

The **JOURNAL**  
of the  
**AMERICAN COLLEGE**  
of **DENTISTS**

Quality of Dental Care

Dentistry in the Seventies

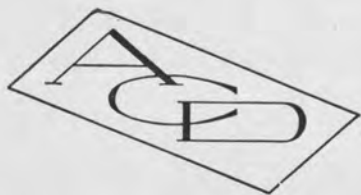
Development of the Professions

Community Health

Professional Leadership

OCTOBER 1971

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# NEWS AND COMMENT

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*Section news announcements and items of interest should be sent to the Editor, Dr. Robert I. Kaplan, One South Forge Lane, Cherry Hill, New Jersey 08034.*

## SECTION NEWS

### Iowa Section

The Iowa Section of the American College of Dentists held a breakfast meeting during the annual session of the Iowa Dental Association on Sunday, May 3, 1971 at the Hotel Savery in Des Moines. There were 27 Iowa members present and one guest from out-of-state.

Dr. J. Donald McPike gave an illustrated talk on the "Iowa Dental People-to-People Good Will Tour to the Orient".

Dr. Homer N. Hake, Regent, described the highlights of the 50th Anniversary Celebration of the College's founding, including interesting comments about its early days and the first planning meeting in Cedar Rapids, Iowa in the Spring of 1920. This meeting was followed by the organization of the College in Boston on August 20, 1920 with Dr. John V. Konzett of Dubuque, Iowa as its first president. Iowa, then has a special interest in the founding of the college.

Associate Dean Jess Hayden of the University of Iowa, College of Dentistry, presented the Iowa Section with an opportunity to support a unique new program in international cooperation in dental education. The University of Iowa and the Royal Dental College, Aarhus, Denmark, begin this Fall a new program in which senior dental students will receive full academic credit for spending one semester in the respective foreign schools. The Iowa Section will contribute significantly to the success of this effort by helping to provide some of the extra living and travel expenses of the U. S. student, plus important incidental expenses which will allow him to visit other Scandinavian dental schools and attend an international meeting of students in Turku, Finland. The Iowa Section voted to support this

program and to send letters to each of its members, soliciting individual contributions.

The Section elected new officers. Both Dr. Fred Peel and Dr. Leslie Fitzgerald had served for many years as Chairman and Secretary-Treasurer, respectively and asked to retire. The new officers are: Dr. Frank Jefferies, Chairman; Dr. Richard Rabe, Vice Chairman, and Dr. W. Philip Phair, Secretary-Treasurer.

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### NEWS OF FELLOWS

Dr. Harold Hillenbrand of Chicago, ADA executive director emeritus, was installed as president of the Federation Dentaire Internationale at its 59th annual session held recently in Munich, Germany. He succeeds Dr. Jack Stork of The Netherlands.

Dr. Hans Freihofer of Switzerland, who has served as speaker of the FDI General Assembly, was chosen president-elect. Reelected as vice-presidents were Professor Louis J. Baume of Switzerland, Dr. W. Allan Grainger of Australia and Dr. Maynard K. Hine of the United States. A newly elected vice-president is Dr. John W. Knutson of the United States, who previously served as FDI councillor and chairman of the Commission on Public Dental Health Services.

Dr. Harry W. Bruce, Jr., has been promoted to the flag rank of Assistant Surgeon General within the U. S. Public Health Service. Dr. Bruce has been the director of HEW's Division of Physician and Health Professions Education, National Institutes of Health, since the establishment of the Division in October of 1970.

Dr. George C. Paffenbarger of Washington, D. C., Senior Research Associate of the ADA Research Unit at the National Bureau of Standards, and chairman of the Commission on Dental Materials, Instruments, Equipment and Therapeutics of the Federation Dentaire Internationale, will be the 18th recipient of the International Miller Prize.

The Miller Prize is the highest honor the international dental profession can bestow on a dentist for contributions to dental science. It was instituted in 1908 by the FDI in honor of its President, Professor Willoughy Dayton Miller. The prize consists of a bronze medal and a diploma. It will be presented to Dr. Paffenbarger during the 15th World Dental Congress of the Federation to be held in Mexico City, Oct. 22-27, 1972.

Dr. Dudley H. Glick of Beverly Hills, California, has been installed as president of the American Association of Endodontists.



Dr. C. Gordon Watson, Executive Director of the American Dental Association, is greeted by President Nixon during special White House meeting for association executives.

Dr. C. Gordon Watson, ADA executive director, has been granted the Chartered Association Executive designation by the American Society of Association Executives.

The CAE designation is granted "to recognize high standards in service and outstanding achievement in association management."

Formal installation for Dr. Watson was held Aug. 23 during the ASAE annual convention and exposition in Bal Harbour, Fla. The association represents 3,800 executives who manage leading professional, business, technical and trade associations in the United States and Canada. Their organizations in turn represent more than 21 million members.

Dr. Watson is a member of the ASAE Board of Directors.

Dr. F. Darl Ostrander of Ann Arbor, Mich., who served as 1967-68 president of the ADA, has received the Distinguished Service Award from the Michigan Association of the Professions. Prior to 1967, Dr. Ostrander served as Speaker of the ADA House of Delegates for five years and is a past-president of the Michigan Dental Association. He recently retired as professor of dentistry from the University of Michigan Dental School.

Dr. Charles T. Smith, dean of Loma Linda University Dental



School, will join the National Institutes of Health as one of four project coordinators in the bureau of health manpower education.

Dr. Bruno Kwapis, professor and chairman of oral surgery at Southern Illinois School of Dental Medicine, served recently on the hospital ship HOPE during its stay in Jamaica, British West Indies.

Dr. Sidney L. Miller of Birmingham, Alabama, has been appointed professor and chairman of the Department of Community Dentistry at the University of Texas Dental School in San Antonio.

Dr. Samuel Pruzansky, Director of the Center for Craniofacial Anomalies at the University of Illinois Medical Center at Chicago, will be co-chairman of an international conference on the Diagnosis and Treatment of Craniofacial Anomalies to be held at the New York University Medical Center, October 25-28, 1971. He was also elected president of the Teratology Society, an international multidisciplinary organization for the study of malformations and the pathology of development.



Dr. Benjamin Kletzky (left), presents the Honos Maximus Award of the Metropolitan Denver Dental Society to Dr. Miles R. Markley (center) and Dr. L. Glenn Cody (right), as a mark of the esteem in which they are held by their colleagues. Dr. Kletzky, a former recipient of the award, is second vice president of the American Dental Association.

# the JOURNAL of the AMERICAN COLLEGE of DENTISTS

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A QUARTERLY PRESENTING IDEAS IN DENTISTRY

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# Regents of the College

## JAMES L. CASSIDY

James L. Cassidy, a general practitioner of Macon, Georgia, was named Regent of the College at the Las Vegas meeting last year. He received his dental education at Loyola University School of Dentistry in New Orleans. While at school he was honored with election to Omicron Kappa Upsilon honorary dental society. He also received the Alpha Omega scholarship award. He is a member of Psi Omega.

Dr. Cassidy served for five years as secretary-treasurer of the Georgia Dental Association and then moved upward to become president, with the distinction of being the youngest man ever to hold that office. He is an ADA delegate, and president of the Georgia Dental Service Corporation. He also holds membership in the Academy of General Dentistry, and is a charter member of the Georgia Academy of Dental Practice.

He has been secretary-treasurer of the Macon Dental Study Group since its beginning in 1955. In 1964 he received the Outstanding Dentist Award in the Central District of Georgia.

His civic activities include service on the board of directors of the Macon Boys Club, the Family Service Agency and the Bibb County Unit of the American Cancer Society. He also is a member of the Macon Lions Club and Macon Chamber of Commerce.



## CHARLES F. McDERMOTT



Regent Charles F. McDermott, a member of the Pennsylvania State Dental Council and Examining Board, is a general practitioner in Pittsburgh. He is a graduate of the University of Pittsburgh Dental School and has served as president of the Chartiers Valley Dental Association, the Odontological Society of Western Pennsylvania, and the Pennsylvania Dental Association. He has been a member and chairman of the Council on Dental Health of the American Dental Association. Active in the Century Club of the University of Pittsburgh, he has been president of the Dental Alumni Association and the General Alumni Association.

Dr. McDermott was president of the Pennsylvania Health Council, and presently serves on its executive committee. He is a member of Psi Omega and of Kappa Sigma social fraternity. He is also a charter member and past-president of the Southwest Lions Club of Pittsburgh. During World War II he saw 3½ years of service in the U. S. Army Dental Corps as a Major. Fellowship in the American College of Dentists was conferred upon him in 1960, and he was named Regent at the Las Vegas meeting.

# Editorials

## What's in an Image?

In the minds of those having power to determine support, or even the inclusion of the profession in health care programs, the image of dentistry apparently does not compare favorably with the image of other health services. Much of this is dentistry's fault. In the past, many of our national programs have presented a simplistic concept of dental health "A Smile is to Keep" or "Swish and Swallow". We may have made so much of the ease and success of water fluoridation that many may believe dental disease has already been curtailed. The profession just cannot compete for public support using such simplisms. The decisiveness of a heart attack, the tragedy of a stroke, or the sorrowful disaster of cancer, easily relegate to a low order of importance support for oral health when dentistry's image is projected by "A Smile is to Keep" or "Swish and Swallow."

We should continually and emphatically point out that the 23 million Americans without any natural teeth are truly handicapped; that decayed and sensitive teeth do seriously affect the selection of a proper diet; that the important beginning of digestion is in the mouth and that it is impaired by cruddy teeth; that smoking is dangerous and often an aberrant oral compulsion; that neuromuscular dysfunction of the mouth system can cause headache and debilitating referred pain; that the orofacial complex is a most important factor in the total health of the person and has a considerable influence on one's self-image. We must proclaim that poor oral health is a real threat to the person and that 23 million toothless people are a national concern. We must believe this ourselves if we expect others to believe it. We must effectively concern ourselves with projecting the seriousness of dental disease if we wish others to take dental disease seriously. We must assign to others the "show-and-tell" of tooth brushing and plaque control. Patient orientation and motivation in oral hygiene procedures are the province of the auxiliary and do not require the expensive time of the dentist. If he is in such short supply and there is such serious need of him, keep him at the chair. Send auxiliaries into the community and into the schools where pre-

ventive "show-and-tell" and elementary hygiene procedures can be programmed at wholesale. To attempt "community dentistry" in the dental office is a costly retail procedure. The image of the profession will be enhanced as the public becomes aware—first, of the seriousness; then of the magnitude of dental disease; and ultimately of the unique knowledge, skill and judgment which proper treatment of the serious disorders of health requires.

R. J. N.

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## A Tribute to O. W. B.

Otto W. Brandhorst was elected to fellowship in the College in 1934. Two years later he became secretary, a post which he filled with distinction until 1969, when he became secretary-emeritus. Subsequently he served the College as president-elect and this year as its president. The 1971 convocation was dedicated to Otto, and he received many tributes on the occasion.

He has been awarded just about every honor which the College can bestow—The William J. Gies Award, for unusual services to dentistry, the Service Key, and the Scroll of Honor. Last year his name was inscribed upon the ceremonial Mace of the College. Many other organizations have also honored him for his achievements as an educator, dental journalist and administrative leader.

As he completes his term as president, his many years of active service to the College will come to an end. But the impact he has made will continue into the unforeseeable future. He has been the architect and planner and builder of so much of the College as we know it today. No aspect of its activity has been untouched by his guiding hand, and he has shaped and molded it into a significant force in dentistry. As his latest achievement, he has set down for posterity a detailed and comprehensive history of the organization. No man could have done it better.

When the Scroll of Honor was presented to Otto a few years ago, former editor Tom McBride, who wrote the citation, paraphrased a passage from the Aeneid of Virgil. It seems entirely appropriate still.

*"While rivers run into the sea, while on the mountains shadows move over the slopes, while heaven feeds the stars, ever shall his honor, his name, and his praises endure."*

R. I. K.

# Quality of Dental Care

## Its Measurement, Description and Evaluation\*

HYMAN K. SCHONFELD, D.D.S., Dr.P.H.\*\*

EVERY DENTIST likes to believe, and to have others believe, that he performs good dentistry; and for many practitioners this may be true. One measure that dentists have used for this type of evaluation is how busy they are. Another is the fact that they receive few complaints from their patients. A third measure may be the amount of their gross or net incomes. I would like to propose that these types of indexes are self-centered and are not necessarily indicative of the quality—or adequacy—of the dentistry that has been performed, though they could be under the proper circumstances. These three specific indexes would more properly reflect the quality of dental services if patients were to seek appointments only with dentists who did “good” dentistry, or if patients were knowledgeable enough to complain about inadequate services, or if patients refused to pay for inferior dentistry.

These few indexes—even if they could be applied properly—constitute, moreover, only a very limited approach to the subject of adequacy of dental care. What is needed, if we are to have a more complete appraisal, is a multidimensional practical framework within which to describe, measure and evaluate dental care. This concept includes information regarding the care that should have been provided, as well as the care that was provided. The indexes developed for this framework should extend in many directions so that not only the services of the dentist and his staff could be looked at, but also the *system* of dentistry within which various types of practices function could be scrutinized. The approaches to the ex-

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\* Paper presented at the “Workshop on Evaluation of Dental Care Programs,” sponsored by the Program for Continuing Education in Public Health, Western Regional Office, American Public Health Association. Conference held at Asilomar, Carmel, California, March 10-14, 1971.

\*\* Associate Professor of Public Health (Medical Care), Department of Epidemiology and Public Health, Yale School of Medicine, 60 College Street, New Haven, Connecticut 06510.

amination and evaluation—or audit—of quality must remain flexible thereby permitting practitioners, patients and society the option of using different sets of indexes as no single measurement nor single method of measurement can suffice for all facets of dentistry.

Before proceeding, it may be well to point out that in this paper the terms “quality” and “adequacy” are used interchangeably. Quality, in addition to referring to the character, nature or attribute of an item which measures its standard of excellence, also has a quantitative dimension. Thus quality becomes equated with adequacy and allows one to deal with the concept of services that are themselves of good quality and that should be available or actually are provided in necessary or sufficient quantity. Under certain conditions, the limited definition of quality—that referring to a “standard of excellence”—may be appropriate; under other circumstances, the broader definition involving the quantitative dimension may be required.

#### LEVELS OF SERVICE AND DIMENSIONS OF RESOURCES

In order to facilitate the measurements, descriptions and evaluations of quality of dental care, a framework is proposed here for which indexes and standards can be prepared. Moreover, this framework allows for interactions among what are referred to as “levels of service or care” and “dimensions of resources.” The framework encompasses the following areas:

<i>Levels of service or care</i>	<i>Dimensions of resources</i>
1. the restoration, procedure or service;	1. the technical;
2. the mouth;	2. the professional-logistic;
3. the person;	3. the organizational;
4. the group—family or community.	4. the financial.

The “person” level should form the cornerstone of our interest. This interest then should radiate in one direction to the “mouth” and “restoration, procedure or service” levels and in the other direction to the “group—the family or community” level. And our concern eventually must be with all four dimensions of resources. Also, it should almost go without saying that good quality at the “restoration, procedure or service” level and the “technical” dimension is basic. Without this, there is really no point in continuing. However, while this aspect of quality is necessary, it is not sufficient for viewing the total picture of quality of care. After all, of what value is the technical perfection of a restoration or of a prosthetic appliance if this restoration or appliance should not have been provided in the first place?

One item that needs clarification, though, is what is meant by good quality—that is, how good is “good.” Must or can all restorations, procedures or services be expected to be “text-book” perfect? Moreover, who should determine the indexes and standards for measuring, describing and evaluating quality of restorations at the technical dimension? And who should perform these audits? Furthermore, these same types of questions must be applied to the care involving the numerous other combinations of levels of service and dimensions of resources.

Several attempts have been made in the past to define “good medical care,” and with appropriate substitutions of the words dental and dentistry for medical and medicine, these definitions should serve our purpose equally well. In 1933, Lee and Jones<sup>20</sup> reported:

Good medical care is the kind of medicine practiced and taught by the recognized leaders of the medical profession at a given time or period of social, cultural, and professional development in a community or population group.

Another explanation of good medical care was included in instructions given to physicians in a study being conducted at Yale. The text is included as an appendix to this paper and can be summarized as saying that good care should be considered as the “practical ideal” rather than as “idealistic” care.

What we now have need of are the working details with which to complete the proposed framework. Generalities can no longer be accepted. The time has come for us to agree upon appropriate indexes and accompanying standards concerning quality of dental care. As was suggested previously, we should start at the “person” level. We would want to know whether the individual was treated as a whole person, and whether his nondental needs were considered along with his dental needs in arriving at a diagnosis and in providing preventive as well as restorative care. Was the individual able to receive care, if care was considered necessary? Were practitioners available and accessible? What procedures or services were done and what were not done? Would the completeness of the care received by the individual have varied if it would have been provided under different organizational and financial arrangements—including sponsorships? Did the person feel satisfied with the care that he or she received? With what was he or she satisfied or dissatisfied, and why? Did the patient think that the organizational arrangement was to his liking? Did the individual think that



the fee (if there was a fee) was a proper one? Could the person afford to pay it? We also would want to consider much these same questions but from the practitioner's point of view.

From the "person" level we can move to the "mouth" level. It is at this level that we could determine the person's oral health needs and demands, and whether these have been met. We could also determine whether various organizational and financial arrangements permit greater or lesser amounts of needs to be taken care of. At this level, moreover, we could try to measure, describe and evaluate whether the preventive, diagnostic, or treatment procedures took into account the interrelationships among the various types of restorations, procedures or services rendered and their effects on both the hard and soft tissues of the oral cavity.

As we move to the basic unit of dental care, the "restoration, procedure or service" level, the questions that we can ask, and the answers that we seek, become more familiar to dentists. The interplay between the "technical" resources dimension and the "restoration, procedure and service" level of care permits the identification of indexes (for which we must produce standards) associated with questions such as: What should be the physical properties of each of the materials used? What should be the specifications for the equipment and instruments employed? What should be the specific items to be looked at for deciding whether an amalgam restoration (or some other type of restoration) is satisfactory? When should measurements be made? How often? By whom?

The combination of the "restoration, procedure and service" level and the "professional-logistic" dimension permits another set of questions to be asked. What should be the sequence of steps for performing a specified type of service? How long should each step take? Who should do it? When? Where? How often?

Moving to the "organizational" and "financial" dimensions of resources, we can ask: Should the organizational or financial arrangements under which the care is provided affect the answers to the preceding questions? That is, should there be different standards for the same indexes, or should there also be different indexes depending upon the organizational and financial arrangements for providing the care?

As we proceed from the "person" level of service or care to the "group" level (either the family or the community) the number and kinds of indexes that could be employed increases. At the "group" level of care and the "professional-logistic" dimension of resources we could include measurements that would provide an-

swers to the following questions: What kinds of care, as identified by professionals, should be provided to the group? What kinds of care are requested by the group? What proportion of the group actually receives care? What specific kinds of care? What proportion of the group does not receive care? What are the characteristics of those who received care as compared with those who do not receive care?

In addition, many of the questions asked at the individual "restoration, procedure or service" level, at the "mouth" level, and at the "person" level could be analyzed and expressed in terms of the group as well as in terms of any individual person. These group analyses could be based on the summation of "person by person" statistics or they could be produced strictly on a group basis. In the former method of analysis, the response to one index or item (or the value of one index or item) is related to that of another index or item for each individual separately, and then these relationships are summed. In the latter method, a group summary statistic for the first item is related to the group summary statistic for the second item without taking into account the relationship of the two items for any of the individuals. For example, for a particular group we could determine the proportion of decayed teeth that had been restored by adding the number of decayed teeth that had been restored for each of the individuals in the group and dividing by the total number of decayed teeth (whether restored or not) present in the various individuals in the group. This proportion would have been derived wholly on a group basis and would have considered each decayed tooth as the unit of measurement, thereby having given each decayed tooth an equal weight. A second method of analysis, one that would take into consideration each individual and would treat the individual as the unit of measurement, could be accomplished as follows: The proportion of decayed teeth that had been restored for each individual would be determined. These proportions would then be summed and divided by the number of individuals having decayed teeth. This would give the average proportion of decayed teeth that were restored for those persons in the group having decayed teeth. Along with this value it would be helpful to know the proportion of persons in the group who had one or more decayed teeth.

At the "group" level of care, there are many other indexes and standards that deal with each of the four dimensions of resources and with combinations of these resources. Some illustrative questions that form the foundation for these indexes are: Which organi-

zational arrangement and which type of sponsorship of a dental practice permit specified dental services to be provided more effectively? More efficiently? Which combination of organizational and financial arrangements is best for the patient? Best for the practitioner? Best for the system?

This last set of questions raises many additional problems, as the term "best" must be defined. Do we mean "best" in terms of technical perfection of restorations? In terms of patient satisfaction? In terms of productivity and income? Or what?

#### FORMULATION OF STANDARDS

The questions identified so far are only illustrative of the numerous questions for which indexes and standards need to be developed. Before we can begin to answer many of these questions, we have to consider other aspects of the problem that are of even more immediate concern. These are: Who should be responsible for preparing indexes and standards of good dental care? What should be the method or methods employed so as to insure the best usable results? How should these prepared indexes and standards be applied? By whom should they be applied, and under what conditions?

Fortunately, we do have some answers for many of the last set of questions, and work is proceeding to obtain additional information. We must recognize, however, that because of the complexity of the questions and the numerous problems involved in obtaining answers, there may be alternative answers for many items. Any, all, or perhaps even none of the answers may actually be appropriate for use in different circumstances. Some of the suggested answers have to be taken on good faith—i.e., they have to be assumed to be true in the absence of complete information, or because they have never really been tested. Other answers have been applied and have been found to be appropriate.

To illustrate the preceding, in seeking answers to the question "who should be responsible for determining appropriate indexes and accompanying standards?" the answer must be that all types of practitioners—dentists and nondentists—and even patients must be considered as potential participants for their appropriate areas of concern. Dentists should develop indexes and standards for those areas for which only their knowledge can suffice whereas dental hygienists should assist in the preparation of standards that apply to them. Thus each type of personnel having input into the oral health care delivery system should assist in the preparation of standards for those indexes involving its own areas of competence. In this

context, the patient should and must be allowed to participate in developing standards involving such areas as patient satisfaction with services provided, accessibility to available services, or ability to pay specified fees.

Having decided who should be responsible for formulating standards, we should consider the approaches to be used for formulating these standards. One method is based upon end-results. Those procedures, services or practices that result in, or are related to, what are thought to be acceptable or favorable outcomes are considered to be the standards to be used—i.e., the procedures or practices to be followed in similar situations. Standards that are based upon actual practice are referred to as “empirical” standards.

A second method is based on peer judgments and uses information derived from the opinions of recognized peers. This is the method being used at Yale to formulate standards of good medical and dental care. Physicians and dentists are being asked what they think should be done in order to provide good care for the prevention, diagnosis, treatment and follow-up for each of a number of diseases or conditions. The information obtained from these interviews is then being used to formulate standards of good care. Some persons refer to standards based upon peer judgments as “normative” standards.

#### MEASUREMENT, DESCRIPTION AND EVALUATION

Once standards have been prepared, they can be used for measuring, describing and evaluating the quality of dental care. The measurement and descriptive phases precede the evaluative phase and do not include the standards per se. It is not until the data that have been collected are interpreted or are compared with some standards that evaluation—or audit—takes place. It should be recognized that often written standards are not used and instead, implied standards are employed. Also, it is at this evaluation stage that we must know what care was needed, what was provided, what was not done, and why, if we are to have a meaningful evaluation.

There are several methods that can be employed for measuring, describing and evaluating dental practices for the quality of the dental care provided. One method uses only the available records of the practice without the questioning or examination of patients, observation of the providers, or an inspection of the premises. Depending upon the information included in the records, many facets of numerous combinations of levels of service and dimensions of resources can be evaluated. What can be accomplished with properly

kept records are descriptions and evaluations concerning aspects of the "professional-logistic" dimension, such as, how much of what was needed was actually provided, what was provided, for whom, by whom, in what sequence, how many visits were necessary to accomplish the services that were provided, and how much time this took? These areas could be examined for an individual patient or for groups of patients. Various aspects of the "financial" dimension might also be evaluated. These could include the costs per individual service and the cost per patient; and the comparisons of these costs among various dental practices having the same or different organizational and financial arrangements—provided, of course, that such organizational and financial data are obtainable.

What cannot be evaluated only on the basis of records are some aspects of the "technical" dimension, such as, how good is the particular restoration? Nor can patient satisfaction of the services that were provided or of the manner in which they were provided be determined from the usual records that dentists keep. Many aspects of the "organizational" dimension also could not be determined from patients' records but possibly could be determined from other types of records maintained by the practice. Such areas of concern would involve the number of practitioners, their qualifications, the kinds of equipment (and possibly the condition of the equipment) and the organizational (and practice) policies.

A second broad approach to measurement, description and evaluation involves the examination and questioning of patients (and the inspection of the premises)—including a review of necessary records. These examinations, interviews and inspections can take place at the time that the services are being provided and thus take the form of direct observations, or they can be done at other times. Those facets of evaluation that are not possible only by the examination of records can be covered by this method. The appropriate use of both methods thereby allows for the evaluation of the quality of dental care for all combinations of levels of service or care and dimensions of resources.

The remaining factor that must be considered is who should do these examinations, interviews and reviews. For many of the items discussed, the dentist and the members of his staff could perform satisfactory measurements, descriptions and evaluations—provided that these are done honestly. Properly conducted self-reviews and examinations would be enlightening to the practitioners and, hopefully, would be translated into better patient care.



For some aspects of evaluation, and in those cases where self-reviews are not sufficient, are not being done properly, or are not being done at all, it is necessary to have examinations, interviews and reviews conducted by persons other than those providing the care. These new "examiners" may be peers (dentists or auxiliary personnel, depending upon the nature of the "examination") or nondental personnel. Their examinations and interviews may be conducted at the time that the services are actually being performed, or they may take place at a later date. For example, a dentist and his auxiliaries may be observed by another dentist for the manner in which the team performs an oral examination, or prepares a cavity for a restoration, or takes an impression for a prosthetic appliance; or perhaps the dental team would be observed by a nondentist to determine how the staff relates to patients; or to conduct a "time and motion" study of how the practice is run. Closely related to this direct observation method is the inspection of the physical facilities to see what equipment is available and its condition. Or the record system itself may be evaluated.

In many instances, peer reviews take place at some time after the services have been provided. Samples of patients may be examined to determine the quality of the restorations or prostheses provided or to determine whether what is indicated on the patient's record as having been required and having been provided, actually had been provided. In other cases, the patients, their records or both are examined to determine whether what was said to be needed was actually required.

It should be apparent from the preceding that the measurement, description and evaluation of quality of dental care is not a simple undertaking; on the other hand it is not an impossible one. When each step in the process is carefully planned and properly executed, accurate measurements and descriptions should follow. Hopefully these procedures should result in meaningful evaluations of the dental care system and of the quality of dental care that has been provided to patients. These evaluations, in turn, should be reflected in a better patient care system and in better dentistry for patients.

#### SUMMARY

A rational approach to the measurement, description and evaluation of dental care is necessary if we are to have complete understanding of the status of the quality or adequacy of the dental care that is provided to people. A framework that could make such an approach possible extends to four levels of service or care (1. the



restoration, procedure or service, 2. the mouth, 3. the person, and 4. the group—family or community) and four dimensions of resources (1. the technical, 2. the professional-logistic, 3. the organizational, and 4. the financial). This framework allows for a quantitative as well as a qualitative view of the quality of care.

In order to properly evaluate, it is necessary to have acceptable standards either of the end-result or peer-judgment type. Standards may be related to desired end results. It is assumed that those procedures, services or practices that are associated with the accepted or desired results should be followed in other similar situations. Hopefully, the adherence to these practices would then lead to similar end results. These procedures become the standards to be followed and are referred to as "empirical" standards.

The peer-judgment method relies on information which is based on the opinions of peers—usually those who are recognized as experts. These standards are also referred to as "normative" standards. For many combinations of levels of service and dimensions of resources, the dentist should not be the only person involved in formulating these kinds of standards. It may be appropriate to include other types of providers of care, and even patients. The peer-judgment method assumes that the standards for good care should not necessarily be dependent upon what has occurred, but rather on what should occur. Under a properly functioning system of good care, it is hoped that what should be done, actually was done.

Once standards have been prepared and are available for use, evaluations are possible. Some measurements, descriptions and evaluations of dental care can be accomplished through the study of records only. These may involve the records of patients or of the organizational, financial and operating aspects of the practice. Other facets of the measurement, description and evaluation of a dental practice require the examination of patients and the observation or interviewing of patients or practitioners or both—with the review of records. These may take place at the time that the services are actually being provided, or they may occur at a later date.

Reviews and evaluations may be done by the dentist and the members of his staff in the form of a self-review. If self-reviews are not sufficient, or if done improperly, peer reviews by dentists and auxiliary personnel become necessary. No matter what method is employed, the measurement, description and evaluation of all aspects of a dental practice require careful planning and proper execution. A thorough evaluation of a practice can be accomplished with the use of appropriate standards. The ultimate objective of the entire

process of measurement, description and evaluation is to provide information about what has occurred so that improvements can be made. This should result in a better patient care system and better dentistry for patients.

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#### APPENDIX

##### Excerpt from the Instructions to the Participating Physicians<sup>15</sup>

What is the standard of "good" medical care to be used?

This question we cannot answer definitively or precisely for you. The study starts by undertaking to set down what a faculty group regards as "good" care—not necessarily what they or any other group actually does. Accordingly, we do not expect you to answer entirely in terms of your present practices. We recognize that concern about costs, limitations of time, lack of cooperation on the part of the patient, and other factors, may sometimes prevent you from doing or arranging for all the medical care you would wish or that you regard as "good" medical care. On the other hand, we are not looking for an unnecessarily expensive or impracticably thorough brand of medical care. We are perhaps looking for what you would consider as the type of medical care that you would talk about if you were addressing your peers in a prepared lecture on "good" medical care for a particular group of conditions. This may be described as the type of care that can be offered in urban communities with, or within convenient reach of, comprehensive facilities and resources for modern medical care; maybe this is the same as saying "practical ideal" rather than "idealistic" medical care.

As mentioned before, there will be review committees of physicians to be appointed by the co-chairmen, and these will be attempting to standardize the level of "good" medical care to make it more or less uniform or comparable for all conditions. It is hoped that results of the study will be regarded as the current (and constantly

changing) "standards and content of good medical care" according to the faculty of the Yale School of Medicine.

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(Continued on page 244)

# Organized Dentistry in the Seventies\*

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ORGANIZED dentistry's biggest task in the 70's will be to help shape our role in the emerging national health scene. Dentistry is today at a cross roads of decision in this matter; but the question is not: Is health care, including dental care, a privilege or a right? That question has really already been answered, perhaps not by dentistry, but by the public. This fact is certainly reflected in the high interest in health legislation in the Congress. The American public has answered that health care, including dental care, is a right, which it wants as quickly as money is available and the delivery system can deliver it, maybe even sooner. Therefore, the real question facing dentistry is how do we react to this challenge? Do we fight it? Pretend it doesn't exist? Or do we work to guide it, to provide the best possible dental care and at the same time preserve the dignity and stature of the profession?

Before further developing the obvious answer, we should discuss dentistry's present policies on national health insurance and the present effort to re-think those policies by way of the ADA Task Force on National Health Programs.

The present ADA policy is essentially based on two Resolutions passed by our House of Delegates. The applicable parts are these:

"The American Dental Association reaffirms its fundamental opposition to government subsidy for the personal health care costs of those for whom the government has no special obligation. . . . In the event a national health program is adopted, it should provide an acceptable level of dental benefits."

This statement was passed as part of a restatement of policy. Later at the same session of the House, the following resolution was passed:

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\* An address delivered to the Detroit District Dental Society, May 26, 1971.

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"Resolved, that the Association reinforce the long standing principle that dental care is an essential component of health care and that it should be included and have comparable priority with other essential health care services in all public and private health programs, and be it further

Resolved, that the appropriate agencies of the Association strengthen their efforts to ensure the inclusion of dental health services in all such programs, and be it further

Resolved, that a progress report on this matter be presented to the House of Delegates at its 1971 annual session."<sup>1</sup>

No doubt you have noticed that these two statements can be mutually inconsistent. This is perhaps the case right now. Our present stance on National Health Insurance can best be summed up as it was recently by our president, Dr. John Deines:

"The ADA is deeply disturbed by those legislative proposals for national health insurance which propose to be complete health programs and yet exclude dental care. Dental care is an integral part of total health care, and no national health proposal can be considered sound or responsible to public need if it does not include a realistic dental program, particularly one for children. Some of the health proposals—such as the Nixon Family Health Insurance Plan—not only ignore the need for dental care but, by elimination of Medicaid, apparently do away with such dental care as is now available to several million needy children. Passage of this kind of proposal would be intolerable. The Nixon proposal for national health standards is similarly deficient in that it does not include dental coverage. Though the funding principles of the Nixon standards proposal are basically consistent with Association policies, the Association could not support this plan unless it is sharply remodeled to include dental services. The Kennedy-Griffiths bill, in contrast, includes a comprehensive dental program, and its designers are to be complimented on that score. But the overall proposal is seriously deficient in other respects. The Association is not impressed with the argument that eliminating existing health insurance programs is in the best public interest. Further, the Association is opposed to the use of government funds for personal health care for those who can afford to pay for it. Association officials are even more sharply disappointed by the proposal of another health organization, the AMA, which also totally excludes provision for dental care. Such exclusions ignore thoroughly documented public need and clearly demonstrated public desire. On behalf of the ADA, its 113,000 members and the public which we serve, we urge the Nixon administration and the Congress to recognize the essentiality of dental care to the total health of this nation."<sup>2</sup>

Thus, we favor the administration's plan's financing mechanism, yet we certainly cannot support a plan that does not include dental care.

We applaud the Kennedy-Griffiths inclusion of an excellent dental care program, yet cannot support its financing mechanism.



What is worse, many children now receiving dental care under Medicaid would no longer get this care. The total amount spent nationally for dental care under Medicaid in 1970 was 220 million, much of this for children. So actually, the Administration's FHIP program actually cuts back on the dental care now being provided to needy children.

All of which leads to a discussion of the ADA Task Force on National Health Programs. This is a monumental effort on the part of organized dentistry to find the positions upon which we may be guided in the crucial 70's, as it must be apparent to everyone that some type of national health insurance program will develop during those years.

The Task Force was formed by the 1969 House of Delegates. The House acted on a proposal made by the President, Dr. Hubert McGuirl:

... "A Task Force should be appointed to design a program for the participation of the dental profession in a national health insurance program when and if such action ever becomes necessary. The Task Force should be broadly based and involve professional, public health, and consumer interest. The charge to the Task Force should be to develop a forward looking, socially aware proposal for the participation of the dental profession in a national health insurance program which could be made available to government and other interested parties when necessary."<sup>3</sup>

Essentially, the Task Force is to develop dentistry's work plan for the future, so that dentistry will have well-thought-out policies prior to the enactment of any major health legislation.

Developing recommendations for the ADA's position on national health programs was a complicated task. It required a review of past and present dental priorities—estimates of manpower supply, distribution, and productivity—an evaluation of the present delivery system, with suggested changes for the future—and assessment of quality control and payment mechanisms—and, most important—close attention to what consumers are saying about dental care and the value of dental health. The dominant issues which seem to be emerging are—distribution of manpower, accessibility of services, costs of programs, and the financing support methods.

The Task Force report was submitted to the Board of Trustees for consideration at its meeting in August, and distributed to the House delegates and alternates along with the comments of the Board.<sup>4</sup>

The 1971 House of Delegates meeting in Atlantic City has a special reference committee to consider recommendations based on the report. Thus, while the Task Force report will be complete, the

recommendations contained in it will not become ADA policy until they are approved by proper action of the House.

It is apparent that all dentists are not in agreement as to what stance dentistry should take on national health insurance: fight it, try to avoid the issue, or guide the evolving plans. If we truly believe that oral health care is an integral part of total health care, our fight must be to include at least some aspect of dental care in a national health plan. To do less would be a tacit admission that the term, comprehensive health care, does not include dental care. We would not be living up to our charge stated in the American Dental Association Constitution of advancing the health of the public.

We hear many statements that the ADA is selling the dental profession down the road to socialism. The fact is, the ADA is not selling anyone anywhere; it cannot. It is the Congress which will pass health legislation, not the ADA. The ADA must rather be prepared to testify and provide professional guidance to the Congress.<sup>5</sup> The Task Force Report will assist the House of Delegates in retaining dentistry's status as the most forward-looking and enlightened health profession.

#### MANDATORY CONTINUING EDUCATION

The concept of mandatory continuing education is rapidly evolving. There seems to be some confusion as to how it should be made mandatory. Basically, the options are to make it mandatory either for dental society membership or for state dental re-licensure. For a moment consider the basic reason for continuing education: to raise the quality of dental care to the public. If we accept this reason, the only logical method for enforcing continuing education is through state licensure. Merely denying membership in a dental society would not necessarily prevent, from practicing dentistry, the dentist who will not advance his knowledge. Requiring continuing education as a condition of re-licensure would be a much stronger incentive. Driving the dentist from society membership would actually seem to further remove this person from any connection with the remainder of the profession—and thus with advancing his state of learning. It appears logical that dentistry, as it makes decisions on continuing education, should base the mandatory requirement on dental re-licensure.

The Kennedy-Griffiths bill includes a provision that would require mandatory continuing education as a prerequisite for participating in the program. It would seem to be more appropriate for the dental profession, through the state board of dental examiners, to main-

tain professional control over this aspect of dental education.

Another problem associated with continuing education is the difficulty of recording these efforts. Many dentists have licenses in more than one state which they must keep current. It would be impossible to expect a dentist to take courses in each state in which he holds a license. The registration of continuing education seems to be one of those jobs which can be most effectively handled at a national level. The American Dental Association is conducting a trial program to register courses taken by dentists licensed in Minnesota and Kentucky—two states which require continuing education for re-licensure. After this trial registration—using the ADA computer, I feel that a national continuing education registry will become a reality.

#### EXPANDED-FUNCTION AUXILIARIES

The subject of expanded-function auxiliaries (EFA) is currently a hot one. The fundamental idea of an EFA is rapidly being accepted within the dental profession. Half of our states have already taken some action in liberalizing their state practice acts. The recently reported studies from Louisville show that EFA's can increase the productivity of a dentist by up to 130% over four-handed dentistry, with no diminution of quality and good patient acceptance.<sup>41</sup> We should note that these experiments were in a clinic setting; similar studies in a private practice setting are now in the formative stage. There seems to be no reason why these benefits would not accrue to a private practice, but the subject should be researched thoroughly.

Proposed changes in state dental practice acts are evolving in two basic patterns—either a serial listing of allowed (or not allowed) duties, controlled by the state boards; or fixing the responsibility on each dentist, limiting the EFA from procedures which are irreversible or involve both skill and judgment. It is not known which method will prove most effective; this is one area of concern which will heavily involve dentistry in the 70's.

Another question, should the EFA be licensed? On one hand, we certainly want to define her (or his) duties, yet by the same token we do not want to restrict ourselves into little pigeon holes as have the hospitals and medical profession. Too many fixed categories of auxiliaries would not be in the best interest of the health of the public or the profession.

Our entire system of auxiliary education needs rethinking. We should be studying a method of creating a ladder-type of curriculum—with some kind of core course—perhaps even as a part of high

school. Why should the high schools send most young ladies toward a secretarial career? We need them in health occupations too. We also need to provide a mechanism for the upward advancement of our present auxiliaries. At present, a dental assistant cannot advance without going back to school for an extended period of time. Too few girls do this once they have started their careers. We need to carefully rethink our requirements for auxiliary education, to provide upward mobility potential and to make curriculum more in keeping with allowed duties.

Dr. John Nolen, Executive Director of the Michigan Dental Association, has made an excellent comparison of our profession with another,

"When you decide to build a house—you retain an architect to design the structure—then he hires a carpenter to nail it together."

Dentistry is moving closer to this idea of delegating manual procedures. The problems are many: Licensure? What expanded duties? What is the role of the assistant? The hygienist? How will they evolve? What should be the length and content of the education? The profession is groping to find the proper answers. Finding the solutions should be one of the most challenging tasks which we face in the 70's. At the national level, an Inter-Agency Committee has been reactivated, starting this fall. This group is represented by organized dentistry, dental examiners, dental assistants, dental hygienists, and the dental laboratories. The aims of this group are to:

- identify studies that are needed regarding expanded utilization of dental auxiliaries
- identify functions that should be assigned to specific auxiliaries
- determine the type of auxiliary education programs needed
- develop a policy statement on regulatory standards for auxiliaries
- develop protocol for evaluating the teaching of expanded functions.

This is quite an assignment; hopefully, guidance for us all can come from this committee.

#### MANDATORY FLUORIDATION

Dentistry has been advocating fluoridation now for over 25 years, yet only seven states have enacted laws which make this excellent public health measure mandatory. Today 90 million people drink fluoridated water, or only 60% of those on public water supplies.<sup>7</sup> If all 50 states had fluoridation laws, the number of people served by fluoridated water would be about 150 million. The 1970's is a time in which all state dental societies should make universal fluori-

dation mandatory on a state-by-state basis. Dentistry has the opportunity to encourage the upcoming national health legislation to insist upon this proven method of preventing dental disease. Fluoridation could and should be an integral part of any national health plan.

#### PREVENTION

Over the last few years, the subject of plaque control has received a great deal of attention. I refer primarily to the background work of Drs. Charles Bass, Sumter Arnim, Robert Barkley and others. The most common present method of preventing plaque involves the program of patient home care which features the use of dental floss. Even if 50% of our patients would learn and use this flossing procedure, since less than 25% of the people go to the dentist regularly, we would reach only 10-15% of the people. It is not known what the retention rates of these control programs are. Can an oral hygiene program be taught effectively on less than a one-to-one basis? The concept of a prevention program is terrific—especially the philosophy which it can bring to a dental office. But much research needs to be done on the number of people we can reach and the depth to which they change their habits. Can the 75% who don't get regular dental care be taught flossing outside of the dental office? In order to make plaque control really effective on a mass basis, we will need a simpler method of practicing it, perhaps a mouthwash? The ADA Conference on Prevention in September is designed to assist organized dentistry to more effectively participate in the whole spectrum of preventive dentistry.

#### LICENSURE RECIPROCITY

Dental licensure reciprocity holds much interest and concern of the average dentist. Perhaps this is a sign of the times. People are not content to do things as they have been done in the past just because they have always been done that way. The question of relevancy is good for dentistry.

Eleven northeastern states already have reached an agreement on a common licensure examination. Other regions have reciprocity under consideration. One of the features of the Kennedy-Griffiths Bill is the provision for universal reciprocity. If a practitioner were eligible to treat a person under the program in one state, where he had his license, he would be eligible to treat patients anywhere. Since almost all people would be eventually covered under the Kennedy plan, this would create, overnight, universal reciprocity. It should be noted that this is not national licensure; state boards



would still be the licensing agencies. The 70's may see a marked liberalization of our inter-state licensure reciprocity.

In a related area, there will probably be increasing pressure, mainly by dental students, to have graduation from an accredited dental school make a person eligible for an immediate license in the state in which the school is located. Automatic licensure combined with universal reciprocity would drastically alter today's licensure apparatus. How it would affect today's mal-distribution of dentists is really not known.

#### STUDENT INVOLVEMENT

The dental student is following the lead of his campus brethren in seeking to become much more involved. The Student American Dental Association was organized in 1933. The student received a membership card, a Journal subscription, and the right to attend certain dental meetings. He had no input into decision-making. This was the situation basically until 1968, when the Student American Dental Association was formed. This group was not related in any way to the American Dental Association. The ADA recognized the need for greater involvement in student affairs and with the student's need for a greater voice. In 1970 the Office of Student Affairs was formed; this office, within the ADA, helped coordinate an organizational conference of one student representative from each school. They formed the ASDA—American Student Dental Association. Its membership now totals 15,131 members.<sup>8</sup> The input of the students to the ADA is through the Office of Student Affairs, then to the Board of Trustees, then to the House of Delegates. These past few months have seen active student participation in many Association activities. For example, students were represented at the journalism, national health, Task Force Hearing, and group insurance conferences. One valuable idea emerging is the idea of the ADA making available its life insurance program—geared to the needs of a newly-wed student or young dentist. Another potential valuable input of the student is to the Task Force—explaining how a young graduate might best be encouraged to practice in an under-served area. These are but a couple of examples of how dentistry can benefit from student involvement.

Another group, consumers, are going to be seeking more input into non-technical dental policies. The consumer groups are questioning some of our sacred concepts, ones we just sort of accept without really thinking. Consumers provide us with a fresh look at ourselves. This is healthy.



## CHANGING PATTERNS OF DENTAL PRACTICE

Organized dentistry will be faced during the 70's with changing patterns of dental practice, such as group practice and health maintenance organizations. Presently, about 5-6% of U. S. dentists are engaged in group practice. There has been a gradual increasing trend over the last few years. There does seem to be some advantages to group practice over solo, but these have really not been scientifically documented. Many solo practitioners are already engaged in what might be termed an informal group practice with several specialists—even though they may not be in the same building. I foresee a gradual increase in the numbers of group practices, especially due to government encouragement and to the newly graduating student who will be exposed to the idea while in school.

Health maintenance organizations are of great current interest. Basically, an HMO is a public or private group which agrees to deliver comprehensive health care to a definable group for a certain price. The official definition covers several pages; but perhaps that is just an indication of how vague a concept an HMO is at this time. Certainly, it is just an emerging idea. Some questions about them need to be raised.

- Should dentistry have to be included to call a program comprehensive?
- Do state laws allow physician-dentist participation in the same corporate group?
- Can a dental society or service corporation be the dental component of an HMO?
- Can the individual practitioner be paid on a fee-for-service basis, even if the HMO is paid by capitation?

These are interesting questions—probably without any definitive answers yet!

## COMMUNICATION

Another concern of organized dentistry in the 70's is the one of communication. The American Dental Association is getting big: 113,000 members. The average "grass-root" dentist feels he does not have any say about national dental policies. However, the ADA officers, trustees, and staff wish to be as responsive as possible to the wishes and suggestions of the membership.

An important measure in opening lines of communication has been the ADA Regional Conferences. To date, they have been held in Atlanta, New Orleans, and Portland, Oregon. At these meetings the executive staff of the ADA has a conference with the state

leaders of each geographic area. An open-forum type of program allows everyone to freely discuss mutual problems. The staff is given an opportunity to explain its programs in detail. Perhaps the most beneficial result of these conferences is the face-to-face meeting of the officers and staff of the different levels of organized dentistry.

The ADA News has contributed greatly in bringing the news of dentistry to the average dentist. The Newsletter, now called the Leadership Bulletin, has a limited circulation. It is of utmost importance that all 113,000 members be kept up-to-date on developments in the profession. The communications problem in any large organization can never be eliminated, but a sincere and honest effort is being made by the Association to reduce this gap to the lowest level possible.

I am sure you are aware of a recently published, "Dentistry and Its Victims" by a so-called Paul Revere, D.D.S. Incidentally, since he has chosen not to use his real name—I choose to call him Dr. Poormouth—a parody on his mythical Drs. Goodwork and Poorwork. Dr. Poormouth tries to give the consumer a yardstick of measuring quality: the extraction of teeth. If Poormouth would have studied recent data, he would know that over the last ten years, the number of teeth extracted has decreased 14% while the population grew 7%.<sup>9</sup> That is progress. We must of course do better, but still, let's not castigate ourselves when we do make significant progress. The recent growth of interest in preventive dentistry is one of which dentistry can be very proud.

We also hear that dental fees are too high. I feel we are being unfairly painted with the same brush as hospitals and medicine, under the name "soaring health costs".

The facts are according to the Bureau of Labor Statistics, for the ten years from 1960 to mid 1970:

- Cost of living, up 32%.
- Cost of all services, up 47%.
- Physicians' fees, up 60%.
- Dentists' fees, up 44%.
- Hospital daily services, up 157%.

But, this all occurred while the average weekly paycheck rose 52%, compared to dental fees 44%. In 1970, dental fees rose 5.5%, the same as for all goods and services. Recently, the Children's Dental Health Act of 1971 was introduced in Congress. This omnibus bill

provides many of the goals which dentistry is seeking to accomplish in the seventies. It would:

- Place the Children's pilot programs in an independent statutory basis, providing \$170 million over five years, which could treat some 1.5 million children. It would also allow Medicaid programs to concentrate on children's care.
- Provide \$15 million over five years as matching grants to help communities to buy fluoridation equipment. The federal share would be 67% unless the community also undertook a pilot dental care project, then the share could rise to 80%. This item could extend fluoridation to 45 million more people.
- Provide \$33 million to assist dental schools to teach dental students and dentists in dental auxiliary utilization. This would replace and actually augment the presently phasing out DAU program.

The ADA, and especially the Washington office, can be justifiably proud in getting this bill rolling. Of course, it is far from enacted—or eventually receiving appropriations. However, this is the start of an effort which could accomplish many of dentistry's goals.

We do not have to take a back seat to anyone for the quality of our services, the reasonableness of our fees, or the vision of our profession. Our external problems will mount as more people seek dental treatment—both through private pre-paid programs and government funded plans. Our responsibility will be to deliver high quality care, at reasonable costs, as more people gain access to dental care. I have great faith in the built-in flexibility of the present system and also the forward thinking of the profession to meet the challenges which may confront us.

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# The Development of The Professions

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## THE GREEK INFLUENCE

THE ANCIENT GREEKS were preeminently a people who responded with courage and intelligence to the demands of the times in which they lived. They, too, were able to conceive and construct an educational system relative to their society.

The Greeks helped stimulate the growth of European education; they asked profound questions about it; they gave profound answers to their questions, both in theory and in practice. They were careful to distinguish between culture and instruction, between value and fact. They offered many answers to the questions that beset us today, because they examined the nature of human beings with astonishing insight and were courageous enough to follow the logic of their thinking.

The Greeks, superb technicians and artists, helped to establish the science of the West.

Plato directed his training toward an elite class who, in their wisdom, were to govern the rest; selection for this higher education was to be based on fitness to profit by it, irrespective of class or sex. Aristotle preferred a system of state education that was the same for all. He also insisted that citizens should be educated to maintain the way of life of their community.

If we apply these principles to our own way of life, we arrive at the proposition that to educate for a democratic way of life we must provide education for all so that talent, skills, and moral capacities are fully developed.

Plato would have required schools and universities to accept the responsibility for training specialists who are endowed with the insight as well as with the tools for the proper use of knowledge.<sup>1</sup>

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## CRITERIA AND CHARACTERISTICS

Abraham Flexner, in his classic paper "Is Social Work a Profession?"<sup>2</sup> set forth six criteria for distinguishing professions from other kinds of work. In his view, professional activity was basically intellectual, carrying with it a great personal responsibility; it was learned, being based on great knowledge and not merely routine; it was practical, rather than academic or theoretic; its techniques could be taught, this being the basis of professional education; it was strongly organized internally, and it was motivated by altruism, the professionals viewing themselves as working for some aspect of the good of society.

To avoid this analysis from becoming too rigid, too mechanical, he ended with the following qualification of his objective criteria. "What matters most is professional spirit."<sup>3</sup>

Others attempted to define the professions and add to the original definition by Flexner. Carr, Sanders and Wilson, constructing an ideal-typical model, conclude that "The application of an intellectual technique to the ordinary business of life, acquired as the result of prolonged and specialized training, is the chief distinguishing characteristic of the profession."<sup>4</sup> Tyler found the two essential characteristics of a true profession to be the existence of a generally recognized code of ethics supported by group discipline and the foundation of technical operations based on general principles, rather than rule-of-thumb or routine skills.<sup>5</sup> Lloyd B. Blanch lists these earmarks of the profession: specialized skills requiring long study and training; success measured by the quality of service rendered rather than by any financial standard; the organization of a professional association to maintain and improve service and also enforce a code of ethics.<sup>6</sup>

## EARLY DEVELOPMENT OF LAW

Perhaps the best view of professional education in the early period of its development is to be seen in the field of law. In Roman times there were no lawyers as we know them today. Instead, a man who fell afoul of society appealed to a friend to plead his cause before a body of his peers. This kind of education was best described by the Roman, Quintilian, in his *Institute of Oratory*, where he states that a man seeking a public career must command the spoken word, must equip himself to become an orator, an effective public speaker. Quintilian's educational treatise, therefore, deals largely with principles of rhetoric.



The advice he offered may be categorized under three headings, each one important in the future development of professional education: (1) He urged a knowledge of the civil law; (2) He recommended that the scholar be well versed in the customs and religion of the state in whose life he is to play his role, and (3) he gave advice on matters which ordinarily can be picked up incidental to the practice of the orator's art.

After this training, Quintilian recommended that the neophyte be wary of delaying too long his entry into the period of apprenticeship.

### MEDICINE

Professional attitude was also shaping up in the education of doctors in the pre-professional period of antiquity. At first, there was neither extensive nor systematic knowledge of medicine. Consequently, the only way to learn the physician's art was by actually taking care of the sick. Empirical at first, it began to gather an intellectual or theoretic content. Just as Quintilian had set the study of law in the context of religion and politics, so is it to the credit of Aristotle that he made medicine part of the wider study of nature itself. This breadth of study enabled Aristotle to distinguish three different grades of medical practitioners. The first grade consisted of mere craftsmen. They practiced their art empirically. The second grade was more scientific in approach to the patient. These practitioners were empirical too, but they directed their diagnoses and therapy by theoretical constructs. The third grade was composed of those who so extended their interest in medicine as to include it as part of liberal studies.

It is this conceptualization that was written down in their treatises on medicine by men such as Hippocrates and Galen. It was this mounting intellectual content that subsequently formed the core for the idea of professionalism and necessitated professional education.

Despite this increasing intellectual or professional content, medical instruction during most of the Greco-Roman period was individual in character. As in law, the would-be physician associated himself with some established physician in the relationship of master to apprentice. It was only later, during the height of the Roman Empire, that centers of instruction like those at Pergamum and Alexandria grew up. There it was possible to gain theoretical instruction.

## THE MEDIEVAL UNIVERSITY

The rise of the medieval university marked an important advance in professional training, where a center of instruction was exclusively devoted to professional education. Here, the classical relation of master and apprentice changed to the newer one of professor and student. The prospective lawyer, doctor or theologian spent more time learning his discipline through a course of lectures. The neophyte of Greco-Roman times read some texts and perhaps listened to some lectures, but the center of training was largely grouped around practice. In the medical university there was a shift away from the practitioner to the lecturer, from sick people to theories of disease. Apprenticeships, however, did not disappear in the medieval period, but did occupy a less conspicuous role.

In the medieval university, not only was an extended period of intellectual training necessary in the professional faculties, but the period had to be preceded by one in which the professional candidate made himself familiar with the liberal arts. Hence, at this early stage, a bachelor's degree was a prerequisite to professional training. The bachelor's degree, however, was different from its modern counterpart. It was a degree which marked the beginning of an arts course rather than its end, as today. It was conferred at the beginning to mark the fact that the neophyte had apprenticed himself to a master of arts under whose tutelage he hoped to become a master of liberal arts himself. This completed, he was then ready for advance studies, such as one of the professions.

The award of a degree in the professional schools of the medieval university was jealously guarded because the award carried with it the license to practice; most coveted of these was the "*jus ubique docendi*", the right or license to teach anywhere.

Examinations for the license in medieval times were quite different from those of a later date. Because lectures in the medieval university were supplemented by disputations among the students, the oral disputation was often the gateway of admission to professional degrees. If this emphasis on the didactic of the syllogism for all professions seems strange, it may be well to remember that in the medieval period most professional students at the university were clerics.

### THE RENAISSANCE PERIOD

The principal center for professional training remained the university in continental Europe during the post-Medieval or Renaissance period. Perhaps the chief innovation in this period was the gradual secularization of instruction. Candidates for law and medicine gradually ceased to be clerics. Professional education in America and England, similarly, became secularized and gradually dropped out of the orbit of university studies.

The English institution which eventually supplemented the university in training for the law gradually took the form of the famous Inns Court and Inns of Chancery. These Inns were a product of the guild system which was widespread in Europe during Medieval and Renaissance times. They came to occupy a place midway between the guild and the university.

Somewhat the same development occurred in English medical education. Here, too, there was secularization, although it took longer because of the Church's long-term interest in medicine.

Again, like the Law, while Oxford and Cambridge had professorships of medicine, this faculty never became well established at either place. Consequently, in the course of time, the study of medicine came to be located in the Royal College of Physicians. By the eighteenth century, however, this college, like the Inns Court, had ceased to have an interest in professional training. As a result, standards of admission to the profession sank to a point of practically no value. Fortunately, conditions were better for surgeons and apothecaries who, with no social accomplishment to fulfill, could concentrate on their professional standards.

Important as medical and legal education were at the Renaissance universities, the Theological faculty still remained the more powerful force. In the course of time, however, theological education became so abstract that it was weak in the practical training it afforded. To overcome this defect, both Catholic and Protestants in the sixteenth and seventeenth centuries began to found seminaries outside the university, a practice which was to have considerable popularity in the United States during the eighteenth and nineteenth centuries.

### THE COLONIAL PERIOD

The transition of European professional education to American shores was accomplished in several stages. In the first stage, colonists had to depend on European-trained lawyers, doctors and clergy who

emigrated to their shores. In the second stage, before professional education could gain a secure footing on the new continent, colonists sent their sons back to Europe to be professionally trained there. In the next stage, professional education finally secured a firm place in American patterns of education and, in the course of time, became self-sustaining without supplementation from abroad.

As the colonists began to fashion their own patterns of professional education, the third stage started with lower standards than those obtained in Scotland. At first, professional education, almost exclusively, took the form of apprenticeship. Colonial colleges had no faculties of law and medicine.

There were two aspects of the colonial apprentice's training: firstly, he actually performed professional duties, and secondly, he received theoretical training by reading the professional books of the men to whom he was apprenticed. At best, the instructional content of professional training in this early period was closer to a craft than a profession.

Professional people of colonial America were aware of the need for higher standards. The New York City bar in 1795 demanded four years of college and five years of apprenticeship for admission to its membership. Similar efforts were begun in medicine. Candidates for the study of medicine were eventually required to present themselves armed with a command of Latin, Greek and French, as well as mathematics and the sciences, to be followed with a seven-year apprenticeship.

#### THE EARLY 19TH CENTURY

While apprenticeship training continued beyond the colonial period into the nineteenth century, and even into the twentieth century in the practice of law, forces were in motion in the nineteenth century to make professional education more a matter of formal schooling and less a matter of informal training on the job. This development took two directions, one being the establishment of chairs, principally in theology and law, in some of the older collegiate foundations. The other direction taken by early professional schools was an enlargement of the apprenticeship system itself. Toward the end of the eighteenth and nineteenth centuries, lawyers and clergymen began taking not just one or two apprentices, but enough to consume all or nearly all of their professional energies. There was a gradual changeover from the office full of apprentices to a formal law school. Medical practitioners developed schools or apprenticeships a step further. Instead of each one teaching his own

group of apprentices, several physicians would combine their forces. This permitted larger classes and a degree of specialization on the part of the practitioner-lecturers themselves.

Apprenticeship took on the more formal aspects of a school and instruction became more didactic. In time, the lectures offered in Medical and Law Schools found their way into print. The publication of well-polished lecture notes foreshadowed the end of the didactic phase of the early professional schools. Another notable feature of these early professional schools was their proprietary character. They were the private property of their organizers. Unfortunately, at first few, if any, of the medical schools had hospital connections.

The standards of professional schools remained low. The spirit of the times tended to make the professions accessible rather than competent.

#### THE LATE 19TH CENTURY

Not until after the Civil War were vigorous measures taken to establish professional training at the level comparable to those in Europe. Toward the end of the nineteenth century, medical research and practice began to draw increasingly on the basic sciences. The incorporation of scientific knowledge into medical practice greatly enlarged the conceptual scope of medical training. Much the same resulted in law. Lawyers were no longer content to base their briefs on statutory law and legal precedent but looked for additional sources in allied disciplines such as economics, political science sociology and philosophy. Prolonged intellectual training was becoming thoroughly grounded in the American tradition of higher education. This emphasis on theory did not put the practical experience of apprenticeship out of fashion.

#### THE 20TH CENTURY

Johns Hopkins gave apprenticeship new significance by recognizing it in the form of the modern medical internship. To draw effectively from related sciences, it was almost a necessity to ally with or incorporate into the main trunkline of university education. In June, 1901, Harvard made the baccalaureate degree a prerequisite to entrance upon medical training. In spite of the leadership of Harvard and Johns Hopkins, other professional schools tended to lag behind. The low standard of the majority of medical schools became such a scandal that the Carnegie Foundation for the Advancement of Teaching undertook a study of medical education. The



study was conducted by Abraham Flexner who published his report in 1910. Five years after the Flexner Report the number of medical schools had decreased from 160 to less than 100. The application of severe standards of evaluation worked wonders and by mid-century medicine had the most uniformly high standards of any of the recognized professions.

The Carnegie Foundation attempted a similar study for legal education. Through the years, steady pressure for higher standards was promoted by state examining authorities, professional associations and associations of professional schools.

With the tremendous expansion of science in the nineteenth and twentieth centuries, many an old craft leaped into the category of technology. The more technical these occupations became, the more protracted the period of intellectual training for them grew, and the more they clamored for professional status. Training for the younger professions—engineering, business, pedagogy, journalism, architecture—tended to pass through much the same stages of development as the older, more learned ones.

There can be no doubt that in the mid-twentieth century the United States was committed to higher and higher standards of professional training in both senior and junior professions; higher standards being deferred in terms of constantly increasing the intellectual or theoretical content of professional training on a continuing basis.<sup>8</sup>

#### EDUCATION FOR THE PROFESSIONS

The education of the professional group occupies a large proportion of the time of those persons who serve in colleges and universities. Society invests several billion dollars a year in education for the professions. The quality of the education is deemed vital for national welfare.

McGlothlin, who in 1960 studied education for ten professions, summed up the relationship of the professional school to the college. He writes:

Seven of the professions have some schools which are independent of colleges and universities. For architecture and nursing each, only 2 schools not parts of colleges or universities, give bachelor degrees. Of the 126 approved schools, 6 are independent. Eleven out of the 78 medical schools are independent institutions. Engineering has 35 independent schools out of its total 210. Business has a number of independent schools. About 1200 colleges and universities provide teachers' colleges. This number is declining as teachers' colleges are reorganized into 4 year colleges of greater scope.<sup>9</sup> Some of the

professions are very old. Other occupations are just emerging as professions. The older professions, despite their great stability, change their objectives with the times, as conditions change.

#### TASKS FOR THE NEWER PROFESSIONS

In the newer professions, a major task for each in achieving status and stability is that of attaining objectives that are acceptable to members of the profession and to the society served by that profession.

It is assumed, that almost by definition, each profession is unique in the service it renders. Uniqueness must be attained throughout the educational programs.

A profession must have gained prestige and recognition for its successful operation.

Standards must be set up so that competence to render a special service by a profession can be achieved. Consequently, standards of performance emerge and become the basis for educational standards.

The professional schools must seek out and educate students in sufficient numbers to meet the increasing demands of service. The problem of supply, the ability to attract students, is still a significant problem.

Change, growth, maturation, development, evolution and reform will be experienced by all forms of professional education.

The constant struggle to achieve the proper balance between education and clinical training continues, each side attempting to encroach on the other's time. These dualisms must be wrestled with continuously in professional education.

#### THE 1970 CARNEGIE COMMISSION RECOMMENDATIONS

Of current note are the recommendations proposed by the Carnegie Commission on October 29th, 1970. To meet the anticipated increased public health needs, the Commission proposed a shortening of the overall training period for the physician from 8 to 6 years and for dentists from 4 to 3 years.

Their report also called for the development of 125 health education centers, which, through medical school affiliations, would more effectively relate medical training to the delivery of health care.

## THE FLEXNER REPORT OF 1910

The Carnegie Commission said that the traditional system, based on the classic report of Dr. Abraham Flexner in 1910, was no longer adequate by itself for American health needs.

While the Flexner report served to raise the standards of Medical education and health care by concentrating better teaching in fewer schools, the Commission's report aims at dispensing high quality training and service to more people. The commission felt that new developments should be directed toward greater integration with social needs, or toward greater integration with the campus, or both.

## THE NEWLY PROPOSED MODEL SYSTEMS

The Flexner model leads to expensive duplication and sets science in the Medical School apart from science on the general campus. The two new model systems that are proposed are (1) The health care delivery system which generally orients itself to external services and (2) the integrated science system where most of all the sciences instruction is carried on within the main campus and not duplicated in the Medical school, which provides mainly clinical instruction.

These two pilot systems are the resultant of changing times and changing social pressures which, with the advent of a National Health Insurance Program will mandate marked alterations in the Education and practice philosophy of the medico-dental professions to accommodate to the increased demands placed upon them.

Not all professional education is conducted in universities, which is both the norm and the ideal. There is a constant struggle for control which frequently results in conflict. The university environment with its aura of academic stimuli, imposed conditions for education and motivation for research, has greatly benefited professional education. The problem of professional school autonomy in the university setting must still be worked out.

The professions should be concerned with the qualities their members possess as leaders in their communities, relating this objective to their liberal education.

They must work together with members of the other professions defining their relationships, differentiation of services, and their ultimate responsibilities.

## CONTINUING EDUCATION

The need for continuing professional education becomes self-evident in order to achieve and maintain satisfactory high standards. This problem has been treated differently by the various professions. Medicine and dentistry have worked out elaborate programs of advanced education training. Other professions have provided meager programs of continuing education and only recently have given greater consideration to this problem. The profession of law, lacking a formal internship and residency program, presently relies upon the Practicing Law Institute and programs of postgraduate legal education which are slowly being developed. Similar programs are being drafted in engineering, business and nursing.

This paper is one of a series to illustrate the growth, development and maturation of a profession: its problems, present status of continuing education and the changing trends as the result of the many modifying sociologic, political, economic and professional forces imposed upon it.

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# Community Health —

## A Dental School Affair

### The Service Function of Dental Schools and Their Programs In Preventive and Community Dentistry

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UNIVERSITY functions are often described as teaching, research and service. The functions of dental schools are commonly expressed in the same way.<sup>2,18</sup> One meaning of "service" is that of "making individual professors available as consultants."<sup>4</sup> Another meaning implies a more active and extensive community involvement.<sup>12</sup>

In 1968 this reporter became aware of the divergent views concerning the service function of dental schools and their programs in preventive and community dentistry. As a result, he decided to explore the nature of these differences.—What were the opinions? How did they differ? What was the basis of the varied opinions? How could they be explained? And most important, could a co-operative working environment be created between the opposing positions?

#### REVIEW OF THE LITERATURE

Opposition to the proposal of an active and increased community service involvement by dental and medical schools is seldom expressed in written form. (Exceptions exist in other academic areas.<sup>15</sup>) This does not mean that opposition does not exist. When Kuhn<sup>13</sup> in 1968 at the Second Conference on Teaching Preventive Dentistry and Community Health spoke on the subject of an extended community responsibility by universities, dental schools and departments of preventive and community dentistry there were misgivings to his

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propositions among some of the listeners. Even at the corresponding conference in 1970 conflicting arguments were heard regarding the service function.

Supporters of *status quo* tend to be tacit. Proponents of change must make themselves heard. One of the proponents of change in regard to the service function expressed himself accordingly:

. . . the university must go beyond making individual professors available as consultants. It must begin to look upon some of the immediate problems in its environment as something that it will want to become involved in.

. . . the university has a responsibility to relate to the urban center or rural center of its contiguous geographical area. In other words, the university must begin to look at the fact that it does have some obligation to the community.

. . . a better balance must be struck between the ways in which universities have attempted to serve communities and the ways in which universities have attempted to serve the academic world.

. . . the university's response to . . . community involvement requires initiative on the part of the university. It requires a recognition of the fact that this is a part of the university's responsibility as an agent in the society, as are its teaching and research responsibilities.<sup>4</sup>

A discussion group at the 1968 workshop on the medical school curriculum expressed similar views:

. . . the medical school should function as an agent of social change in a variety of settings and should investigate ways to improve care in these several settings.<sup>17</sup>

#### OWN SURVEY

Having read of the consensual proposals for an expanded involvement in community health affairs by dental schools, one would be inclined to conclude that no disagreement exists on their service function. If this were true, however, there would not be so much written concerning the need for their increased community involvement. In order to investigate the pro and con of the debate this reporter decided to include questions pertaining to the service function in his 1969 survey of undergraduate programs in preventive and community dentistry, a survey which was conducted for the American Board of Dental Public Health and sponsored by the U. S. Public Health Service.

#### DATA COLLECTION

Data for analysis were obtained through personal interviews conducted in the spring of 1969 at 20 schools of dentistry in the United States. The schools were selected to include only schools with pro-

grams (separate administrative units) in preventive and community dentistry. In other respects, however, the sample of 20 schools seemed to represent all dental schools in the United States.<sup>16</sup>

Respondents were deans, directors for the programs in preventive and community dentistry, general faculty in these programs, and at each school about three faculty members considered by the dean to have considerable influence on curriculum development. These "curriculum decision-makers" were mainly department chairmen in departments other than those specifically responsible for preventive and community dentistry. This reporter served as interviewer using a structured interview form, which had been pretested at four schools. Anonymity was assured for the schools and the respondents.

### SURVEY FINDINGS

One interview question read:

Do you think that your school has responsibilities to the community beyond research and the training of dentists?

A majority of the respondents answered affirmatively. At seven schools all respondents accepted a service function in addition to teaching and research. No difference was found between private and public schools. Unfortunately, due to the large proportion of non-response, it is difficult to speak with confidence of differences among the four categories of respondents. Due to lack of time and other practical constraints the interviewer was unable to pose the questions about service functions to a large number of respondents. All those queried, however, readily answered the questions. Accordingly, it appears permissible to conclude that deans and directors of programs in preventive and community dentistry had a greater acceptance of community service responsibilities than "program faculty" and "curriculum decision-makers." Table 1.

Respondents accepting a community responsibility beyond teaching and research were asked for a more definitive explanation of what they believed such a responsibility should entail. The answers indicated that the majority of them (67) considered quite an extensive community involvement necessary while 13 had a rather supine attitude to community health. Table 2.

No difference appeared to exist among the four categories of respondents in accepting clinical care, separate or in connection with other duties, as a service function for their dental school. Other group comparisons are more difficult to make. Practical constraints

TABLE 1.

FREQUENCIES OF RESPONSE TO QUESTION ABOUT DENTAL SCHOOLS' RESPONSIBILITY TO THE COMMUNITY BEYOND TEACHING AND RESEARCH BY CATEGORY OF RESPONDENT.

(Interview data from 20 dental schools, spring 1969.)

Community responsibility beyond teaching and research	Dean	Program Director*	Program Faculty*	Curric. D-M	Total
Definitely not	—	—	1	3	4
No	3	4	8	13	28
Yes	7	7	17	21	52
Definitely yes	9	8	4	12	33
Not ascertained	1	4	34	13	52
	20**	23**	64	62	169

\* Program in preventive and community dentistry.

\*\* Three schools had each two programs in the area of preventive and community dentistry.

limited the comprehensiveness of the exploration. If it had been possible to present all respondents with the 12 service functions as fixed answer alternatives, it is quite likely that the frequencies and the proportions among the categories of respondents would have differed. Unfortunately, the reported response categories only emerged in the process of coding the answers to the open-ended question. What was considered service in the form of clinical care by some might have been classified by other respondents as a spin off of teaching; setting up demonstration or pilot projects in health care delivery might have been classified by some respondents as research rather than service.—The least ambiguous data are summarized in Tables 3a and 3b.

The extent to which programs in preventive and community dentistry were involved in community service was explored by asking the directors of the programs the following question:

Does your program provide any direct service to the public?

Among the five program directors who answered yes, three stated that their programs provided clinical care, one said health education and one mentioned both health education and clinical care. All five indicated that they wanted to see the service involvement of their programs expanded.

TABLE 2.

FREQUENCIES OF RESPONSE DESCRIBING DIFFERENT CONNOTATIONS OF COMMUNITY SERVICE BY CATEGORY OF RESPONDENT ACCEPTING A SERVICE FUNCTION OF THEIR DENTAL SCHOOL.

(Interview data from 20 dental schools, spring 1969.)

Connotation of community service	Dean	Program Director*	Program Faculty*	Curric. D-M
Provide clinical care and health education	6	1	3	8
Provide clinical care and establish demonstration projects in the delivery of health care	1	3	—	1
Provide clinical care	3	4	8	11
Provide clinical care to needy	1	1	3	1
Provide emergency care	—	—	—	1
Provide health education and establish demonstration projects in the delivery of health care	1	1	—	—
Provide health education	—	1	5	4
Establish demonstration projects in the delivery of health care	3	—	1	2
Serve as center for referrals	—	—	—	3
Make consultants available	—	1	—	—
Be prepared for and serve in case of disaster	—	—	1	—
Provide continuing education	—	—	—	1
Not ascertained	1	3	—	1
	16	15	21	33

\* Program in preventive and community dentistry.

Eight of the 18 directors with programs not providing any direct service to the public intended to develop such service, while the remaining 10 stated that they could see no reason to do so.\*\*

\*\* Follow-up question to directors of programs without direct service involvement:  
"Do you see any reason for your department having a service program?"

TABLE 3a.

FREQUENCIES OF RESPONSE DESCRIBING ATTITUDES TO AN EXTENSIVE COMMUNITY SERVICE INVOLVEMENT OF OWN DENTAL SCHOOL BY CATEGORY OF RESPONDENT.

(Interview data from 20 dental schools, spring 1969.)

Extensive community service involvement of own dental school	Dean	Program Director*	Total
Accepted	16	14	30
Rejected	3	5	8
Not ascertained	1	4	5
	20	23	43

\* Program in preventive and community dentistry.

TABLE 3b.

FREQUENCIES OF RESPONSE DESCRIBING COMMUNITY SERVICE FUNCTIONS BY CATEGORY OF RESPONDENT ACCEPTING AN EXTENSIVE SERVICE INVOLVEMENT OF OWN DENTAL SCHOOL.

(Interview data from 20 dental schools, spring 1969.)

Community service functions of own dental school	Dean (16)	Program Director* (14)	Total (30)
Provide clinical care	11	9	20
Provide health education	7	3	10
Establish demonstration projects in the delivery of health care	5	4	9

\* Program in preventive and community dentistry.

Nine of these 10, however, had indicated previously in the interview that they wanted their students to become more public health oriented and to participate more effectively in community and school health affairs. Nevertheless, seven of these nine, with effectiveness in community health affairs as an educational objective for their students, did not offer their students any opportunity to practice in a field setting, and four of the same nine had not established any cooperation whatsoever with groups or organizations outside the



dental school. Four of the 10 program directors who could see no reason for instituting a departmental service program, also answered negatively to the question of their school's responsibility to the community beyond teaching and research. No relation between age of program and community service involvement, either provided or intended, was observed.

Six out of the 10 program directors, who objected to the idea of departmental service involvement, stated that education should be the principal concern. The same opinion was given by 11 of 16 "curriculum decision-makers." Obviously, these respondents made a clear distinction between the functions of teaching and service. One program director said that service should be provided by the health department and not by his department or school. Another said that service should be provided by the clinical departments and not by his department in preventive and community dentistry.

Approximately two-thirds of the "curriculum decision-makers" supported the necessity for a special community service function for the program in preventive and community dentistry. Similar to the answers on the school's responsibility to the community beyond research and teaching, there was no particular consistency of opinion within each individual school.

#### SUMMARY AND EVALUATION OF THE INTERVIEW DATA

Opinions regarding the service function differed among people with influence on the policies of the 20 dental schools. Most deans and faculty members said that they accepted a service function of their schools beyond research and training of dentists; accepting a separate service function, most described the function as an active and extensive community involvement justifying service for its own sake. Only a few described it as incidental preparedness to serve in case of a special community request or as making consultants available to the community. Some indicated like Dennis that teaching and research represent service deferred,<sup>5</sup> or that service could be accepted only as a spin off of these other two functions.

Assigning a service function to programs in preventive and community dentistry was also viewed differently by different respondents. More than half of the respondents (46 of 73) said that they accepted a special service function of these programs. Only five of the 23 programs, however, had developed activities in 1969 which provided the public with direct service. The same program directors were all in favor of the community service involvement. Another eight said that they wanted to develop such service.

One factor which seemed to influence the validity of the interview data was related to acquiescence among the respondents. According to observations by this interviewer the respondents tended to answer as positively as possible. The collected data indicated that deans were more favorable to active community service than faculty members. This position by the dean may have prompted some faculty members to express his rather than their own opinion. Awareness that the U. S. Public Health Service and the American Board of Dental Public Health were supporting the study might also have persuaded some respondents to express a greater acceptance of an extended service function than that which corresponded to their true attitudes. Conscious or unconscious views about social desirability in accepting an extended service function, and question wordings such as "responsibility to the community" might have created the same bias. Accordingly, it appears justifiable to conclude that the reported information from the 1969 survey is citing a too favorable attitude toward an extended community service involvement.

#### DISCUSSION

Reasons for the different opinions can only be hypothesized. One explanation could perhaps be found in different orientations of individual faculty members to public and professional interests. Dental educators with an orientation dominated by self-interest might be more inclined to isolate themselves from the community than those mainly oriented primarily toward the welfare of the public. However, a reversed or symmetrical causality could also be possible. The greater acceptance of community responsibility beyond teaching and research would then be explained as a result of greater contact with the community, its representatives, and its health problems.

Different ways of looking at dentistry and dental education might explain some differences of opinion to the service function of dental schools. Three broad categories of orientation to dental education were identified by the reporter. One of them, the *academic* orientation, has been described by Nisbet: "Research, along with teaching, is what universities are all about." Research is "the aristocratic pleasure of seeking knowledge for its own sake." Teaching consists of transmitting the new knowledge to the students. In that way the university can "stay as far as possible out of politics, out of economic enterprise and, generally, out of the areas of society where partisan feelings are endemic and where passionate moralism is of the essence."<sup>15</sup>

For many, such an academic isolation of dental schools might seem unreasonable and unrealistic. Still, it is most likely that the *academic* approach has proponents also among dental faculty members. For instance, it can hardly be questioned that research in dental schools has given many "the aristocratic pleasure of seeking knowledge for its own sake." Dental research has been modelled quite extensively after medical research. Medical research has emphasized, since the Flexner report,<sup>8</sup> the biological or so called basic sciences. The gains have been considerable but there have also been weaknesses, because "the Flexner or research model . . . largely ignores health care delivery outside the medical school . . ."<sup>9</sup>

According to Nisbet, academic teaching consists of transmitting research findings to the students. This close connection between research and teaching might exist for a few dental subjects, but a *clinical-vocational* approach to dental education appears to be more prevalent. This approach can be described as master clinicians passing on their practical experience to apprentices, or as Bowen expressed it:

I have the impression, . . . , that dental teaching concentrates heavily on "how-to-do-it," . . .<sup>3</sup>

The *clinical-vocational* approach to dental education has meant preparing students for clinical excellence. Dental care provided by the students in the course of their training has been rather immaterial and incidental. The inhabitants of local communities in need of dental care have been recruited for the sake of the dental students and not as a gesture of community service. The *clinical-vocational* approach has given little room for a public health orientation. One dental school in Sweden might illustrate. At that school an atmosphere had been created by the faculty which made most students feel that their progress in technical performance was more essential than helping the patients.

The school was surveyed in early 1970. Sixty students were asked to describe the emphasis in the clinical work at their school. A random sample of 10 students from each of the six clinical semesters was selected. Translated from Swedish to English, one question read:

As reflected in this school's treatment of patients, the main concern is satisfaction of which of the following?

- the need of the students to be trained
- the need of the patients to receive care
- both student and patient needs
- other—please specify . . .
- don't know yet

Fifty-five of the 60 students answered the question:

—the need of the students to be trained .....	29
—the need of the patients to receive care .....	9
—both student and patient needs .....	7
—the need of the teachers .....	2
—don't know yet .....	8*

Neither the *academic* nor the *clinical-vocational* approach to dental educational imply the development of a special service function for dental schools. According to Nisbet's definition of the *academic* orientation, universities should purposely eliminate "consulting, entrepreneurial and humanitarian activities carried on by individual faculty members."<sup>15</sup> The *clinical-vocational* approach accepts the latter involvement, at least as a trade with the community or as a means of maintaining good public relations. The third approach to dental education, the *community health* orientation, is denoted so for its acceptance of a service function and its desire to develop quite an extensive involvement in community health affairs. This orientation justifies itself by pointing at acute and overwhelming community health problems.<sup>1, 4, 9, 13</sup>

The divergent opinions about community service might thus be explained in terms of varied orientations to the role of dental schools in the community or to the role of dentists and dentistry in the society. These observations, however, are not meant to suggest parsimony. A simpler explanation was advanced in terms of contact with versus isolation from community health problems. The latter premise could perhaps be clarified in terms of a personal attitude likely to have been influenced by informed contacts with the community. That attitude or characteristic could be described as conservative-innovative, the innovative side being cultivated by contacts with people outside the profession and outside the dental school. Additional observations can also be considered. Most important, however, they all remain to be tested.

Naturally, opinions are expected to differ, but divergent opinions create polemics. Controversies opened for discussion can form the basis for progress. Progress, however, can hardly be expected unless the discussions lead toward a solution. In order for these to be productive the participants must learn to communicate. Unfortunately the findings in this study seriously question the existence of

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\* Six of these were in their first clinical year.

a common language to bring about a greater and more viable understanding of the role of dental schools in the community service field.

Marjorie Young, at the Second Conference on the Teaching of Preventive Dentistry and Community Health, observed the difficulty people working in dental education have in making themselves understood:

The thing that was revealing to me was, in a group as homogeneous as this there was very little concurrence with the meanings, the connotations as well as the denotations, of most of the terms that were thrown around both in the talks and in the small group discussions. Someone has said that the greatest barrier to effective communication is the illusion that it has been achieved, and certainly that illusion was quite prevalent throughout all of the discussions that I paid my attention to.<sup>19</sup>

The question then arises what could be done to create a common language in discussing the service function. One approach seems to present itself by first settling the less controversial functions of teaching and research. Using educational planning as a platform for major discussions seems to present a most reasonable start. A recent report from the University of Pittsburgh, School of Dental Medicine gives support for this proposition.<sup>7</sup>

A most crucial point seems to be that of reaching agreement on the overall objective of dental education. For instance, if the dentist of the future is expected to work more productively, give more emphasis to prevention, and take greater responsibility for the provision of comprehensive oral health care to all people in the community, dental education would have to provide the students with highly transferable experiences in community health. Using the communities as educational laboratories could be most beneficial.<sup>11, 14</sup> Dental schools could also work with direct community service in order to serve as models for a community action oriented dental practice.

If a community health approach is taken when looking at the teaching and research functions, community service would then become integrated in both teaching and research. Instead of describing the function of dental schools as teaching, research *and* service, the function would be community service by enabling dental students and other dental personnel to become skilled in and dedicated to solving community health problems. Teaching dental students how to work effectively and efficiently with public health problems would then become a service both immediate and deferred.

Similarly, biological research could be supplemented with research in community health action and experimentation in the de-



livery of oral health care. By directing some research to projects in the delivery of health care and integrating this research with teaching activities, the teaching and research activities could potentiate each other. Such a coordinated approach to teaching and research based on a public health orientation could function as a direct community service. The students would be influenced by the critical evaluative view of research, and they could be taught patient and community care simultaneously.

The suggested approach postulates the need for closer cooperation between dental schools and community organizations. Greater cooperation would also have to be established between dental schools and schools of public health.\* This cooperation would mean that greater joint effort and increased resources be devoted to planning and administration of coordinated education in clinical work and community health. Experience from just such an arrangement is being gathered at the Harvard School of Dental Medicine.<sup>6</sup>

If dental faculty can be made to communicate within the area of educational planning, it seems likely that discussions about the service function could be made more productive. The different ideas and opinions about the service function would perhaps be settled automatically if dental educators came to agree on the major problem to be solved by dentistry and dental schools. In order to optimize the ability of educational planning to serve this additional purpose one could try to include consumer representatives in the goal planning process. Educational planning would thus become an encompassing instructive forum where faculty, students, local consumers and political representatives could confer. A confrontation with community needs and perceptions could probably eliminate some reluctance to the community health approach among students and faculty more oriented to an ivory tower academe or to vocational training in the dental trade. Programs in preventive and community dentistry ought to be challenged by the prospect, suggested by Hillenbrand,<sup>10</sup> to serve as catalysts in such a development:

Hopefully, too, the departments of community dentistry can encourage or instigate the greater participation of dental schools in community health programs . . .

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\* Cooperation with community organizations was reported to have been established by 19 of the 23 programs in preventive and community dentistry which were surveyed in 1969. The organizations mentioned most frequently (by 14 program directors) were local and state health departments. (At least 13 of the 23 programs had recruited faculty with previous experience from state or federal health services.) Five program directors reported that they were cooperating with schools of public health.

## SUMMARY

Opinions about the so called service function of dental schools and their programs in preventive and community dentistry have been reviewed. Hypotheses explaining the different opinions were induced from the observations, and it was suggested, in order to avoid moralistic demands, misunderstandings, and unproductive disputes about semantics, that the service function be discussed only after the content of the teaching and research functions had been agreed upon. Data for analysis were taken from surveyed literature and from an interview study in 1969 of deans and selected faculty members at 20 schools of dentistry in the United States.

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# Professional Leadership and Responsibility\*

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**I**F THE American Dental Association accepts third party intervention as a fact of life and it's obvious that it does, every energy and resource at its command should be directed to making certain that the rights, duties and obligations of the profession are protected. For only through a strong viable profession can the dental health of this nation be maintained as the finest in the world. Only through an informed, dedicated membership, that comes from an informed, dedicated leadership can all that need dentistry be granted the benefits of dental health, that we are now told are actually rights, not privileges.

The American Dentist has it within his capacity to deliver the dental health care, resolve the oral problems and promote the general objectives of our profession if he is properly informed and correctly motivated.

This is a tall order to place on the shoulders of the leadership of the ADA but to who else do we turn. The alternatives are terrifying. Let us be certain they never have to be faced.

There are however general areas of concern that are more frightening. This is probably due to a national malady of utter lack of regard, interest or general apathy in all things. I do believe we are becoming a nation and yes a profession that is willing and anxious to let others shoulder the load.

I do believe we are a nation suffering from a lack of individual responsibility. This is expedited in its development by those who say, "Give me the money and I'll do it for you or take care of you". As we visualize the disproportionate growth of the ADA one must wonder are we also guilty.

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\* Excerpted from a paper entitled, "An Easterner Looks at the American Dental Association." Presented at the Fourth Regional Conference of the American Dental Association, Philadelphia, Pa., September 17, 1971.

† President, Dental Society of the State of New York.

History tells us that there developed between the 9th and 15th centuries a system of feudalism wherein the serfs and vassals looked to their lord for care and protection. Somewhat the same system is developing today as we abandon the rigors of individual responsibility for the assurance of others that "they" will take care of us. I fear we are heading toward professional serfdom.

Professionally educated people should know that abandonment of responsibility and duty to others is a certain way to lose freedom. The freedom of a profession is proportionate to its assumption of responsibility. A certain way for the professional individual to lose his privileges and prerogatives is to assign or abandon his duties and responsibilities to a hired staff such as the ADA or to a government bureau.

The staffs of ADA and of government have different perspectives than those of the individual professional. By the very nature of their duties this must be so. There develops a tendency to reduce the number of variables in a given situation so that it can be better managed. This is a first principle of administration. With such reduction of variables the freedom to be different, which in other words is to be an individual, is lost. Such loss of freedom is not a complicated process—but it is a gradual one. The last thirty years is sufficient history of the world to prove this point.

I think everyone today is well intentioned. No one has ulterior motives. If there is a conviction in our society that certain systems are better than others, if some areas are to be protected from encroachment, then there must be a resistance at some point. This begins with the individual and his willingness to shoulder responsibilities and to do his duty. Apathy, indolence, and self-interest are the precursors of professional default.

The profession should look at research, at education and at the delivery of services and determine whether or not the money spent for dental research in all areas has had benefit—whether dental education has been meeting its obligations or developing systems of self-interest. The researchers look at research—the educators look at education—the practitioners look at practice and all agree that what is needed is more money. We have spent more money in the last ten years than any time prior; yet all say we are worse off in every dimension. How come? What is needed is a peer review of the entire profession to test its performance in society—not to describe it. I think the profession should devise a performance appraisal of dentistry including in it: its own organizational systems;

the ADA and the constituent and component societies; the specialties; the demand for and the performance of dental services in private practice, in federal services, and in other delivery systems; the effectiveness of research programs; and the qualities of the dental educational system.

Such a report would reflect the competency of the profession and assure society that we have made a composite peer review of our overall performance and are professionally responsible to society.

If such a task is too big for the profession, if it is afraid of what it might learn about itself, then I question its right to continue as a profession within the design of our society.

The pluralistic nature of our society structure demands that we have a free system of professions as this is the "best buy" for the public. It is a prime responsibility of a free profession to monitor its own metabolism not to enhance its own interests but to better serve the public. Being free and responsible, it can do this—and by doing, it can continue to be free and responsible.

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# Tenth Annual Institute for Advanced Education in Dental Research

Sponsored by the American College of Dentists  
April 24, 1972 - May 5, 1972  
October 1972

## CONTROL OF OROFACIAL PAIN

The subject for the 1971 sessions of the Institute for Advanced Education in Dental Research will be CONTROL OF OROFACIAL PAIN. Dr. Charles C. Alling, Professor and Chairman, Department of Oral Surgery, University of Alabama, School of Dentistry, will be the principal mentor. The first session (two weeks) will be held from April 24, 1972 through May 5, 1972 at the Carrousel Inn, Cincinnati, Ohio. The second session (one week) will be held in Chicago at the American Dental Association headquarters building on dates in October 1972 to be announced later. Trainees *must* agree to attend all days of both sessions.

The overall objective of this Institute will be the emphasis on the interrelationships of the clinical and biomedical sciences in understanding pain reception, perception, and reaction. Understanding, managing, and teaching the control of pain in the maxillofacial regions, require the rational application of the knowledge of several disciplines of the basic and clinical sciences. This Institute will bring together modern concepts from several areas: neuroanatomy, pathology, pharmacology, neurology, internal medicine, and psychiatry. Studies will be made of clinical applications in sedation, analgesia, and regional and general anesthesia. Thus, the trainees will have learning experience from both laboratory and clinical scientists in the general area of patient management and pain control.

The Institute, developed by the Committee on Research of the American College of Dentists, has as its objective the advanced training of experienced researchers. By giving them the opportunity to gather together, under the guidance of a group of recognized senior scientists acting as mentors, and to discuss their research interests, problems and goals, it is hoped that the participants, all with related but not necessarily identical interests, would gain a better understanding of dentistry's problems and possible ways of solving them. At the various sessions of the Institute, consideration

will be given to specific details of each participant's own research activity. This will contribute an insight into its significance and possible future direction, as well as into new and advanced approaches which might be applied.

The Institute reimburses trainees for their travel expenses and pays a stipend based on cost of living.

This is the Institute's Tenth year under support by a training grant from the National Institute of Dental Research. Determination of annual program content, invitation of senior mentors, and selection of trainees are the responsibility of the Subcommittee on Research of the American College of Dentists.

Programs are kept flexible. Mentors are invited on the basis of stature and competence in the field, and for their community of interest with the participants. They are drawn from the ranks of general science as well as from dental research centers. In choosing trainees, consideration is given to past accomplishment and future promise, and their ability to add to the dialogue of the curriculum. An effort is made to achieve a balance between the various disciplines related to the study areas. Usually the group chosen consists of ten to twelve trainees and four mentors, with senior participants added as special needs arise.

Research workers interested in attending must send a *letter of application* before January 10, 1972, to Dr. Robert J. Nelsen, Executive Director, American College of Dentists, 7316 Wisconsin Avenue, Bethesda, Maryland 20014. This letter *must* include the following: (1) a curriculum vitae, (2) list of pertinent publications, (3) a detailed account of previous and present activities relating to the subject field, (4) a statement of the type of discussion topics that would be most useful to the applicant's interests.

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## *The Objectives of the American College of Dentists*

The American College of Dentists in order to promote the highest ideals in health 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 extension and improvement of measures for the control and prevention of oral disorders;

(b) To encourage qualified persons to consider a career in dentistry so that dental health services will be available to all and to urge broad preparation for such a career at all educational levels;

(c) To encourage graduate studies and continuing educational efforts by dentists and auxiliaries;

(d) To encourage, stimulate and promote research;

(e) Through sound public health education, to improve the public understanding and appreciation of oral health service and its importance to the optimum health of the patient;

(f) To encourage the free exchange of ideas and experiences in the interest of better service to the patient;

(g) To cooperate with other groups for the advancement of interprofessional relationships in the interest of the public; and

(h) To make visible to the professional man the extent of his responsibilities to the community as well as to the field of health service and to urge his acceptance of them;

(i) 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.



