a dentist should be permitted to evaluate his own capabilities in the many branches of dentistry and decide which conditions he will treat and which he will refer to another dentist.

It is unlikely that a dentist could, without bias, appraise his own ability and skills. Many recent graduates are confident that they are well trained to treat most dental problems. In a short time, this attitude leads to complacency and a failure to take continuing education courses.

It is apparently difficult for the average dentist to realize how rapidly changes can occur in treatment methods and materials and how rapidly the techniques he is using may become obsolete. Only a small percentage of dentists regularly attend continuing education courses touching on all aspects of general dentistry. The generalist may consider himself capable of treating certain types of cases successfully simply because patients do not complain. However, many cases function because of the great adaptiveness of the patient rather than the competence of the operator. The same patient, if treated by another dentist skilled in modern methods, might have experienced greater chewing efficiency and comfort from the beginning to the completion of the case. Many general practitioners are especially competent in several areas of dentistry and at the same time are below average in others.

Those members of the dental profession who accept their pro-
professional obligation to be honest in self appraisal and who therefore refer patients to other dentist with special skills, when this is indicated, are to be commended.

Dentists who claim to be proficient in all areas of dentistry are probably guilty of overestimating their abilities. This becomes embarrassingly obvious when it is necessary to call on a specialist to treat a case which was plainly beyond the capability of a generalist.

It is evident from the dental examination of many average patients who have accepted, without a complaint, various types of iatrogenic dental disease that the patient is unable to judge the quality of the dental services.

An attempt has been made to elevate the competence of the general practitioner by the New York State Department of Health which has established educational requirements for dentists who treat a medically indigent segment of the population. Dentists are required to attend continuing education courses in order to be eligible to treat that portion of the population whose dental care is paid for by government funds. It is not difficult to anticipate that the next step would be to examine dentists periodically to determine if they had mastered the material presented and were able to apply the knowledge to which they have been forcibly exposed.

Through their dental societies, dentists in New York State have objected to this attempt by a government agency to raise minimal standards of adequate dental treatment.

If dentistry is to survive as a respected profession, the dentist must accept his responsibility to maintain and protect the highest level of care, the dental health of the public.

This speaker is in favor of periodic examinations for continued licensure by a separate state board established for the sole purpose of reexamination.

It would be preferable if the board were controlled by the dental societies rather than by government bureaus but that may be too much to hope for.

It is extremely doubtful that state dental societies can stop the bureaucrats from establishing such government control boards just as they could not stop MEDICAID from becoming a reality in New York.
The best that can be hoped for is that the reexamining board should be composed of examiners who have a full understanding of the complexity of dental practice. It is hoped that the reexamining board would recognize that an older practitioner might not be able to pass a reexamination involving the memorizing of the biochemistry of blood clotting, but that he might be able to place an excellent silver filling or demonstrate better diagnostic judgment than a recent graduate.

The establishment of a reexamining board will involve many complex problems such as how often shall dentists be reexamined; who shall recommend candidates for membership on the board; should members be appointed or elected, shall the board make office visitations to observe dentists in actual practice; shall the examination be written or oral or both; shall specialists also be required to be reexamined in their special areas; what procedures shall be followed in case a dentist does not pass the reexamination; shall dental schools be subsidized by the state to establish refresher courses at which the dentist may prepare to take the reexamination; shall the state board provide the refresher courses free to the dentists?

These are a few of the problems which must be solved before reexamination courses can be established. Through a better understanding of modern techniques, the generalist will acquire the knowledge and skill to select those cases which he is competent to treat, and will therefore define his own parameters of treatment.

The public is demanding and will insist upon receiving adequate dental care. If we are to maintain the position of an honored profession, we must exercise self-discipline through continuous study and provide each patient with a high level of dental care which will command public respect for dentistry.

Thank you.

Dr. Boyle: You may remember the classic experiment concerning ether drift carried on by Professors Michelson of Case Institute of Technology and Morley of Western Reserve University. It is of interest in this discussion of generalization versus specialization that Professor Morley taught chemistry, botany, mineralogy and chemistry. He was also expected to preach in the college chapel on Sundays. Like Professor Morley, our next speaker on the panel has
many talents, though he is now limiting his practice to endodontics.

Dr. Stewart's question is: "Do we have too many dental specialties? Is there sufficient overlapping so that several specialties could be combined?"

*Dr. George Stewart:* Dr. Boyle mentioned earlier that we might get into some real controversy, for obviously the problem of, "Do we have too many dental specialties?," has been controversial for many years. In 1957, the Council on Dental Education and the House of Delegates of the American Dental Association declared a moratorium on the recognition of new special areas of dental practice.

Wisdom prevailed, and this moratorium was lifted when it became apparent that the profession was growing and new knowledge and skills were being developed. Significant numbers of dentists were limiting their practices to other than the seven that had been designated special areas of practice.

We are no longer content with filling cavities, extracting a tooth here and there and perhaps replacing these teeth.

We have become abundantly aware of the fact that we are treating a human being, and though responsible primarily for his oral health, we cannot ignore his total environment and how this environment affects him and our profession.

It is obvious that if we restrict the growth of our profession in any area we restrict the advance of knowledge, and the eventual distribution of better health for more people. It is also obvious if we consider the term "too many dentists specializing," to mean a waste of human effort; and obviously from statistics that are available, not only do we have an insufficient number of men with special training, but we also have an insufficient number of men in general practice capable of taking care of all of the accumulated dental needs of our population. If possible, we might encourage more areas of special practice and expand our frontiers of knowledge and understanding. We should also learn how to use these advances of knowledge in a total concept of health care.

I would definitely say that we do not have too many specialties or specialists. I think the term "specialist" is an unfortunate one, because it conjures up in the minds of many men in our profession,
that the "specialist" is competing with the man in general practice. The "specialist" serves the patient as well as the generalist and could not economically survive without the complete support of the men in general practice.

Thank you.

Dr. Boyle: Does any member of the panel feel impelled to get in on this discussion?

Dr. Kerr: Dr. Stewart has just stated that we did not have too many specialists. I do not think this is the question. The question is, "Do we have too many dental specialties? Are we dividing dentistry into too many partition departments?"

I think this is one of the reasons that a moratorium was placed on dental specialties, because of the idea that we were dividing dentistry into so many small areas in which few individuals could actually make a living, or actually find places to become members of an academic fraternity by the specialization, the limitation of his activities to a particular phase of dentistry.

I think this is one of our real problems. In order to have a dental specialty, we ought to have a branch of dentistry that can be very sharply defined.

We should have a zone of activity that can be reasonably well delineated. We should have one that an individual could spend a major part of his time actively engaged in the practice of his specialty without branching over into the activities of other recognized specialized fields of practice.

There are many areas of specialty that provide problems, for example, if a person cannot limit his activities to his specialty then he cannot be a specialist and limited in his practice. In such an instance, he will have to be cited for not limiting his practice.

We have, for example, pedodontics and orthodontics and some problems arising as to whether an orthodontist can place a filling for a child patient for whom he is doing orthodontic treatment.

We have the problem of periodontics, whether a periodontist can carry out an operative procedure for a patient that he is treating for periodontal disease.

We get into lots of problems when we get down to finely specialized activities with very limited scope of practice.
Dr. Boyle: Thank you, Dr. Kerr. Dr. Lazarus would like to comment.

Dr. Lazarus: I think that Dr. Kerr has answered that part without realizing, perhaps, that he has stated why the Council on Dental Education lifted the moratorium on dental specialties. The reasoning behind it is simply that if an organization presents, or individuals present, to the Council the logical argument that there is an area which should be recognized as a specialty, that they should have the opportunity to be heard; and that the moratorium would not automatically say, "You cannot have another specialty."

In other words, are we in a position to say that this is the ultimate in the profession, we have eight specialties and here we stop? The answer is, "No." We want these people who believe that they have a specialty, worthy of recognition at least to be heard.

Dr. George G. Stewart: I knew we would have controversy, and I agree with Dr. Lazarus and also with Dr. Kerr.

I think we are interested in the same thing. It might be a problem of interpretation or semantics, but we have to evaluate definitions. We have accepted an idea that specialty implies limitation of practice. How limited must one be?

I think we should further investigate this particular concept. Might it not be better for the certifying boards to determine, Is the individual capable? Does he present sufficient evidence that he has schooled himself above and beyond the point that we might anticipate, from an undergraduate educational exposure? Should the specialty boards say, "You must limit your practice to a very narrow point of interest."

Dr. Boyle: One of the members of this committee, when the questions were being considered, wrote and said that he thought it should be emphasized that dentistry was a specialty of medicine. Medicine has this problem also.

The newly appointed editor of the greatly respected New England Journal of Medicine, Maxwell Finland, was quoted recently by Modern Medicine on specialization:

"Specialization is an unavoidable consequence of expanding knowledge. If this greater knowledge is to be applied, it must be applied by specialists."
Later in the interview, he was quoted as follows:

"Today's specialist knows a hell of a lot about his own specialty, damn little about anything else."

Many of the older dentists have had broad experience in all phases of dentistry and then acquired increasingly detailed specialized knowledge and skill before limiting practice to a narrow area.

There is a problem when a recent graduate comes out of school and immediately limits his practice. I am sure we will get into that question further during this morning.

The next question is directed to Dr. Borish.

"Should the generalist be considered a specialist also and should he be required to take training beyond the undergraduate level as an internship?"

Dr. Borish: There is no question in my mind but that learning must be a continuing process. No practitioner should ever stop presenting himself for more and more knowledge. From my experience, it is the generalist who takes the courses given in the continuing education departments of our schools. Great advances in structuring these programs by those individuals assigned to this task in the schools have seen this area of learning expand extensively in the past ten years. I will have to add, however, that there are still great areas for improvement. I could see that the generalist might be termed a specialist but only in self-defense. If the word "specialist" is to denote superiority, then the general practitioner would also have to be called a specialist.

The generalist in dentistry might well be compared to the internist in medicine when the former has advanced his skill through continuing education. The General Practitioner who has earned his Fellow, Academy of General Dentistry and now his Masters, Academy of General Dentistry might very well qualify as the specialist in general dentistry. The general practitioner so trained must be permitted to practice all phases of the profession in which he has perfected his skills.

Dr. Lazarus: The examiner might lend substance to something Dr. Borish just said in terms of the fact that, hopefully, the generalist today is not over-stepping his bounds perhaps as much as
he has in the past, because I think it is well understood and well recognized in the profession that the graduate of today and for the past many years is more sophisticated and he has a deeper and greater understanding of diagnosis and treatment.

_Dr. Boyle:_ Thank you.

The next panelist is Dr. Harold E. Boyer. His question is:

"Should the undergraduate dental curriculum be altered to facilitate and abbreviate the specialty training programs in dentistry and, if so, how?"

_Dr. Harold E. Boyer:_ Thank you. Unfortunately, I do not propose to answer the question directly.

There are two aspects of the question that perhaps should be reviewed individually; the _Undergraduate Curriculum_ and the _Advanced Educational Curriculum_.

With the input of federal dollars for construction and curricular development, the undergraduate curriculum is undergoing drastic changes in educational concepts and curricular patterns. The advanced educational programs (specialty programs) are also taking a new look at educational objectives. The impetus at the specialty level is coming from the specialty organizations themselves. New guidelines for specialty training are being spelled out. An example is the new brochure which has recently been prepared by the American Society of Oral Surgeons, entitled, "The Essentials of an Advanced Educational Program in Oral Surgery." The document states very clearly the objectives and curricular requirements of a specialty program in oral surgery. Other specialty areas are proceeding likewise to review and define program requirements.

Since the advanced educational requirements in some specialty areas will undoubtedly bring about major changes in both curricular emphasis and the length of educational programs, perhaps the panel question should be restated—"Can the revised undergraduate dental curricular effort be integrated with the advanced educational programs (specialty programs), so that the combined learning experience will more effectively meet the objectives of the formal educational requirements of the specialty, thereby reducing the time period for specialty training?"

Assuming this arrangement of programs is academically work-
THE SPECIALTIES AND GENERAL PRACTICE

able, will an integrated undergraduate-specialty program be acceptable to meet the expectations of both the undergraduate dean and the directors of the respective specialty boards? This in itself may be an administrative hurdle that will be difficult to overcome.

UNDERGRADUATE CURRICULUM

A closer look at the undergraduate curriculum brings to light a series of existing problems. Those of you who have had experience on curriculum committees know that the undergraduate curriculum is a highly complex arrangement of “too many courses in too little time.” The Survey of Dentistry reported the mean number of total range of total curriculum hours reported by dental schools across the country varied from 3,845 to 5,190 hours. The variation of clock hours is interesting, in that the span is equivalent to one full academic year. It is readily apparent that there are differences among educators as to what comprises the undergraduate dental curriculum.

The Council on Dental Education no longer places rigid requirements on minimal clock hours, but merely specifies subject areas to be included in the curriculum. This provides the freedom to alter and adjust the curriculum according to the philosophy of the individual school.

Currently, demands for curriculum time exceed the maximum available time. Free periods for individual study, library time, and elective course work are almost non-existent in the undergraduate curriculum. Simultaneously, legitimate pressures from the various disciplines are being exerted on curriculum committees for a larger share of curriculum time. If new material is to be introduced into the undergraduate curriculum, who will sacrifice what to make curriculum time available?

A second point is that since there are now eight recognized board specialties, proposed adjustments to accommodate specialty training in the undergraduate curriculum would have to be made within the framework of a common denominator for all specialties. These adjustments, of course, must be within the allotted time that is dictated by the objectives and the philosophy of the individual school.

How, then, can the necessary adjustments be made in an under-
graduate curriculum that is already struggling at capacity? A starting point might be to outline precisely the objectives and scope of dental education as defined by the institution. If this can be put down in statement form, the curriculum then becomes the means of expressing the philosophy of accomplishing these objectives. However, philosophies of individual schools vary as curricular emphasis is weighed with reference to biological orientation, technical skills orientation, and research orientation; thus schools are divided on the proration of time required to meet curricular objectives.

Undoubtedly curriculum time must and can be recovered. Some examples are as follows:

1. The conventional basic science laboratory exercises are now being critically reviewed by many schools and alternate teaching methods are proving to be quite effective in a greatly reduced time period.
2. Many of the technical laboratory procedures in dentistry are now being delegated to auxiliary personnel and curriculum time can be recovered in this area.
3. Duplication of teaching effort is notorious throughout the four-year dental curriculum.

Another approach to recover curriculum time, in order to introduce new material into the curriculum, is to break up the traditional 18-week semester, 36-week year, four-year requirement for a dental degree. If the shackles of the sacred curriculum can be removed, all kinds of educational opportunities become possible.

Why should every student take the same four-year curriculum? Why not an elective or selective curriculum with major or minor curriculum interests. A specialty area might well be an early identifiable major or minor interest.

Perhaps the first 2½ or three years should be a required "core curriculum," following this the student could set his own pace and explore his curriculum interests, providing he has talent and has satisfied the minimum requirements for the dental degree. For instance, the senior student who anticipates a surgical specialty would find the hospital atmosphere more productive than a continued assignment in the conventional dental curriculum.

Another point in consideration of the undergraduate educational program is the student. While the very purpose of the institution is to educate the student, he is often lost in the "more impor-
tant" curriculum shuffles. The students often view educators as falling short of their objectives—we are criticized for confusing teaching with learning.

Students come to us with varied educational backgrounds and yet they are exposed to the same curriculum and the same teaching methodology. Some 10-15 per cent of students are continuously in academic trouble and as a result our program efforts are directed to the lower percentile while the upper percentile is never fully motivated and goes unchallenged. And yet, it is the upper percentile that we hope to encourage into advanced educational programs in research, education and specialty training.

**IN SUMMARY**

Curriculum time must be made available if we are to introduce any new curriculum material into the curriculum; secondly, it is suggested that the curriculum be evaluated in terms of elective programs, whereby these programs at the undergraduate level can be stepping stones into specialty training.

The crux of this total effort, of course, is going to come from the specialty groups themselves. Whether they will recognize the effort at the undergraduate level and add direction, so that this early experience is in sequence with specialty requirements and will prove to be fruitful, remains to be seen.

*Dr. Boyle:* Dr. Boyer, that is an important question and I hope a fruitful answer. The next question is directed to Dr. Moore.

"What are the advantages and disadvantages of state specialty licenses?"

*Dr. Moore:* Dr. Lazarus in his discussion covered this point very well. I might add a few words of why state specialty board examinations came into being. The primary purpose of licensing or certifying bodies in the health professions is to protect the public from unscrupulous persons declaring themselves specialists without actually qualifying educationally or experience wise for such a designation. State specialty licensing was one method attempted to protect the public's interest in this regard.

Michigan and Illinois were among the first states to establish such specialty licensing programs. They recognized that dentistry did not have the policing power that medicine had in limiting the
practice or certifying the competency of specialists through their hospital affiliation. The hospitals have excellent means of checking whether individuals are performing services for patients which are beyond their capabilities. Dentistry did not have such a control so state specialty licensing was established.

State specialty boards served a very useful purpose early in the days of the development of specialty areas of practice. At the present time we have arrived at a point where national specialty boards have been established in almost all of the dental specialties and the acute need for individual state specialty examinations is past. The national boards should now serve the primary purpose of certifying competency for the public's protection.

Recently the American Dental Association has helped to strengthen the degree of protection offered the public by listing individuals as specialists only those who have been certified by a national certifying board in one of the areas of specialty practice.

The advantages of specialty certification are obvious. The disadvantages of such certification at the state level involves the necessity of having 50 specialty examination boards certifying the competency of specialists in at least seven areas in dentistry. Some years ago I took a state specialty examination which was given by a regular state board of dental examiners. They told us that they did not feel competent to examine us in our specialty area and that they were certifying us on the basis of our advanced formal training in our specialty area. This was in a large state so the problem would be many times compounded in the smaller states establishing specialty certifying procedures.

For the above reasons I feel that we have reached a point where the need for the state specialty examination board is no longer acute and that the American Boards in various areas of specialty practice could serve this function.

Dr. Stewart: Dr. Boyle, if I may expand on that particular topic, I think it was a very, very worthwhile undertaking years ago when specialty boards and licensures came into being, naturally to protect the public interests, but I think just as the profession itself is growing sometimes the responsibility of the various boards can also grow and on a national level could become more significant.
In this respect, the boards might also be active in encouraging advanced study symposia of various types and further, advance the understanding of the basic sciences in a common program effort. This would really expand some of the functions of the board so that possibly, the boards of the separate states would not be able to follow individually. However, by participating on a national certifying board, they would have a better opportunity to do so.

I think this is one of the things, too, that the Council on Dental Education has been encouraging. They have been a very active progressive medium in our profession, and now they are helping and encouraging all the boards to develop a program format to encourage hospitals and institutions of higher learning to lay down certain minimum programs that would satisfy the board areas.

Dr. Kerr: This may be semantics. What we are discussing here is the national certifying boards.

We have no national certifying boards. The national boards, are, I think, entirely undergraduate.

We have certifying boards that evaluate specialists and are sponsored by specialist societies. These are not legal boards as are certifying boards of the states or national certifying boards. These are boards that are to evaluate deficiencies in a specialty training program and they are sponsored by the specialties themselves, and are operated and governed by the specialties. They have no legal status. Dentistry may set up and administer this type of examination as a means of qualifying individuals to practice a specialty or to evaluate the competency of the individuals in special areas of practice.

The states still can accept this if they so desire, but it is up to the state licensing organizations to determine whether they will or will not accept such evidence for specialists.

Dr. Pelton: I think there is a lesson to be learned in what Dr. Moore said about specialty licensure in Illinois when he qualified as an orthodontist.

The Illinois specialty board was an instrument of the state which simply verified that he had had special training. I do not know the history of the Illinois board but I assume that this was a func-
tional way of doing business and that the public was, indeed, protected by this method. Neither do I know of any malpractice suits that resulted from improper treatment supplied by the orthodontists in that state.

Now, if you relate the Illinois attitude about qualifying a specialist to what I thought Dr. Suit said about requalifying general practitioners on a relicensure basis, I think we are wasting time by making a relicensure system too complicated in the beginning. If a relicensure examination system could be as simple as the Illinois specialty board, an examination which only determines whether a man did, indeed, have so many hours of graduate or postgraduate instruction, we would have an easy way for a practicing dentist to requalify for his license. I do not think a relicensure system, whether for a general practitioner or a specialist, needs to be very complicated.

_Dr. Moore:_ One other point I think we should keep in mind is that the dental license permits us to practice all phases of dentistry. The problem of public protection is related to the individual who announces himself to the public as being a specialist in any given area of practice who is not actually competent to be designated as such. We must recognize that it is the individual practitioner's prerogative to practice any phase of dentistry in which he feels competent. As soon as he holds himself forth publicly as a specialist then the public's interest must be protected.

_Dr. Boyle:_ We will go on now to the next question.

This question is.

"What are the advantages and disadvantages of beginning specialty training at the undergraduate level?"

_Dr. Perdigon:_ As I see it, the advantages are few, since beginning specialty training early will encourage more students to specialize. However, the disadvantages are many: Before an undergraduate student takes any specialty training, the student should have a good knowledge of general dentistry.

When a student is in an undergraduate curriculum, he has no idea what the relative merits of the various specialties are.

Undergraduate students can easily be influenced to enter certain specialties because of the glamor and financial advantages, and they might regret the decision the rest of their lives.
It is my understanding that dental schools do not have time in their curriculum to add specialty training. Any additional training will be at the expense of the general curriculum. We will possibly produce a so-called specialist who is not properly educated and does not have sufficient background to understand and recommend oral diagnostic and treatment procedures in other specialties that will benefit the patient.

For the dentist to practice any specialty, he should have the experience of first being a dentist in general practice or its equivalent, and then make his choice as to the area of specialization he would like to practice. This is particularly true in prosthodontics. He must have a broad background in all fields of dentistry.

Dr. Boyer: Well, I am in complete agreement with what my colleague is saying but I think we should also consider the fact that many dental students coming to us today are mature individuals and have given a great deal of consideration about their future during their four-year pre-professional curriculum. If we continue to think in terms of four years of undergraduate school, four years of dental school and perhaps two or three years of general practice, it becomes increasingly difficult for that individual to come back and pursue three or four years of specialty training. I think that this transition period from a senior student to a specialty can be eased a bit at the undergraduate level.

That was the point of my question which I discussed previously.

Dr. Pelton: I do not have the prosthodontist's experience in this matter. I believe that we have had a very, very successful demonstration over a 20 or 25 year period which indicates that one can train a very competent specialist. It was done at the University of California, in an orthodontic program during the same period of time that other students took a regular dental course. As I understand the matter, and I am willing to be corrected, it was simply a matter of taking the number of hours that were available during the four-year period and allotting them in a different fashion so that general dentistry was taught to the boy who became an orthodontist but not to the extent taught to the young man who was going to graduate as a general dentist. It is a fact that when the specialty board applied its criteria to the men asking for specialty recognition in orthodontics, those people who showed up
best on the specialty boards were the California trained orthodontists, that the second best showing was made by those who had been trained under an apprenticeship program, and the poorest were those people who had taken two-year orthodontic courses beyond the initial dental training. We have had a demonstration that one could alter the dental curriculum and come up with specialists. And I believe that. I would like to see this tried in other areas.

The facts of life relating to dental manpower statistics are such that it would be desirable to alter the curriculum so that one could train students for specialties within the four-year period allotted to dental education.

Dr. Kerr: I think, Mr. Chairman, we have to look at some different areas of dentistry—some different aspects of dentistry.

This example of orthodontics as a trial experiment in which you can give the individual specialty training during his undergraduate program is quite different than some of the other areas of dentistry.

This has, from its inception, almost been a graduate area of dentistry very limited in its activity, very limited in the segment of population involved, and very limited as far as recognition of need for the service or the treatment.

If we compare this to the individual in periodontics, we have quite a different situation. In training an undergraduate student for eventual specialization in periodontics, we have to train him first in the area of dentistry and the recognition of the disease, and before he knows that he wants to become a periodontist. As an undergraduate he has to have had enough experience to recognize that there is a periodontal problem and the magnitude of the periodontal problem, then he becomes interested.

He has to also outline a much broader program of treatment. His pre-treatment program is not the highly specialized treatment program that we have in the field of orthodontics, and so you have to provide him with a greater background. I do not think he can start at the end of the sophomore year and be trained so that at the end of his senior year he is going to be qualified as a periodontist and treat him as such. He will not be qualified when he gets out of school to evaluate a situation and tell a general
practitioner or a specialist in reconstruction that these are the things that you are going to have to do this way for this patient. His limited experience in dental education will not provide sufficient knowledge and experience to provide total patient evaluation.

Dr. Moore: I would like to speak to the question Dr. Pelton raised regarding the University of California's Curriculum II. I happen to be a graduate of Curriculum I, which was the Restorative Dentistry program that paralleled Curriculum II. I received my training in orthodontics at a later date.

The program for students in both Curriculum I and II was the same during the first year in dental school. At the end of the first year those students who elected Curriculum I received a minimal exposure to orthodontics while those who elected Curriculum II received a minimal exposure in prosthodontics and crown and bridge. This made it possible for those in Curriculum II to devote about half of their time to the orthodontic aspects of their curriculum. Half of the time of the restorative students was devoted to crown and bridge and prosthodontics. Considering the age group with which the orthodontist is primarily concerned, the need for extensive training in prosthodontics and crown and bridge is not as essential as it would be for the restorative students. There is no question that this program operated very successfully for 30 years at the University of California, as pointed out by Dr. Pelton.

Dr. Pelton's figures regarding the performance of Curriculum II (Orthodontic) graduates relative to their performance on the examination of the American Board of Orthodontics were slightly misinterpreted. The figures that he quoted should have been related to the number of failures of the board examination. In other words, the University of California group has provided very few candidates to the American Board of Orthodontics who have failed the examination. In fact, it is possible that the statistics would show that a Curriculum II graduate has never failed. The reasons behind this could not be demonstrated without a thorough study of board statistics but nevertheless the fact still remains that Curriculum II graduates, as a group, have one of the lowest, if not the lowest, failure rates.
We might consider a point that Dr. Boyer raised previously and that is we are hidebound to a dental curriculum that was created early in this century and there has been basically little modification of it since that time.

Starting this fall the University of Washington School of Medicine has inaugurated a new curriculum which barely resembles the traditional curriculum that medicine has followed for years. The new curriculum evolved from a four-year study carried out by top echelon people from every department responsible for the teaching of medical students. One of the first things they concluded in their study was that it was impossible to teach all aspects of medicine in the allotted four years. It is my opinion we have reached the same point in dentistry today.

They developed the new curriculum by defining various pathways that a medical student might elect to follow through his medical education. The medical student must choose one of these pathways which will then determine his curriculum plan. The pathways were designated as follows: (1) Behavioral Sciences, (2) The Family Physician, (3) Surgical and (4) Research and Education.

After establishing the pathways they established a minimal academic attainment for which they would award the M.D. degree. They used the University’s academic framework of 180 hours, representing four academic years of course credit. Thus when a man has attained 180 hours of academic credit he is eligible for graduation. In their curriculum planning they developed a core curriculum which would extend through the four-year program and would represent 90 credit hours of accomplishment. The other 90 hours of course credit hours that would be required for graduation would then be elective and would be in the pathway which they had selected when they started the program.

Departmental barriers in curriculum planning were broken down by defining areas of knowledge necessary for the practice of medicine in which representatives from the various departmental disciplines associated with that knowledge planned conjoint courses. For example, the first-year students in medicine do not get a course in biochemistry, microbiology or anatomy, per se, but rather courses related to the application of these sciences to vari-
ous aspects of biology. As an instance, one of the new courses is entitled, "Cellular Biology and Metabolism." The course is being taught by a biochemist, physiologist, anatomist and medical clinician. The course outline is developed by all the teachers involved with a chairman designated as the one responsible for coordinating the teaching program. The effectiveness of these new courses will be evaluated and if it is ascertained the course objectives are not being realized, a new committee will be formed with the responsibility of modifying the teaching program. This format has promise of translating what might be called abstract science into more meaningful terms as far as the student is concerned.

No longer is a biochemistry laboratory required for medical students. However, if a student elects the research pathway he can elect to spend a major portion of his elective time in biochemistry which would give him an advanced start towards attaining his ultimate goal.

**Dr. Boyle:** Very interesting. Those of us from Cleveland who know that the Western Reserve Medical School program has been adopted at Harvard on the east coast will be glad to learn that it has reached Washington also. There are a number of comments.

**Dr. Albert L. Borish:** Dr. Boyle, may I take a moment to interject. At breakfast this morning, you spoke of conservative and radical views. I am wondering what label I will carry after I complete this statement. Quite frankly I am concerned about the present education and qualifications for the two-year specialist. What disturbs me is that this man goes into limited practice with so little knowledge of general dentistry. This man is to be called in for consultation and health planning with little or no practical experience. Some consideration should be given to this proposal: Before limiting his practice, the doctor should have at least five years' experience in general dentistry. At the end of this period with some direction as it relates to the various disciplines, he attends a two-day-a-week graduate program for a period of three to five years. He is now prepared to move into his specialty with confidence and with what is more important, the confidence of his colleague, the generalist.

**Dr. Perdigon:** I think he is correct. Economically, it will hurt. I
would like to ask the question: “Is the schooling in Southern California in orthodontics still in existence?”

Dr. Moore: No. The University of California Curriculum II in San Francisco was “outlawed” by the American Dental Association Council on Dental Education.

Dr. Perdigon: I think he will be a better orthodontist if he has four years of general dentistry before beginning specialty training.

Dr. Boyer: I would like to pick up the discussion to my right with reference to the shackles of the conventional curriculum. Pointing out again, that throwing the shackles off does give us the opportunity to take the gifted group of students, whatever percentage this may be, who have indicated an interest in some phase of advanced dentistry, be this a specialty or some unidentified area of dentistry, and encourage them to explore this area in depth. I personally feel that in the specialties, speaking for oral surgery, great inroads can be made by getting the student into his chosen area of study earlier in this career.

If the gifted student, on the other hand, goes on through the conventional senior year, quite often he is not fully motivated. The proper challenge is missing and he is laboriously required to repeat the same set of requirements and procedures that he has completed in the junior year. As a result, the gifted group of students is not motivated to enter the advanced fields of dentistry that are essential to educational development and research.

Dr. Hawes: Dr. Boyer just said what I intended to say.

It seems to be that some of the comments we have heard would lead one to think that perhaps dental schools are not preparing people adequately for general practice, but I think the man who begins general practice after dental school training is just as well prepared for general practice when he then takes it up and begins learning as the man is who enters a specialty training program immediately after graduation.

The man who enters a specialty needs an understanding of the interrelationships of general practice and his specialty, but he does not have to develop the level of competence in all the areas that the general practitioner will develop over the years of his
practice. I think it is unrealistic to expect all men who want to become specialists to do general practice for four or five years and then take additional specialty training for four or five years. The specialist's energy should be spent developing competence in his specialty area. We would have some very senior, aged specialists by the time they got into practice. The cost of this type of program would be prohibitive.

We will have some very senior, aged specialists by the time we get through to it, and if you will imagine the cost of the individual and the patient, I think the whole thing is preposterous.

**Dr. Boyle:** Dr. Pelton, will you reply to this question? "Should dental schools adopt a three-year program of 11 months each, followed by a fourth year of closely supervised general or special practice? The fourth year could be on salary—after state board licensure. This would meet some of the objectives of low income patients (neighborhood health centers, etc. to having their dentistry performed by 'students.' Dartmouth has proposed a somewhat similar program for medical education."

**Dr. Pelton:** The idea of a three-year program is not new, as you know. It would be difficult to come up with something entirely new in dental education.

I remind you that this was done during World War II and is still being done at the University of Tennessee. Thus, the basic concept is possible and is workable, but it would create problems, none of which are impossible to solve. I think it could be done today.

An around-the-calendar educational program raises some questions about reducing the earning capacity of the student. Most of you would probably say that in today's economy a student does not have to work in the summertime to replenish his income and get ready for the next academic cycle, that there are scholarship programs, loans and just more affluence, so that we do not have the same kind of student today that we had years ago.

It could be done, too, if the schools readjusted their faculty and increased their staffs, because it would require many more student contact hours. When the teaching load is increased, the time the faculty member has for research or other advanced study is re-
duced so that the financial arrangements and administrative arrange-ments for a revised educational program would be a bit different than required under the present 32- or 36-week school year.

Now, if you license these people in three years and required an additional year of residency, it would mean that your practice act would have to specify the fourth year of experience. You would have to have a law to do this, in my opinion, because if a man is licensed at the end of three years in a given state, there is nothing to keep him from going into practice the way they do in Tennessee now.

Then, the matter of working on low income people on that fourth year—it would be very devastating to the professional growth of a person.

We see this so much in the military. Young officers assigned to the amalgam pile get very bored with just doing routine kinds of dentistry. This is what would happen in a public health program.

So that the last item relating to three-year courses that I can think of that would be a distinct advantage would be the competitive positions of dental schools. It might not be a detraction. It might be the opposite. The plan might attract students who want to finish quickly and earn some money in the fourth year.

Now, actually when we talk about dental education, we are not talking about a four-year curriculum. We are talking about the minimum of two, more likely three, and sometimes four years worth of training prior to matriculation in dental school. This fact puts a different twist on what the dental curriculum ought to include. We are not beginning, as somebody already has said on this panel, with immature people. It is not infrequent to find a student with a master's degree before he enters dental school.

We have new problems that require new thinking. Hence, I would like to see some additional schools try a three-year curriculum but I do not think it is an educational pattern that is ready to be applied all over the United States.

Dr. Boyle: I will ask the next question of Dr. Hawes.

"Quality control is already a problem in New York and Massachusetts and presumably will become one in other states under MEDICAID, prepayment plans, etc. What can our profession do to
set and control standards and thus obviate the likelihood of control by outside agencies?"

*Dr. Hawes:* The first part of this question indicates that there is a problem about quality control in New York and in Massachusetts.

I took the opportunity, when I was given the question, to write to the Secretaries of the Massachusetts and New York State Dental Societies. I was interested to find out that the response from Massachusetts indicated that it is not considered to be a problem in Massachusetts, but it is considered to be an opportunity, a challenge.

I thought that was very healthy in respect of the direction which the response from the dental society can take when it seems to be an opportunity and a challenge rather than a problem or something to be conquered and overcome.

There are several things that occur to us in thinking about quality control. First of all, we think of this as something that is new in the world, and of course, it is not. State agencies and insurance companies have long experience in quality control in the medical field, and now they are attempting to apply it, unwisely perhaps, in the operational control of the dental profession.

This means that if we are to accept the quality control as a challenge, we must participate at every level from the governor's office and his council to the state health department and from the state social or welfare agencies levels right down to the local level. The voice of the dentist must be raised and heard. It must be an effective and consistent voice. We need to support our Dental Society representatives not only in their effort to establish acceptable procedures to judge the quality of what the dentist does, but of equal and perhaps of more importance, we must support their efforts to ensure the quality of the program as it is organized, because the quality of the program will directly affect the willingness of dental societies to participate in the operation of the program.

Secondly, it is difficult for us, at this point, to agree on standards. There are problems arising in care of the poverty stricken among our population with which we are not now familiar. There are
problems of behavior. There are attitudes, there are special problems of neighborhood and locality about which only now we are beginning to gain some experience and some knowledge.

Should we apply the same standards of dental care universally, or do we need to make the standards more universally applicable?

In the third place, if we are to avoid third party control of the quality of dental services, we must accept a clear responsibility. We must accept responsibility for determining what the standards should be, then we must accept responsibility for maintaining them. Obtaining widespread agreement on what the standards should be is going to be our first hurdle if we are going to develop standards that can be supported by a great majority of dental practitioners.

In addition, we encounter in some state agencies an attitude that would censure dentists who do not come up to what is termed an "acceptable level." The statement is made that dentists who do not perform up to an "acceptable level" should not be permitted to participate in state sponsored programs. On the basis of this attitude by the agencies concerned, it is expected that dentists who do not come up to the standard, will be anxious to improve so that they can do acceptable work. In an attempt to foster this response, the State of New York has set educational requirements for general practitioners who participate in State programs. Educational requirements have not been set for specialists. Many feel this is unfair. Unfortunately, the training taken to meet this requirement may be irrelevant to the area of incompetence of the practitioner. A course in practice management counts in fulfilling requirements. And so this education although worthwhile is not necessarily going to improve the quality of service.

I feel that we should approach this problem by recognizing that we need every dentist in these United States performing at maximum effectiveness and in order that we can continue to contribute at a high level to the public's dental health. I feel that we should urge dentists, whether they are specialists or general practitioners, to seek continued education in areas where they can best apply their knowledge. Dental societies, state agencies and philanthropic institutions should assist in the retraining and continued education of the dental profession.
I think it would be desirable to share the financial burden of re-learning a whole field of knowledge about every ten years. That is the rate at which knowledge is multiplying these days. Ten years from now there will be twice as many articles in dental libraries as there are today.

The dentist who feels the responsibility to keep up is a great asset. Dental societies have an opportunity here, as the Massachusetts Dental Society has put it, to accept the challenge of quality control. Rather than to censure and to act the authoritarian figure toward practitioners, the agencies and the dental societies should accept the opportunity to lend a helping hand to see that this opportunity is provided for all dentists.

Dr. Lazarus: I cannot complete what I would like to say this morning, but I think that when we talk about quality control and when we talk about what is going on in the profession, that someone someday has to stand up and be counted. I lay this statement before you in this matter, that there is no evidence on record that the people of the State of New York have been receiving substandard quality of dentistry.

Admitting that we are all human beings, some days we do not do as well as we do on other days, but this does not mean that the profession, at large, is not trying to do what they are responsible for in taking care of the public, and so I think, until the day comes that there is substantial education that the efforts of the care of the public are really and truly at substandard; that we need to have someone look over our shoulders and tell us how we are going to take care of the public on one level in one way and other patients in another way.

Dr. Kerr: I do not know quite where to start my remarks. I have several that I would like to make.

In the first place, we are talking about quality control, and quality control is something that has come into the practice of medicine for the simple reason that we have an extended activity of automated laboratory procedures which now constitute a large part of the practice of medicine.

We have situations in which you place a few drops of blood in a machine and come out with answers for ten different tests. Auto-
ation demands control, quality control, but automation and the
demand for quality control infers mechanical activity or some
chemical test, something that is a positive activity in which you are
dealing with a known reaction or you are dealing with known
mechanical procedure; and so if we admit that dentistry needs
quality control, then it seems to me that they are admitting that
dentistry is entirely a mechanical activity; and thus should be
taken out of the health service field.

Another thing that bothers me is that if we say that all of our
dentists need quality control, then this means that we have not
trained our dentists satisfactorily, and so instead of talking about
less time, we had better start talking about more time, because we
should be able to train them to carry out adequately acceptable
procedures.

I do not think anybody is talking about quality control in the
general practice of medicine, and I see no reason why we should
be talking about quality control as far as the practice of dentistry
is concerned.

Dr. Boyle: There is quality control in certain hospitals. Teach-
ing hospitals control by admission to the staff and also by such
devices as tissue committees which review staff activities and per-
formance.

Dr. Boyle: Here is another question:
“Specialists have the opportunity of seeing the quality of den-
tistry practiced by those general practitioners who refer patients
to them. What is their experience and judgment regarding the
level of competence of general practitioners?”

Dr. Suit: Briefly, this question asks the specialist to evaluate the
level of competence of the general practitioner.

In order to arrive at an objective conclusion, 30 specialists in the
various branches of dentistry were asked:
“What is your opinion of the competence of the general dentist
and how would you grade his work?”

A composite of all replies indicated that the specialist considered
the quality of dentistry to be just fair.

If the specialist were grading the general practitioner, he would
probably receive a C plus grade.
A few fair-minded specialists and most of the general dentists with whom this question was discussed, indicated they doubted that the specialists were qualified to judge the level of competence of the general practitioner.

They pointed out that some specialists may not realize how difficult it is to perform technical procedures which may partially depend on patient co-operation during and after treatment.

The general dentist did not believe that specialists were aware of the most recent advances in general dentistry, nor have they had the time or opportunity to investigate their individual limitations.

Several capable general dentists expressed the opinion that the competence of certain specialists should be investigated. They based this judgment on clinical results obtained by several so-called experts.

Apparently using specialists to evaluate the competence of the general practitioner is open to some justifiable criticism. "Who, then, will determine the level of competence of the general practitioner?"

As I mentioned in my earlier comments, the level of competence of the general practitioner could be raised by compulsory reexamination or required regular attendance at continuing education courses.

*Dr. Moore:* I would like to comment on this. If the specialist evaluates the general practitioner and awards him a C plus grade as Dr. Suit states, I would say that speaks very well for dentistry. C is usually considered as representing average performance so that a C plus should be interpreted as meaning that the level of dentistry is a little bit better than what is usually considered average.

*Dr. Borish:* How presumptuous! The specialist is asked to grade the ability of the generalist. If any judging is to be done, it would seem to me that the GP should be evaluating the specialist. Perhaps the most logical approach would be for each discipline to guide its own area. Let us instead take a positive look. It seems at long last there is a movement toward continuing education and relicensure. More and more of our authorities are getting closer to the compulsory point of view. As for myself, although I will admit
that I have exercised great patience in this area, I too, might have
to come around to this point of view. In the past number of years
I have concentrated on the “Science of Attraction” (JOURNAL OF
THE AMERICAN COLLEGE OF DENTISTS, April 1967) as it influences
the dentist to participate more and more in continuing education.
Perhaps the next five years should be devoted to our ingenuity
in the science of attraction rather than depending on the strong
arm. If this fails, we will then have every reason for reacting to the
“no action” of our colleagues.

Dr. Stark: I would like to include a comment regarding the spe-
cialist evaluating the work of the general practitioner or family
dentist. First, my observation has been that patients referred to a
specialist are usually more responsive and better behaved than
those that go routinely to their family dentist.

Insofar as evaluating the work of the general practitioner by the
specialist, may I add that I have tried to evaluate the work of my
colleagues and tried to pass judgment on their work in relation-
ship to their ability and this has resulted in mixed emotions. My
tendency to be critical of their results when dental work was not
up to expectations was soon tempered when I tried my best only to
find that I, too, encountered many behavior patterns and complica-
tions among those patients presented. I then marvelled at what
a good result they had under the circumstances and would have
given them an “A” rating rather than a “C” rating.

The pendulum here swings in favor of the specialist as very few
of his patients are seeing a dentist for the first time as practically
all have had initial contact with their family dentist. Then, too,
patients going to a specialist are more reconciled to premedication
and are more reconciled to take their postoperative care more seri-
ously.

Dr. Roland R. Hawes: Just one comment about the behavior of
patients referred to the specialist. I am a pedodontist. Draw your
own conclusion.

Dr. Boyle: Dr. Borish spoke of the dentist who had learned all
there was to know. I thought it was only senior dental students
who know all there was to know.

We have done some experimentation with our curriculum and
have a type program where a senior student is under the charge of
a preceptor and concerned with general diagnosis, treatment plan-
ning and complete care for a selected group of patients. I recently
asked one of our seniors who just started under this program a
week before, how it was going. He shook his head and said that,
for the first time, he was beginning to realize how little he really
knew, which indicates, I believe, the beginning of wisdom.

Dr. Stark: In the overall evaluation of the subject of general
practice and specialties, one cannot help but feel proud of the
American Dental Association in the democratic and reasonably
painless way in which the eight recognized specialties and their
respective certification programs evolved.

Specialties in dental practice can justify their existence only if
they promote the health and welfare of their patients to an extent
beyond that which the average general practitioner can do. This,
I hasten to say they have done beyond a doubt and also have added
distinction and stature to the dental profession. This, despite
the fact that specialization has resulted in a fragmentation not
only of the profession but also of the patient and the affliction in-
volved, as well as a cleavage within the ranks of our profession
from a political standpoint.

Of the eight recognized specialties there are two which can be
dismissed as not involving the general practitioner directly. They
are public health and oral pathology. Usually these two are in-
volved with an institution or a third party such as the Federal
Government. The other six involve the patient, the family den-
tist and the specialist.

May I say here that our profession is the envy of the medical
profession in that we have indoctrinated into the public a protec-
tive mechanism in the six-month checkup. Medicine has yet to do
this. This has received public acceptance and nothing should inter-
fer with it. In the case of orthodontic treatment, this six-
month checkup is frequently lost sight of. If undetected caries
suddenly appears, it puts the family dentist on the defensive if
that patient has not observed the six-month checkup. The pa-
tient’s defense is that after all, hasn’t he been in the hands of a
dentist.

One cannot stress too much the element of communication
which includes consultation. Much duplication of effort, such as study models, radiographs, and prophylactic treatment, could be avoided with a little more emphasis upon communication. In the final analysis, it will be the general practitioner who will have to reconcile any misunderstanding, since the interpretation patients place upon a treatment varies with the patient.

The Council on Dental Education has set down some guidelines for the dentist who, while not rated as a specialist, does limit his practice. He may be in general practice with emphasis upon the area of his special interest.

Are there any gripes? Yes, definitely. There probably always will be gripes. It is a bit difficult for a general practitioner who has been in active practice for 25, 30 or more years to have the public expect to pay him less for a root canal, a surgical or periodontal treatment than would be aid to a specialist whose specialty practice was but six, eight, or ten years old. However, in fairness to the general practitioner, he is accepting it.

I mention communication and consultation again, or rather the lack of them, and here I want to lay this responsibility upon the shoulders of the family dentist as well as on the specialist. Even though in general practice he should be able to talk the language of the specialist; understand his technics as well as his philosophy and the fundamentals of the specialty, so he too, can explain them to his patient. Frequently, the lack of communication starts with the acknowledgment of a referral by the specialist. This, I might add, regardless of how elaborate it may be, is in itself not enough. Many gripes or grievances might be avoided if there was a periodic follow through, especially in orthodontics, with a progress report, especially when a deviation from the originally agreed plan of treatment enters the picture. The decision of what and when to take out third molars, be they erupted or impacted, should be the combined judgment of the family dentist, the specialist and the family involved. Frequently, these extractions involve another specialty. While we have the gripe that the specialist does not always see to it that the patient returns to the general practitioner promptly for check up after treatment, we are also mindful of the fact that frequently elaborate preparations are made with the specialist and the patient fails to keep his appointment.
Specialty practice has not only fragmented our profession but has also influenced our local, state and national meetings and programs. It is gratifying to see so many of our general practitioners take some of the refresher courses in specialty groups even though they exclude that type of service from their practices. It is equally gratifying to see so many specialists include subjects involving dental practice of the generalist in their continuous educational programs.

It was my privilege to have been on the ADA Reference Committee at the time when endodontics, our youngest specialty, was approved. It occurred to me then, as it will to you now, that if endodontics had sought specialty accreditation back in the twenties when focal infection, including pulpless teeth, was in disrepute, endodontics as a specialty would not have gotten off the ground.

It is understandable that certain native skills possessed by our members have no doubt contributed toward development of specialties, as well as the avoidance of some unpopular routine problems which arise in general practice.

I think, too, that, geographically, the transition of neighborhood individual merchants with their public transportation transfer points to the modern all purpose shopping center with its inclusive facilities as a medical center has been a great factor in promoting specialty practice. The introduction of group practice has also made its contribution. Prosthodontics as a specialty seems to have outgrown its gripes, just as general anesthesia in oral surgery helped establish its status as a specialty.

When we consider that it wasn’t many decades ago that the radical treatment of a single peridontal pocket was frowned upon by some ultra conservative general practitioners and how we know today, especially with our ageing population, that the retention of their natural dentition is dependent upon such treatment. As in all other specialties, we as a profession, are indebted to our colleagues who advanced specialty treatment even though occasionally we find such treatment has been challenged because of the over-enthusiasm of certain members of the profession. One cannot help but observe that some of our specialty groups could have been recognized earlier.

Dr. Boyle: We have questions from the audience concerning
differentials in fees and services which may be rendered either by the general practitioner or by the specialist.

Dr. Stark has touched on that. Who else on the panel would like to comment? Dr. Pelton?

Dr. Pelton: If you are aware of the history of some of these federally funded programs, you may recall that the EMIC, the Emergency Maternal and Infant Care Program, during World War II was sponsored by the Children's Bureau. In those days, the government tried to make sure that the wives of soldiers away at war had whatever obstetrical care they needed from the home town physicians without financial considerations. The same issues came up. They were:

1. The specialists (OB, GYN) tried to keep the generalist from delivering babies.
2. The specialists also tried to establish a higher fee schedule for themselves than was prevailing at that time for the general practitioner.

The upshot was that the Children's Bureau said there would not be a difference in the fee for delivering a baby, and too, that the generalist was the mainstay of the program and that there would be no effort on the part of the government to assign EMIC patients to specialists only.

The dental problem, I think, is even bigger than the problem of delivering children, because everybody is pregnant in this case. I would expect that an effort to establish separate fee schedules and distribute dental care to specialists only will not be made by any governmental agency.

Now, there are exceptions, of course, I cannot visualize orthodontic services being supplied by anybody but an orthodontist. I think it would be a mistake to say that all extractions must be done by qualified oral surgeons. This defeats the purpose of the program. Also it would cost the taxpayer more to do it this way and in these days of affluence the government is very poor.

Dr. Hawes: I think I could speak quite clearly for the pedodontist in respect to this question.

I think the direction of the American Society of Dentistry for Children is to encourage comprehensive dental service for all children by the general practitioner.
Dr. Moore: I feel one of the weaknesses of our present dental curriculum is the fact that our graduates do not know enough about the growth of the jaws and their effect upon occlusal relationships. This knowledge is basic to general dental practice as well as most of the specialty areas of practice. The general practitioner should be able to recognize a malocclusion when it exists and know what are the possibilities for correction from a treatment standpoint.

The problem reverts back to the amount of time available in the curriculum for education and training of the dental student in this area of knowledge. Once the dental student is able to recognize what is wrong then it is possible to develop his judgment and skills so that he can deal with the problem. I do not feel that the diagnosis and treatment of occlusion problems is the exclusive right of the orthodontist.

Dr. Boyer: Question number 15, is a similar question and we can cover both at the same time. "Is it desirable that a general practitioner attempt uncomplicated tooth removal, minor tooth movement?"

I do not think that the word desirable is the issue, but certainly minor tooth movement falls into the realm of general practice.

Basic principles and concepts of oral surgery are taught at the undergraduate level, with the premise that it is on these concepts of excellence that the undergraduate student will someday practice certain aspects of oral surgery as a general practitioner, or if he so chooses, he may build on the undergraduate foundation through advanced training and limit his practice to the broader aspects of the specialty.

Undergraduate experiences in oral surgery vary from school to school as does clinical competence of the individual practitioner. It would be inappropriate to develop a list of surgical procedures for the general practitioner and another for the specialist. However, it is appropriate to say that there can be but one standard for excellence in surgery regardless of who the surgeon is, and that competence by virtue of training and experience should determine the surgeon’s limitations.

Dr. Boyle: "What is a patient going to do who requires the care
of a periodontist and an endodontist, and so forth and so on, and does not have either time or money to afford both?"

*Dr. Stark:* I think this belongs in the hands of a magician. Obviously a good and practical question. I do not believe that there are many such cases which do not get attention if they are of the necessitous or hardship category. Here the answer lies in making a choice as to what is a cosmetic case or a necessitous one. The cost of a cosmetic replacement might be prohibitive while the relief of pain or a focus of infection would invariably be taken care of. This calls for cooperation of the patient, as well as specialties involved. As presently constituted the burden of choice would fall in the hands of the family dentist and the patient would probably have to accept a compromise. Dr. Pelton, would you like to comment on that?

*Dr. Pelton:* We follow the pattern of medicine so frequently. I am glad you mentioned that problem because one of the criticisms that has been leveled at the medical profession is the fractionation of service, particularly for teenagers and young adults.

In a clinical situation, one can get a child pretty well taken care of in a pediatric hospital. When the patient is a teenager, an age group which is one of our large problem areas in dentistry, it gets a little ridiculous to refer the patient around to a whole lot of different specialties spread all over a medical center or a city. The trend in medicine now is to develop a one-door institution where all the specialists will be brought together in one place and made available so that chasing patients all over town for consultation or services is not necessary.

I visualize something like this could be done in dentistry. In fact, I am sure it is being done in places like Forsyth Infirmary and at other group clinic arrangements, either public or private.

*Dr. Stewart:* Dr. Boyle, the author of such a question is trying to put the panel on the spot. We are all trying to find an answer for these patients. "How can we provide more and better service in less time at little or perhaps no cost to the patient?" Psychologically, the patient wants to be out of our office before he enters. He relates to the dentist as a father figure, and of course, he responds
according to whether he likes his father or not. The patient resents paying the fee in the first place.

The quality of service rendered should be presented from a positive standpoint. The practitioner experiences more pleasure in rendering a better service.

It is ideal; yes, but I think it is something worthwhile striving for. No matter what we do, what walk of life we find ourselves in, we do gain a greater sense of satisfaction and accomplishment in achieving success with a more difficult problem.

**Dr. Boyle:** I have a final question from the audience which I will direct to Dr. Lazarus.

"What body should be responsible for curricular standards and hence accreditation, the dental schools, the licensing bodies or the public through their demands for dental service?"

**Dr. Lazarus:** I think that we might eliminate the last one. In my mind, the public, through their demand for dental services are not the people who should decide what the curriculum standards for dental schools and accreditation might be.

**Dr. Boyer:** I would hope we are all cognizant of the significant role the Council on Dental Education assumes in the evaluation and accreditation of dental educational programs. Currently, all dental programs at the auxiliary, undergraduate, graduate, and specialty levels are evaluated by the Council.

Back in the era of the 40's the Council set specific recommendations for curriculum clock hours, as I indicated earlier. This was perhaps too rigid a requirement, which limited curricular variation and development. Schools are now required to merely include specific subject areas in the curriculum, the arrangement of curricular content and patterns is determined by the individual school. This permits an opportunity for the introduction of innovations in program and teaching methodology. However, to maintain excellence in dental education it is important that the evaluation and accreditation of teaching programs rest firmly with the Council on Dental Education.

Likewise, it is equally true of the evaluation of specialty programs. To turn this responsibility over to the specialty groups
would be disastrous. However, specialty organizations are used as consultants. For example, the Review Commission that reviews oral surgery programs is comprised of two members of the American Board of Oral Surgery, two members of the American Society of Oral Surgeons, and two members of the Council on Dental Education. But the final decision on accreditation of a hospital program rests with the Council on Dental Education, and I think we should strive to keep it right there.

**Dr. Boyle:** On the subject of generalists versus specialists, I recently learned that Harvard College, founded in 1636, introduced, 131 years later, a program in which different subjects were taught by different instructors. Up to that time, one instructor had carried a class through the entire college course, teaching in all subjects.

Specialization in all fields is now the order of the day. Yet the necessity of communication between specialist and generalist in the best interest of the patient becomes increasingly urgent. This discussion, I believe, has served a useful purpose in calling our attention to the problems involved and suggesting possible ways toward their solution.

I wish to thank the audience for its responsiveness and the panelists for their presentations.

**SUMMARY**

**Dr. Paul E. Boyle**  
*Moderator*

The questions posed to the panel cover a wide range of topics concerned with the rise of specialization in dentistry and the associated problems of communication and cooperation which have arisen between specialists and general practitioners of dentistry. The fact that dentistry is, in essence, a special area of health care and the relation of dental practice to the practice of medicine with its parallel problems of specialization versus general practice were touched upon. It was pointed out that medicine had a relatively effective control mechanism in that hospitals exercise their prerogative to be selective in making staff appointments. Also, tissue committees function to review surgical and other procedures in the
hospital whereas dentistry is practiced largely by individuals working within their own offices with little or no review by peer groups. The great need for team work between generalists and specialists was pointed out by Borish and reemphasized by Stark and others.

The significance of American Board Certification in the eight areas of specialization now recognized by the Council on Dental Education of the American Dental Association was discussed at length by Lazarus. It was emphasized that, through the mechanism of board certification, uniform standards on a national basis are set and maintained. In the discussion, it seemed to be the consensus of panel members that this procedure was superior to individual action by state dental licensing boards attempting to set standards for qualification in special areas of dental practice, since these standards varied from state to state except in those cases where the certification of national boards was accepted by the individual state.

The difficult question of the scope of practice of the general practitioner of dentistry was discussed by Suit. State licensure does not impose specific limits on dental practice. For examples, a general practitioner may use orthodontic technics for “minor” tooth movement, may undertake surgical procedures about the face and jaws, may treat periodontal diseases, etc., etc. The decision as to which dental problems he will undertake to treat and which he will refer to a specialist who limits his practice to a particular area is one of the most crucial faced by the general practitioner. It was stated that objective self evaluation was a professional obligation and that dentists who claimed to be proficient in all areas of dental practice are probably overestimating their abilities. The requirement that dentists who participate in the medicaid program of New York State must attend continuing education courses was cited and Suit advocated periodic relicensure of dentists by a separate board of examiners established for this purpose.

Stewart was of the opinion that we do not have too many specialists and pointed out that specialists are dependent upon general practitioners for the referral of patients. Kerr alluded to the problems of limitation of practice and the restrictions on restorative procedures being carried out by orthodontists or periodontists. Lazarus spoke of the willingness of the Council on Dental
Education to listen to proponents of additional specialty programs in dentistry beyond those already accepted.

Boyer discussed the undergraduate dental curriculum and its relationship to graduate specialty training programs. He suggested that our already over-crowded curriculums should be reexamined in the light of carefully delineated objectives. He advocated challenging the upper ranks of the student body through a system of elective courses which would allow exploring in depth special areas of dental practice. He also proposed that undergraduate and graduate programs in dentistry should be correlated and planned in sequence. Moore spoke of experiments undertaken in medical education at the University of Washington whereby a student could chose different areas of concentration to supplement a core curriculum consisting of 90 hours. The remaining 90 hours required for graduation included electives in preparation for careers in general (internal) medicine, surgery, behavioral sciences (psychiatry) or research in education. Boyle spoke of the program in medical education at Case Western Reserve University, adopted in 1952, whereby considerable "free" time was made available to the student during which he organized a research project carried out under faculty supervision. The program has been modified recently so that all didactic work is presented in the mornings, under subject committee auspices. Three afternoons per week are free and two are allocated to optional programs under faculty supervision.

Borish called for five years in practice before undertaking specialty training. Perdigon expressed strong approval. Hawes considered this unrealistic in terms of the excessive time involved.

Pelton gave qualified approval to a three-year program of eleven months enrolled time each year leading to the D.D.S. (D.M.D.) degree as an experiment, pointing out that it had been tried during World War II and was still in vogue in Tennessee. He warned that a subsequent fourth year doing routine restorative work for the indigent could be devastating to professional growth of a recent graduate.

Hawes discussed quality control as a challenge to the profession and spoke of the necessity of all dentists performing at maximum efficiency and effectiveness for the benefit of the public's dental health. Lazarus stated that there is no evidence that the people of
the State of New York are receiving substandard dental care at the present time.

Suit was of the opinion that the quality of dentistry seen by specialists in the mouths of patients referred to them by the general dentist was "just fair." He and others pointed out the difficulty in evaluating quality of work performed without knowing the degree of cooperation of the patient or other circumstances facing the general practitioner. The competence of the specialist as evaluated by the general practitioner was also questioned.

Stark praised the way in which the American Dental Association had designated the eight specialties of dental practice now officially recognized. He stated that specialists have added distinction and stature to the profession through promoting the health and welfare of the patient in selected areas at a level above and beyond the capacity of the general practitioner to do so. He stressed the need for better communication between specialist and general practitioner especially in progress reports concerning patient treatment by the specialist. He emphasized the fact that the patient is the overall responsibility of the general practitioner and that decisions on treatment planning, or changes in plans once treatment has been undertaken by the specialist, should be the result of the combined judgment of both the general practitioner and the specialist.

In conclusion, it appears obvious that specialization is here to stay and will only increase in the foreseeable future. The functioning of organized dentistry in controlling accreditation of specialty training as well as of the accreditation of undergraduate education, appeared to receive general commendation. The necessity for better communication between specialist and generalist was emphasized and reemphasized. The possibility of group practice and of various specialists sharing a common location was touched upon.

The rapidly evolving problems of care of the medically and dentally indigent portion of our population and the attendant problems of continuing education of the dentist, possible reexamination for continuing licensure, and quality control were approached with varying degrees of boldness and circumspection. It appears abundantly clear that the solution of these problems lies in the future. There is no doubt that the problems are real, that
they will not go away but become more insistent upon rational solution and that they do indeed constitute an important challenge to our profession.
The Objectives of the
American College of Dentists

The American College of Dentists, in order to promote the highest ideals in dental care, advance the standards and efficiency of dentistry, develop good human relations and understanding, and extend the benefits of dental health to the greatest number, declares and adopts the following principles and ideals as ways and means for the attainment of these goals:

(a) To urge the development and use of measures for the control and prevention of oral disorders;
(b) To urge broad preparation for such a career at all educational levels;
(c) To encourage graduate studies and continuing educational efforts by dentists;
(d) To encourage, stimulate, and promote research;
(e) To encourage qualified persons to consider a career in dentistry so that the public may be assured of the availability of dental health services now and in the future;
(f) To improve the public understanding and appreciation of oral health service and its importance to the optimum health of the patient through sound public dental health education;
(g) To encourage the free exchange of ideas and experiences in the interest of better service to the patient;
(h) To cooperate with other groups for the advancement of interprofessional relationships in the interest of the public; and
(i) To urge upon the professional man the recognition of his responsibilities in the community as a citizen as well as a contributor in the field of health service;
(j) In order to give encouragement to individuals to further these objectives, and to recognize meritorious achievements and potentials for contributions in dental science, art, education, literature, human relations and other areas that contribute to the human welfare and the promotion of these objectives—by conferring Fellowship in the College on such persons properly selected to receive such honor.

This is from the Preamble to the Constitution and Bylaws of the American College of Dentists.