The JOURNAL of the AMERICAN COLLEGE of DENTISTS

THE HMO ACT OF 1973

A NEW ETHICAL OBLIGATION

IS EARLY GRADUATION SACRIFICING QUALITY?

THE MOUNTING COST OF DENTAL EDUCATION



MEMBER PUBLICATION AMERICAN ASSOCIATION OF DENTAL EDITORS

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NEWS AND COMMENT

ANNUAL MEETING PROGRAM

CONRAD HILTON HOTEL

CHICAGO, ILLINOIS

October 24 and 25, 1975

REGISTRATION

Candidates for Fellowship and their sponsors will register on Friday, October 24th between 2:00 and 8:00 P.M. at the Registration Booth in the Foyer of the Grand Ballroom.

ORIENTATION PROGRAM

One of the requirements for Fellowship is attendance at the Orientation Program. This will take place on Saturday, October 25th at 8:00 A.M. in the International Ballroom South. Sponsors and families of candidates are also welcome to attend. A continental breakfast will be available at 7:00 A.M. in the Williford Room, Parlors A and B.

GENERAL MEETING

The annual meeting of the College will be held on Saturday, October 25th at 9:00 A.M. in the International Ballroom South. Following the business session, a panel discussion will be presented on the topic "Alternatives in Meeting Oral Health Care Needs — II." This will be a continuation of last years highly successful program.

LUNCHEON

Candidates and their ladies will be guests of the College at the luncheon in the International Ballroom North at 12:15 P.M.

Entertainment will be provided by a well-known humorist. The officers of the Illinois Section who will act as hosts are Mitchell V. Kaminski, chairman; Herbert C. Gustavson, vice chairman; and Syrus E. Tande, secretary-treasurer.

CONVOCATION

After luncheon, the 1975 convocation will be held in the Grand Ballroom at 3:00 P.M. Candidates and sponsors have received information regarding the arrangements for caps and gowns and the procession.

DINNER-DANCE

On Saturday evening at seven a reception will be held in the Normandie Lounge, followed by the annual dinner-dance in the Grand Ballroom. There will be musical entertainment followed by dancing until midnight.

A detailed program of the meeting will be mailed later in the summer. Hotel reservations should be made early through the American Dental Association Housing Bureau on forms provided in the ADA Journal.

SECTION NEWS

New York Section

The March meeting of the New York Section of the American College of Dentists was held on Tuesday, March 18, 1975, at the New York University Club.

Forty members heard Mr. Douglas Horn, attorney, Certified Public Accountant, and a former agent of the Frauds Division of the Internal Revenue Service. Mr. Horn reviewed the tax problems of former President Nixon, and also those most often encountered by professionals, notably doctors. The lively discussion that followed the presentation demonstrated the positive interest of the audience.

Mr. Stephen Cottrell from Columbia University, and Mr. Kenneth Hoffman, from New York University, were presented with special Honorary Awards from the American College of Dentists honoring the outstanding Senior Dental Student from the city's two dental schools.

Louisiana Section Honors Dean Jeansonne



At the annual breakfast of the Louisiana Section of the American College of Dentists on Friday, April 18, 1975, at the Marriott Hotel, held in conjunction with the 1975 Louisiana Dental Association Convention, Dr. Edmund E. Jeansonne was individually honored by the Section in recognition of his outstanding contribution to the profession as a dentist and as an educator.

Dr. Meffre Matta presented Dean Jeansonne with a handsome oil portrait to be placed in the L.S.U. School of Dentistry. Dr. Matta stated that the Louisiana Section of the American College of Dentists is strongly aware of the great efforts of Dr. Jeansonne toward furthering the dental profession and dental education. It is the wish of the group that this portrait be displayed for all to see as a symbol of their admiration and gratitude for Dean Jeansonne's genuine devotion and dedication.

New England Section

The regular Spring Meeting of the New England Section of the American College of Dentists was held on Monday evening, May 12, 1975, at the 57 Restaurant

The speaker of the evening was Norman Walker of New York City, Director of the very famous Jacob's Pillow Dance Company at Lee, Massachusetts, and head of the Department of Dance at Adelphi University, Garden City, New York. Mr. Walker proved to be a very personable individual, and most knowledgeable in his field, and gave a very enjoyable talk.

The following members were elected to serve as officers for the coming year: Chairman: A. James Kershaw, Jr., West Warwick, Rhode Island; Vice-Chairman: Lloyd L. Miller, Weston, Massachusetts; Secretary-Treasurer: Orrin Greenberg, Chestnut Hill. Massachusetts.

NEWS OF FELLOWS

Benjamin Kletzky of Denver was honored by the American Academy of Pedodontics at its recent annual session in New Orleans. The entire meeting was dedicated to him for his many years of leadership and services to the dental profession. A luncheon was also held in his honor.

The honorary degree of Doctor of Humanities was confirmed recently by Bethany College upon **Russell I. Todd** of Richmond, Kentucky for professional excellence and service to humanity.

Past President of the College, **Louis G. Terkla**, was installed as president of the American Association of Dental Schools in San Francisco in March.

Thomas Wu of San Francisco has been appointed to a four-year term as consultant to Secretary Casper Weinberger of the Department of Health, Education and Welfare. He was also appointed to the National Advisory Research Council of the National Institute of Health of the Public Health Service of DHEW.

John E. Aldrich of Columbus, Ohio was elected president of the American Association of Orthodontists at its recent 75th annual session in Las Vegas, Nevada.

(Continued on page 179)

the JOURNAL of the AMERICAN COLLEGE of DENTISTS

A QUARTERLY PRESENTING IDEAS IN DENTISTRY

ROBERT I. KAPLAN, Editor One South Forge Lane Cherry Hill, New Jersey 08034

ROBERT J. NELSEN, Business Manager Journal of the American College of Dentists 7316 Wisconsin Ave.

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Contents for July 1975

| NEWS AND COMMENT 125 |
|--|
| EDITORIAL |
| A LIMIT TO CRITICISM |
| THE MINI-SELF-ASSESSMENT PROGRAM |
| THE HMO ACT OF 1973 Jamie Binder Murray |
| A NEW ETHICAL OBLIGATION H. Barry Waldman, D.D.S., Ph.D., M.P.H |
| IS EARLY GRADUATION SACRIFICING QUALITY? Surang Kowatrakul, Ph.D., Georgianne McVay, Ph.D., Malcolm Robinson, A.B. and Abraham R. Panackal, Ph.D |
| A COMMENTARY ON THE MOUNTING COST OF DENTAL EDUCATION Walter A. Wilson, D.D.S |
| PREVENTION IN DENTAL EDUCATION Michael C. Wolf, D.D.S., M.P.H |
| LOCUS OF CONTROL AS AN INDICATOR OF PATIENT COOPERATION Marshall P. Duke, Ph.D. and Burton Cohen, D.M.D |

A Limit to Criticism

The pages of this JOURNAL are always open to its readers through its "Letters to the Editor" section. Such correspondence is always welcome, for it generally signifies that someone is reading the magazine and has had his thought processes stimulated enough to write in and take exception to something that has been printed. Most letters are subsequently published.

No matter how critical they are, such comments are encouraged, for they frequently put a different aspect or interpretation on the issue. They also provide the author with some valuable feedback on the views of his readers.

Differences of opinion will often lead to controversy. There are publications which thrive on controversy, knowing that it can enliven their otherwise staid and conventional pages. Newspapers have been aware of this fact since their origin. Many dentists find the "Letters" section of the ADA News one of its more interesting features.

The JOURNAL OF THE AMERICAN COLLEGE OF DENTISTS has frequently printed articles of a controversial nature and will continue to do so. Although never inundated with letters, it still solicits reader comment, however critical. It does adhere to one policy however. A reader is welcome to attack, criticize, blast or otherwise protest anything he finds in its pages, but the JOURNAL does not feel obligated to print attacks upon individuals. There are limits to responsible dissent.

Issues may be discussed but not the personality or character of the author. We consider the printing of such disparaging remarks as an abuse of editorial privilege and in poor taste. We will devote neither the space nor the reader's time to verbal barbs of this type.

This editorial was motivated by two letters recently received in which the correspondents took to task the author of statements which appeared in a past issue of the JOURNAL. Whether or not the comment was justified is not the matter under debate. The attack upon the writer, couched in harsh and derisive terms, is to our way of thinking highly objectionable, and we shall not print such letters.

Criticism, yes! Calumny, no!

R.I.K.



Participants taking the Mini-Self-Assessment Test at the Greater New York Dental Meeting.



Officers of the Maryland State Dental Association taking the Mini-Self-Assessment Test.

The Mini-Self-Assessment Program

The American College of Dentists believes that voluntary programs of self-assessment and continuing education, sponsored and supported by dental organizations and participated in by the entire profession, will avoid mandatory government-imposed examinations and relicensure regulations and will restrain intrusions and encroachments by other agencies and interests outside the profession.

The Self-Assessment and Continuing Education program which was initiated two years ago by the College was conceived with this belief in mind. It has been successful in providing to its participants a better understanding of their current level of knowledge and an insight into the areas of their strengths and weaknesses.

The SACED program, which consists of four tests, each containing 150 questions on all aspects of dental practice, is still available and can be obtained by mailing a check for \$40 to the Executive Office of the College in Bethesda.

To supplement the SACED program, a new testing device has been developed by Executive Director Robert J. Nelsen and the SACED committee. This is the Mini-Self-Assessment Program, a 50 question test drawn from the larger tests, that is being presented in conjunction with various dental meetings. It takes less than an hour to complete and was first offered at the Greater New York Dental Meeting in December 1974 with the cooperation of the New York Section of the College. Since then it has been presented at the Chicago Midwinter Meeting and the Maryland State Dental Association Meeting with the support of the local College Sections.

Participants were asked not to sign the tests or identify themselves in any way. After scoring their own tests, the test papers were discarded on leaving the room and later destroyed. In order to obtain some opinions about the test, a brief questionaire was appended, and participants were asked to fill it out and leave it with the test director.

The answers and comments given on the questionaire will be helpful to the planning committee in its further efforts. At the New York Meeting, 259 dentists participated. An analysis of their replies to the stated questions showed the following:

1. Did you learn anything from this test?

Yes 250 No 6 Doubtful 3

2. Were you able to identify areas of dental knowledge where you were

a. Strong? Yes 168 No 12

b. Weak? Yes 192 No 13

3. Were the questions asked

a. Too hard?

b. Within your comprehension? 208

c. Too easy? 10

4. Have you taken any postgraduate courses within the past year?

Yes 203

No 53

(An impression exists that dentists who attend postgraduate courses are generally more favorably disposed toward and interested in programs of self-assessment.)

5. Would a more comprehensive, voluntary test of this type help you in selecting postgraduate courses?

Yes 169

No 55

Doubtful 25

6. In your opinion, what can be done to interest the nonparticipating dentist in self-assessment and continuing education programs other than by threat of government action? This question elicited a large number of varied replies.

29 said "Nothing" or "Don't Know." Other replies were more definite, offering suggestions such as:

"More publicity in journals and convention programs."

"Keep advertising."

"More programs like this one."

"Offer participants a certificate."

"Make self-assessment a membership requirement in local or state society."

"Print short tests in journals as a regular feature."

"Make tests compulsory for retention of ADA membership."

"Provide more interesting continuing education programs."

7. Further comments were solicited, and the following are some examples:

Because of the favorable response, the College expects to continue the Mini-Self-Assessment Program at dental meetings. Organizations having an interest in the testing program should contact the Executive Director, Dr. Robert J. Nelsen, 7316 Wisconsin Avenue, Bethesda, Maryland 20014.

[&]quot;Reemphasize that the results are strictly confidential."

[&]quot;Make cost as low as possible."

[&]quot;Have self-assessment programs at local and state meetings."

[&]quot;More correspondence courses."

[&]quot;Show how continuing education can increase a dentist's income."

[&]quot;Make such tests mandatory for state license renewal."

[&]quot;Lower program fees for recent graduates."

[&]quot;I believe this to be an almost insoluble problem without government action, which I deplore."

[&]quot;Inform dentists that without their cooperation, government action is forthcoming."

[&]quot;Try friendly persuasion."

[&]quot;Nothing will help. Just because someone is forced into continuing education does not mean it will improve his dentistry or his ethics."

[&]quot;This sort of testing should be more inclusive, and given each year to every practitioner."

[&]quot;Such self testing is the only alternative to government intervention."

[&]quot;Compulsory periodic re-examination is the only answer."

[&]quot;The self-assessment test should bring to anyone the fact that they do not know as much as they thought they did."

[&]quot;Such programs make it possible to become a better, more efficient and happier dentist"

[&]quot;A test like this one teaches humility."

[&]quot;Sure shows up a fellow's strengths and weaknesses. We need more of this."

[&]quot;It's the first time in ten years I had fun taking a test"

[&]quot;Hygienists would profit from self-assessment tests."



Stephen Mele, D.D.S.; Oakbrook, Illinois

"I support the American Fund for Dental Health because the Fund helps me."

"I'm very busy practicing dentistry, and I rely on others to do the research that ultimately enables me to be a better dentist.

"Several years ago I learned that the Fund is extremely effective in sponsoring the research work as well as projects in education and the delivery of dental care that I need to keep ahead.

"The easiest way for me to help keep these proj-

ects going is to contribute to the Fund. So, every year, I respond to the request for financial support by sending a healthy-size check.

"In the long run, my support of the Fund is really quite a selfish thing. I'm really helping to improve my own efficiency and ability to continue providing the first-class dental care my patients expect."

American Fund for Dental Health

Suite 1630, 211 E. Chicago Ave., Chicago, Illinois 60611



The HMO Act of 1973

An Analysis

MS. JAMIE BINDER MURRAY

On December 29, 1973, the Health Maintenance Organization Act of 1973 (*P.L. 93-222*), authorizing \$325 million over a five-year period for HMO development, was signed into law. It represents the government's first attempt to influence health care delivery by creating what the Nixon Administration considered to be a competitive alternate to the fee-for-service, private practice system. But whether dental care delivery can be made to fit into the mold of this system remains to be seen. Evidence suggests that it cannot, a situation made clear by HEW's attempts, through regulation, to alleviate the stress dental care places on the HMO.

AN OVERVIEW OF THE LAW AND ITS REQUIREMENTS

Basically, HMOs must meet requirements in two areas of the statute, services and organization/operation, in order to be designated as "qualified" by the government. The services requirement refers to the mandated basic health benefits, under which limited dental services for children are included, and the supplemental services requirement. The organization/operation requisites include, among other things, that enrollment in the HMO be voluntary, that premiums be based on a community rated system, that one third of the plan's policy-making body be composed of plan beneficiaries, and that provisions for open enrollment must be made.

Once designated as qualified, HMOs would be entitled to receive federal financial assistance as well as to participate under certain provisions of the Act designed to provide the HMO with a competitive edge over other existing health plans.

The first is an override provision which negates state laws restrictive to HMO development. This provision states, among other things, that "No state may establish or enforce any law which

Ms. Murray is Assistant Secretary of the Council on Insurance, American Dental Association, Chicago, Illinois.

prevents a qualified health maintenance organization...from soliciting members through advertising its services, charges or other nonprofessional aspects of its operation." The advertising language, however, may not make any qualitative judgments concerning any health professional who provides services for an HMO.

The advantage this provision permits the HMO is obvious, since dentists in private practice are bound ethically not to advertise their services. The Council has commented to HEW on HMO advertising (to be discussed later) but as yet, no regulations have been released on this section of the Act

The other provision that comes with qualification is the "Employees Health Benefits Plan" (dual choice), a section that mandates employers with at least 25 employees to offer to employees "the option of membership in qualified health maintenance organizations which are engaged in the provision of basic and supplemental health services in the areas in which such employees reside." (From section 1310) In addition, this section states that if an employer provides a health plan which includes services beyond the HMO basic services requirement, the employer must offer his employees the option of receiving those services through qualified HMOs.

Other basic features of this section include that the employer must offer the HMO alternative in terms no less favorable than the existing health plan, that the employer must bear all administrative costs associated with the HMO offering, but that such administrative costs may not be included as part of the employer's contribution to the HMO premium.

While the dual choice section presents some disadvantages for employers, the advantages to the HMO are obvious. HMO financial viability can be assured somewhat with the ready-made market the dual choice section creates. Beyond this, dual choice was designed to influence an HMO's decision to become qualified and meet all requirements of the Act. It must be reiterated that the law clearly intends HMOs to meet the requirements of the Act in order to become qualified and, in turn, gain federal subsidies or participate under the override and dual choice sections of the law.

Indeed, Sen. Edward M. Kennedy (D-Mass.), one cosponsor of the HMO Act, said on December 19, 1973, that the requirements of the Act "... will provide adequate safeguard against the assistance of poor quality or nonviable HMOs." Sen. Jacob Javits (R-N.Y.) added that day to Kennedy's comment on the as yet unpassed Act, "I

believe...if we are to achieve the desired objective....the bill enacted into law must strictly define the criteria for HMO establishment and operation."

But, perhaps the designers of the Act had more confidence in the viability of the HMO system than reality would warrant. With passage of the Act, many existing prepaid group practice model HMOs began early to feel the strain. The broad-based benefits coupled with the open enrollment and community rating requirements appeared too severe for existing HMOs to meet and remain competitive with other health plans which did not have to operate under the same restrictions. A strict interpretation of the statute could present some serious problems for existing HMO-types which would have to overhaul their operations in order to meet the requirements.

HEW, responsive to these apprehensions, began to restructure the Act through regulation in an attempt to lessen the requirements. Dental care represents only one of the requirements of the law that HEW has sought to soften.

HMO ECONOMIES AND DENTAL CARE

While a possibility exists that HMOs can create some level of economy in the delivery of in-patient care, the same does not hold true necessarily for out-patient care, especially dental care delivery. For example, the combining of facilities and equipment, a requisite under the law, creates greater economies in medical care delivery since most of medicine's expensive equipment can be shared. But since dental care delivery necessitates that each practitioner have his own operatory and equipment, little cost-saving impact is made here.

Additionally, a cornerstone of the HMO Act is that the HMO emphasize preventive and maintenance care to minimize the need for hospital services. Lowering hospitalization is one avenue by which the HMO can realize substantial savings. But hospitalization is minimal to the delivery of dental care, a factor which excludes it from this major cost-saving activity.

There is another reason why dental care delivery does not lend itself readily to the economies allegedly inherent in the HMO system: utilization of dental care services. Dental utilization is not as predictable for insurance purposes as the utilization of medical care services. And for these reasons, the vast majority of existing HMOs have preferred not to include dental care under their list of covered benefits.

DENTAL SERVICES UNDER THE HMO — BASIC DENTAL BENEFITS

The greatest indicator of the HMO leary attitude towards dental care is the limited scope of dental benefits that has been mandated by the statute for children under age 12.

The Conference Report attending the HMO bill defined the HMO preventive dental package to mean "at a minimum oral prophylaxis, topical fluoride application and surface sealant services." But HEW regulations, finalized October 18, 1974, exclude sealant services. HMOs seeking federal qualification are required to provide children under age 12 only "oral prophylaxis as necessary, and topical application of fluorides and prescription of fluorides for systemic use when not available in the community water supply."

These services contrast sharply with the broad, extensive coverage available to children, as part of groups, through dental prepayment mechanisms using fee-for-service, private practice as the source of care.

The American Dental Association has commented to HEW that the HMO dental benefits are so narrowly defined as to fail to meet what is either professionally or commonly understood by "preventive dental care." A comparison between the HMO preventive dental package and the extensive preventive program designed by the Association in its Dental Health Program for Children highlights that while the HMO is directed to emphasize preventive care, it does not do so with respect to dental care.

The reason for this is clear. A professionally sound preventive dental approach is one that HMO proponents felt the HMO could not afford to deliver and maintain a premium competitive with other health care plans.

As a result, only a minimal dental package was written into the statute, the limitations of which can pose serious problems for the consumer. For example, if the HMO offers only the mandated dental benefits, the child will have to receive his dental care from at least two sources, the HMO and the family dentist. Convenience to the patient aside, this is not an efficient way to deliver dental care services.

The advertising allowances permitted under the Act may present other problems for the consumer, depending upon the nature of the guidelines HEW issues on advertising. Careful attention should be drawn to the fact that consumers might be misled about

the extent of dental benefits to which they would be entitled under the HMO which advertises its "preventive dental care coverage." Parents should be notified that they may be obliged to seek the greatest portion of their child's dental care from private practice. HMO advertising practices should be carefully regulated and should be required to give notice of such benefit restrictions in order that potential subscribers can have sufficient information on which to make informed judgments.

Still, even the meager basic dental health services requirement written in the Act causes stress on the HMO system, a fact made clear by HEW-released regulations dated December 9, 1974. This set of regulations, governing the qualification of HMOs, provides a three-year period during which HMOs may phase-in certain operation requirements and basic health services, including the minimal dental package. In addition, HEW would qualify these HMOs, even though they did not meet all requirements of the statute, a move in total contradiction to the intent of the Act.

But regulations dated February 12, 1975, proposing rules for the dual choice section of the Act, rescind the December 9 noted phase-in period by stipulating that the *phase-in applies only to existing HMO contracts*. All new contracts into which an HMO enters must meet all requirements of the Act, including the basic dental requirement. The HMO would then be qualified only with respect to its new contracts and not to existing contracts.

There is nothing in the language of the Act that provides for a phase-in period, not even that limited by the preamble to the February 12 regulations. It appears that the phase-in period was a concession made by HEW to existing HMOs in order that their premium structures for existing contracts would not be made to rise significantly by the sudden inclusion of benefits and operational requirements not provided previously.

The ADA is on record as having recognized HEW's attempts to restructure the statute and that the phase-in stipulations are not consistent with the language of the Act.

SUPPLEMENTAL DENTAL SERVICES UNDER THE HMO

According to the Act, each qualified HMO must provide "without limitations as to time or cost" supplemental "dental services (as well as certain other services) not included as basic health services" at an additional premium for which HMO subscribers have contracted. This requirement is waived only when health manpower necessary to deliver supplemental services is not

available within the HMO's service area. The language of the law is clear on this requirement. It neither imposes boundaries to the extent of supplemental care that should be provided by the HMO, nor does it separate out the supplemental health services requirement from the other requirements of the statute.

Section 1310(b) (2) reads, "For such payment or payments (for supplemental health services) as the health maintenance organization may require in addition to the basic health services payment, the organization shall provide to each of its members each health service which is included in supplemental health services" (as defined in section 1301 (2)).

But HEW regulations dated October 18, 1974. limit the extent of supplemental services the HMO must provide by permitting individual HMOs to "determine the level and scope of such supplemental health services" as they see fit

The Department has gone farther than just creating, by regulation, limitations to the scope of supplemental health services an HMO may provide.

Section 1310 states that under dual choice, employers must offer employees "the option of membership in qualified health maintenance organizations which are engaged in the provision of basic and *supplemental health* services..."

It would appear from this section of the statute that the HMO option is not limited to basic services and that supplemental services are required for dual choice. Yet, HEW has said that HMOs will be qualified only with respect to their basic benefits. It is difficult to determine how HEW plans to regulate HMOs with respect to the provision of supplemental services when they do not come under the qualification review process. Since the language of the law is simply devoid of any such separation, the creation of a distinction between the basic and supplemental services requirements represents a clear attempt by HEW to undercut the requirements of the law and make more palatable to HMOs the HMO Act of 1973. The safeguards Senator Kennedy promised are being dismissed in order that HMOs, further bolstered, may be able to compete more effectively in the health care marketplace.

HMO DENTAL SERVICES IN THE FUTURE — THEIR DELIVERY

With no apparent requirement for the provision of supplemental dental services, it is unlikely that HMOs will jump at the chance to

provide comprehensive dental care. But the dental profession should be prepared for the eventuality. If HMO funding assistance holds constant, it is likely that HMOs will continue to grow if only from the push government subsidies can provide. Additionally, given the present trend in dental insurance under the private practice system, comprehensive dental care will soon become an expected health and welfare employee benefit. In order for HMOs to compete effectively with this level of coverage, they will have to provide or arrange for comprehensive dental care services.

How dental services must be provided by the HMO is an important aspect of the statute.

DELIVERY OF BASIC DENTAL SERVICES

According to the Act, basic dental services may be provided by dentists who are either (1) staff members of the HMO; (2) members of a medical group practice; or (3) members of an individual practice association (IPA) with which the HMO has entered into service agreements. The only exceptions to this requirement are for services delivered out of the HMO's service area or for services that have been deemed by the HEW Secretary to be "unusual or infrequently used."

The services agreements into which health care providers must enter must include, according to the October 18 regulations, membership acceptance of incentives, such as risk sharing, which are designed to lower the utilization of health care services. This would include that providers must be held liable should HMO premium dollars run out before the benefit period ceases.

The Association has found justifiable cause to believe that risk sharing incentives may produce a negative effect on the delivery of care by creating reverse incentives for providers to underdeliver health care services. In addition to the three modes of delivering basic health services listed in the Act, the October 18 regulations create another possible source for their delivery. These regulations permit delivery of basic health services through members of the HMO staff who are either directly employed or appointed through a contract for services. Presumably, the HMO could contract with a limited number of dentists to provide the basic dental services in their offices in accordance with a compensation arrangement established by the HMO. Should a closed panel HMO provide only the basic dental services, it is likely it would make such arrangements with a closed panel group of dentists rather than incur the expense of a staff salaried dentist.

DENTAL SERVICE CORPORATION AND THE DELIVERY OF BASIC DENTAL SERVICES

The definition of both a medical group and an IPA provided by the statute includes that each must be composed chiefly of MDs or DOs, a restriction that effectively eliminates the possibility of a dental service corporation serving as an IPA. It would appear then, from the restrictions attached to the provision of basic health services, that a dental service corporation would not be allowed to contract directly with a qualified HMO to provide basic dental services. But final determination on this will have to wait until HEW begins to qualify HMOs. A precedent could be established by an HMO whose basic dental services are delivered by a dental service corporation and which successfully passes the qualification review process.

The language of the regulations, however, does not disallow a dental service corporation from subcontracting with an IPA or medical group to provide the basic dental services. But subcontracting may relegate to the profession a secondary role with respect to the administration and cost and quality review of the basic dental services provided by the HMO. But since only a minimal amount of dentistry is mandated under the basic benefits requirement, professional prerogatives here would have little impact.

It must also be mentioned that basic dental health services could be provided by dental hygienists with minimal supervision by a dentist. But the statute does not contain language urging the maximum use of auxiliaries.

SUPPLEMENTAL DENTAL SERVICES

Provision requirements for supplemental health services under the statute are not encumbered by the restrictions mandated for the delivery of basic health services. Consequently, a dental service corporation or an insurance company or dental group could enter into direct written services agreements to provide supplemental dental care. The statute does state that if supplemental health services are provided on a prepayment or fee-for-service basis, the prepayment must be fixed under the community rating system.

According to the October 18 regulations, supplemental dental services "need not be provided through the staff of the HMO nor through a medical group nor through an individual practice

association." But should a closed panel HMO provide supplemental dental services, it is likely it would either employ dentists to work within the facility, contract out with a closed panel dental practice or contract with dentists in a private practice setting. A dental service corporation could provide the services through the latter arrangement. It is likely that the open panel type HMO would contract with a dental service corporation or insurance company on a fee-for-service basis.

Should the HMO provide supplemental dental services through some method of delivery other than staff personnel, the delivery of basic services may be affected. As mentioned before, it would be uneconomical, inconvenient and otherwise inefficient for the patient to receive basic dental services, usually provided in conjunction with other services, from one set of personnel and in a different place from where supplemental services are provided. HMOs would want to provide both basic and supplemental services from the same source. But if a dental service corporation is providing supplemental dental services, and cannot by law provide basic services, some allowance in the regulations would have to be made to permit basic and supplemental dental services to be provided from the same source.

There are a number of other aspects to the HMO Act and regulations that have not been mentioned.

Just briefly, the \$325 million in federal financial assistance authorized under the statute deserves attention. To date, a total of \$6,567,118 in grant awards to 63 organizations has been made.

FINANCIAL RESOURCES OF THE HMO ACT

The HMO assistance legislation provides grants and contracts for feasibility studies to public or nonprofit private groups. Each grant or contract is limited to a maximum of \$500,000 and for one year, but may be extended by HEW to two years. No group may receive more than two grants for feasibility studies.

Grants and contracts to cover planning and initial development costs are also provided under the Act to public or nonprofit private groups. Loan guarantees to for-profit HMOs serving medically under-served populations are also authorized. But each grant, contract or loan guarantee for planning is limited to \$125,000 and one year, which could be extended for two years. No organization can receive more than two contracts, grants or loan guarantees for planning projects. A maximum of \$1,000,000 for no more than three years is authorized for initial development projects.

Direct federal loans to public or nonprofit private organizations and loan guarantees to for-profit HMOs serving medically underserved populations can be made under the statute. They may not exceed more than \$1,000,000 in any given year and may not total more than \$2,500,000 in the aggregate.

Financial assistance will also be available to operational HMOs for significant expansion purposes and funding priority will be given to applicants who plan to enroll at least 30 per cent of their membership from medically underserved populations. Finally a minimum of 20 per cent of the funds available under each category of assistance has been reserved for HMOs which plan to enroll at least 66 per cent of their memberships from non-metropolitan areas.

An additional \$40 million over a five-year period has been earmarked in the Act for research on and evaluation of the effectiveness, administration and enforcement of quality assurance programs. Another \$10 million has been set aside under the Act for a major study of quality assurance, bringing the total funds authorized under the statute to \$375 million.

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A New Ethical Obligation

Is Peer Review Informing?

H. BARRY WALDMAN, D.D.S., Ph.D., M.P.H.

The dentist has an obligation to report to the appropriate agency of his component or constituent dental society instances of gross and continual faulty treatment by another dentist.

ADA Principles of Ethics - January 1975 1

You have just examined an emergency patient with a periodontal inflammation associated with a large amalgam overhang. You note many other large overhangs with associated incipient periodontal problems throughout the mouth. The patient's regular dentist (who is located down the street from you) is on vacation. What do you do?

You are an oral surgeon (or periodontist or any other specialist). The treatment provided by several general practitioners who refer many patients to you for care is at best mediocre (realistically most would probably call it quite poor). What do you do?

Until a number of months ago the extent of a practitioner's obligation in instances of "indisputable evidence" that a patient is suffering from previous faulty treatment was to institute corrective treatment, do it with as little comment as possible, and in such a manner as to avoid reflection on the work of his predecessor² (while seeking to preserve the integrity of the profession 3). Guided by these dubious directions from our profession's Principles of Ethics and bolstered by legal advice which admonished practitioners to be aware of unguarded remarks which could result in the accuser being the object of a litigation for defamation of character 4; dental practitioners effectively have found refuge in a "conspiracy of silence" which permitted a few practitioners (who we reluctantly must call colleagues) to continue to provide substandard services for the public. (In an earlier study by this writer, it was reported that despite significant increases in patient initiated requests for the services of a dental society

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committee which involved a review of problems of quality, virtually no requests for these same services had been initiated by members of the dental profession.) ⁵

But now as a result of the perceived (and real) thrust by governmental/union/insurance company quality evaluations and a desire to forestall a complete removal of the organs of the profession from the arena of peer review, the American Dental Association has taken the position that we are obligated to bring to our component and constituent society's attention the shoddy work performed by some of our colleagues. We are even encouraged to "provide expert testimony when that testimony is essential to a just and fair disposition of a judicial or administrative action," I since "a dentist acting as a witness may not be disciplined (by his dental society) merely for presenting his professional opinion." I

Stated simply, if you examined an emergency patient with a periodontal inflamation associated with many amalgam overhangs placed by the same dentist and you do not advise the local social dental society, you are unethical! Or if you are an oral surgeon (or periodontist or any other specialist) and observe gross and continual faulty treatment by another practitioner who refers many patients for services and you do not notify the local dental society, you are unethical!

No doubt your first reaction to the idea of being an "informer" is at best squeamish and in reality downright distasteful — not to mention the economic consequences of reporting another practitioner who has been referring large numbers of patients for your services. The obligation for the practitioner to come forth as an informant, is to demand that the dentist assume what to some may be the loathsome role of a stool pigeon, snitch or squealer — not to mention the legal consequences of a possible defamation of character suit should the allegations that you had made be found to be groundless or that extenuating and mitigating circumstances adequately explain the observed questionable services.

Your second reaction would be probably to disregard the whole thing, assuming that most practitioners either do not know about the recent modifications in the *Principles of Ethics*, or that other practitioners are just as frightened to inaction by the threat of a counter lawsuit. Thus by inaction, you could "solve" the problem of the inferior practitioner — nobody squeals, nobody knows, and nobody can sue you!

A third reaction (and probably most frightening) is the thought of the specter of an "exposed" colleague trying to get even and inform on you! Surely there are days when each of us is not up to par, or our patient is completely uncooperative and the particular service provided is not up to our usual standards. The resultant image of a dental society peer review committee discussion dissolving into a series of accusations, countercharges, allegations, and denunciations, is far from a pleasant thought.

Unfortunately (fortunately?) a return to the days of a "conspiracy of silence" is no longer one of our options. Professional Standard Review Organizations (PSROs), which require the review of services of the public and by one's colleagues (within and outside of the particular institution) if the institution is to receive Medicare. Medicaid and other federal funds, are a reality. Surely it is only a matter of a short time before the dental profession will be required to monitor itself in a similar manner. True, most dentists are in solo practice and there is limited opportunity to institute a system comparable to the hospital tissue review committee or chart audit procedures. However, under the auspices of government funded health programs, dental auditing procedures already have been initiated. In New York City the Health Department has instituted a program which, in addition to spot checks on the quality of services, has begun a program of on site visits in an effort to ensure that the general delivery environment meets minimal standards.6

But even more important, has been the alarming increase in successful malpractice litigations with ever greater financial payments to patients (eg, a \$20,000 settlement to four plaintiffs for injuries associated with the failure to diagnose and/or treat periodontal disease over a period of 18 years 7) and the need (or is it threat?) for governmental take-over of the medical malpractice field with copayment insurance penalties by physicians (who are found guilty in malpractice suits) as a result of the astronomical rise in medical malpractice costs.8*

(One could complicate further the issues of peer review and

^{*/}The cataclysmic rise in malpractice insurance rates has had an interesting side effect — physicians have been joining the armed forces in increasing numbers to avoid malpractice insurance costs. The applications for medical commissions in the military started rising dramatically shortly after insurance companies across the country began serving notice that malpractice rates would be going up as much as 384 per cent for hospitals (in some areas as much as 600 per cent *) and 200 per cent for individual practitioner policies.*

obligatory reports to dental societies by associating the whole issue with the agonies of the American Dental Association over reciprocity; eg, when a dentist holds a license in State A, and subsequently repeatedly fails to pass an examination in State B, does this mean that the examiners in State B must notify the State Board examiners in State A that the particular dentist is "probably" providing dentistry of questionable quality in State A? And if they do not, does that mean that the State Board Examiners in State B are unethical?)

While our medical colleagues have protested the incursion of governmental efforts into the quality review arena and have even instituted a legal effort to prevent the establishment of PSROs as an unwarranted (and expensive) intrusion into the practice of medicine, 10 the concept of peer review long has been accepted as an active part of medical practice with appearances before tissue review and general audit committees by physicians calling to task the actions of their colleagues. Such has not been the rule in the dental profession — at least at the level of the dental society. Inasmuch as there is little availability for review at an institutional level of the services provided by dentists, one must assume that the local dental society — through its quality review committees — would assume the role generally reserved in the hospital setting for the audit and control committee mechanisms.

But to talk about peer review from the perspective of the newly modified ADA Principles of Ethics in terms of the wide spread development of defamation of character vendettas is to demean the efforts and capabilities developed by the quality review committees of our local dental societies. While these committees have performed their duties often as arbitrators between dentists and third parties of irate patients (rather than as reviewers of questions of quality raised by fellow practitioners**) nevertheless, the experience garnered by many of our colleagues who have served on these audit committees — far from the limelight of notoriety — should allay our fears of witch-hunts, exposes, betrayals, and character assassinations and insinuations!

The obligation to notify the review committee of the local dental society of instances of gross and continual faulty treatment by another dentist, therefore, must carry with it the continuing

^{**/}In the study by this writer of dental society peer review mechanisms referred to earlier, each of the reporting societies indicated an active quality review mechanism which often was involved in the role of arbitration.

obligation to protect the "suspect" practitioner until such time as the accusations have been proved to be justifiable. In turn, the criticizing dentist must also share the common state of anonymity if future compliance with the Principles of Ethics is to be encouraged. Lest we fear that the criticizing dentist would use this cloak of anonymity to slander and stigmatize a competing practitioner, the peer review committee may elect to delay a review of the "suspect" practitioner until a second independent practitioner raises questions of the quality of services provided by particular dentist. This need for repeated reports of questionable services before an overall review of a practitioner's capabilities — which may include a check of patients treated. office environment, record-keeping and the like — should allay fears of the action a single vindictive colleague as well as concern for chastisement for dental treatment of a lesser quality for a particularly difficult and uncooperative patient.

No doubt there are some practitioners who will object to the development of these "profiles" or records by dental societies on the past complaints by other dentists. No doubt there will be practitioners who will be even more concerned and outraged that their individual private practices and their patients might be examined by review committees of local dental societies. And no doubt these same practitioners will be horrified to think that members of the peer review committee may testify against them in a malpractice litigation (in accordance with advisory opinions of the ADA Principles of Ethics) which encourages us to "provide expert testimony when that testimony is essential to a just and fair disposition of a judicial or administrative action."

But are we not better off keeping our own house in order, rather than deferring to the governmental/union/insurance company review procedures (which incidently already use these same mechanisms).

If indeed we are to retain the right of self-review and self-policing, then it is incumbent upon the local organs of the profession to add substance to the generalities of the ADA Principles of Ethics. Dental society review committee must now establish mechanisms and guidelines to handle the eventuality of practitioner-initiated referrals of questionable quality of services provided by fellow dentists. Dental practitioners must be ready and willing to review the services provided by their colleagues and if necessary transmit their concerns to the dental society review committees.

The modification of the *Principles of Ethics* which may seem at first to be an incursion into the sanctity of one's private office, may in the long run offer us a mechanism to preserve the vitality of our profession in the face of major inroads by third parties. Is peer review squealing? Absolutely not! Peer review, the review of one's work by his equals, is an essential component of any professional system which is established to assure the public that it is in fact receiving a quality product. A peer review mechanism by our profession may in fact be the only way to ensure the future of dentistry for the public and the preservation of our profession.

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Is Early Graduation Sacrificing Quality?

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In its 1970 report, Higher Education and the Nation's Health, the Carnegie Commission listed as one of the goals for 1980 the increasing of health manpower, and one of the means the acceleration of medical and dental education. This report is one of the major factors influencing the movement for curriculum change and individualized learning in dental education. The effect of this report can be seen by the fact that in the past four years the issues raised by the question of accelerated programs have been discussed in dental journals. The focus of the discussion seems to be on whether it is feasible to abandon the traditional four-year curriculum, whether the traditional curriculum should be shortened or compressed, whether curricula should be restructured to keep pace with changing concepts of dental education, and whether open-ended curricula permitting individualized learning should be adopted.

Articles in *The Dental Student* have reported on the changes in the programs of many dental schools and have called attention to the advantages and disadvantages for the dental student of modifications of the time limit, particularly if a three calendar year

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program should become the pattern.²⁻⁷ Some dental educators, while urging the adoption of accelerated programs, have warned against creating a new lockstep pattern, and have called for programs flexible enough to permit early graduation for some students.⁸⁻¹¹ Jacobs has presented a case against the inefficiency of the lockstep curriculum in meeting the nation's needs, and argues that continuous progress education, rather than abbreviated programs, would be more efficient since a flexible curriculum would allow students to meet educational objectives in periods ranging from two and one half to four and one half years.¹² Robinson also cautions against planning or continuing a curriculum based on assumptions that dental students have identical preparation, abilities, motivation, and professional goals, and recommends that the proposals of the Council on Dental Education adopted in 1970 be considered in curriculum revision.¹³

The Council on Dental Education "encourages a curricular approach that allows for individual student differences and permits the development of more flexible teaching programs. This mechanism allows students to proceed at a pace consistent with their learning ability. It appears such programs would diminish the current attrition rate and allow exceptional students to complete the educational period earlier." ¹⁴ In its Procedures for Evaluation, the Council on Dental Education recommends that dental schools provide for individual differences of students by allowing outstanding students to meet requirements for graduation in less than four years. It further recommends flexibility and curricular experimentation. ¹⁵

A review of the literature ¹⁶ shows that although there is much written on the issue of early graduation, and much attention given to the implications of early graduation to the curriculum, very little has been written on the characteristics of early graduates or on what type of criteria dental schools should set for selection of their early graduate groups. Since dental educators are concerned about quality education, it would seem that early graduation should be permitted only for selected subpopulations. Thus the criteria for early graduation should be important.

The significant question in education is the quality of early graduates, how they perform in both academic and clinical areas when compared to regular graduates. Since this question needs some objective answers, the purpose of this study is to investigate what are the major variables which characterize early graduates of Temple University School of Dentistry.

The philosophy of the school calls for a flexible curriculum, as illustrated in Dean Howell's statement:

The curriculum must be flexible; one which can be modified readily to reflect changing concepts of dental practice. The allocation of instructional time must be on the basis of subject matter content to fulfill specific objectives of each subject area rather than on the historical or conventional schedule....The schedule must be individualized sufficiently to accommodate the adequate but slower student, and at the same time, challenge the exceptional student.¹⁷

At Temple University School of Dentistry each class entering since 1968 has had the opportunity to complete requirements for graduation in less than four years. No set criteria of selection were employed. Therefore, it has been possible for members of these classes to graduate early. Table I shows the distribution of early graduates over a period of time.

TABLE I

DISTRIBUTION OF EARLY GRADUATES 1972-1974

| Date of Graduation | 1972 | 1973 | 1974 |
|--------------------|------|------|------|
| January 1972 | 14 | | |
| May 1972 | | 3 | |
| August 1972 | | 11 | |
| January 1973 | | 23 | |
| May 1973 | | | 3 |
| August 1973 | | | 11 |
| January 1974 | | | 27 |
| Total | 14 | 37 | 41 |

PURPOSE OF THE STUDY

The purpose of the study was to discover whether there are differences between the early graduates and regular graduates of Temple University School of Dentistry in academic performance based on the predental GPA, DAT scores, National Board scores, and GPA during the dental school years.

For purposes of this article, a dental class consists of all students who entered in a given year. The regular graduates are those who complete all requirements in eight regular academic semesters. Thus the regular graduates of 1972 entered the dental school in September 1968 and graduated in May 1972; the regular graduates of 1973 entered in September 1969 and graduated in May 1973; the regular graduates of 1974 entered in September 1970

and graduated in May 1974. The early graduates are those students of the classes of 1972, 1973, and 1974, who entered in 1968, 1969, and 1970 respectively, and completed all requirements and graduated in fewer than eight semesters.

METHOD

Subjects

The total sample consists of 51 dental students who were early graduates of the classes of 1972 and 1973. The early graduates of the class of 1972 were 13 males and 1 female, from a class of 139. For the class of 1973, there were 37 early graduates, all male, from a total class of 139. Data for regular graduates of 1974 was not available at the time of this study and hence the early graduates of the class of 1974 cannot be compared with the regular graduates.

Procedure

Students who were classified as early graduates according to the definition given above were identified for both academic years 1972 and 1973. Mean scores of 52 academic variables of early and regular graduates of 1972 and 1973 were computed. The comparison of the differences between the mean scores of early and regular graduates was done separately by year of graduation.

RESULTS

The comparison of mean scores on 52 academic variables between the early and regular graduates of both 1972 and 1973 shows that there were statistically significant differences between the means of early and regular graduates on two variables of the total of 52 variables. These variables were junior second semester GPA and senior second semester GPA, as shown in Table II.

The regular graduates of 1972 showed statistically significant higher means than early graduates on three variables. These variables are DAT Verbal Reasoning, DAT Reading Comprehension, and National Boards Microbiology score. The comparison is shown in Table III.

For the class of 1973, the three variables that have statistically significant differences between regular and early graduates are DAT Factual Science, DAT Science Application, and DAT Total Science scores, as shown in Table IV.

The comparison of the means of the sophomore cumulative GPA and the final dental school cumulative GPA appear in Table V.

TABLE JI

SIGNIFICANT DIFFERENCES COMMON TO
1972 AND 1973 EARLY AND REGULAR GRADUATES

| | | 1972 | | | 1973 | | | |
|----------------------------|------------|---------------|------------------|------|---------------|-----------------|------|-------|
| | | Early N=14 | Regular N=109 | t | Early N=37 | Regular N=80 | t | р |
| Junior second semester GPA | Mean SD | 3.08 .31 | 2.71 .35 | 3.74 | 2.78 .28 | 2.52 .34 | 4.20 | < .01 |
| Senior second semester GPA | Mean SD | 2.99 .28 | 2.80 | 2.98 | 2.98 .25 | 2.85 .21 | 2.95 | < .01 |

TABLE III

DIFFERENCES BETWEEN MEAN SCORES ON THREE ACADEMIC VARIABLES
OF 1972 GRADUATES OF TEMPLE UNIVERSITY SCHOOL OF DENTISTRY

| | | Regular N=109 | Early N=14 | t | р |
|------------------------------|------------|------------------|---------------|------|-------|
| DAT Verbal Reasoning | Mean SD | 4.91 1.69 | 3.57 1.78 | 2.77 | < .01 |
| DAT Reading Comprehension | Mean SD | 4.98 1.62 | 3.86 2.14 | 2.34 | < .05 |
| National Boards Microbiology | Mean SD | 87.37 4.06 | 85.00 4.42 | 2.03 | < .05 |

TABLE IV

DIFFERENCES BETWEEN MEAN SCORES ON THREE ACADEMIC VARIABLES
OF 1973 GRADUATES OF TEMPLE UNIVERSITY SCHOOL OF DENTISTRY

| | | Regular N=76 | Early N=37 | t | р |
|-------------------------|------------|-----------------|---------------|------|-------|
| DAT Factual Science | Mean SD | 5.15 1.62 | 4.49 1.68 | 2.00 | < .05 |
| DAT Science Application | Mean SD | 5.12 1.57 | 4.35 1.53 | 2.46 | < .01 |
| DAT Total Science | Mean SD | 5.24 1.49 | 4.46 1.43 | 2.64 | < .01 |

These means tend to be higher for the early graduates than for the regular graduates for both years. The combined means (for 1972 and 1973) of the cumulative GPA at the end of the sophomore year is 2.76 for the early graduates and 2.64 for the regular. The combined means of the final dental school cumulative GPA for the early and regular graduates are 2.81 and 2.66 respectively.

TABLE V

MEANS AND STANDARD DEVIATIONS OF SOPHOMORE AND FINAL CUMULATIVE GPA FOR EARLY AND REGULAR GRADUATES

| | | 1972 Graduates | | 1973 Graduates | | Combined 1972 and 1973 | |
|---------------------|------|----------------|---------|----------------|---------|---------------------------|---------|
| Year | | Early | Regular | Early | Regular | Early | Regular |
| Sophomore | Mean | 2.72 | 2.60 | 2.77 | 2.69 | 2.76 | 2.64 |
| Cumulative GPA | SD | .37 | .40 | .46 | .39 | | |
| Final Dental School | Mean | 2.82 | 2.65 | 2.81 | 2.69 | 2.81 | 2.66 |
| Cumulative GPA | SD | .32 | .30 | .34 | .37 | | |

CONCLUSION AND IMPLICATIONS

This study attempts to find the significant differences between the self-selected early graduates and the regular graduates at Temple University School of Dentistry in academic performance based on the predental GPA, DAT scores, National Board scores, and GPA during the dental school years. The results of comparison between means of the early and regular graduates on these variables show that early graduates of the classes of 1972 and 1973 had higher mean scores than the regular graduates on two academic variables. These were grade point averages for the second semester of the junior and senior years.

These results show inter-year consistency in contrast with the results on DAT scores and National Board scores, which show significant differences, but which are inconsistent from year to year; ie, regular graduates of the class of 1972 scored significantly higher on verbal reasoning, reading comprehension, and National Board scores in microbiology than the early graduates while there were not significant differences on these variables for early and regular graduates of the class of 1973. Meanwhile regular graduates of the class of 1973. Meanwhile regular graduates of the class of 1973 scored significantly higher (p<.05)

than early graduates of this class on Factual Science, Science Application, and Total Science. But similar results did not appear for the class of 1972. When the comparison of the means of the cumulative GPA of the sophomore year and the final cumulative GPA was made, the results showed that the means of the early graduates tended to be higher than the regular graduates' means although they were not statistically significant. The combined means of the early graduates were also higher than those of the regular graduates.

On the basis of these findings, what, then, should be the criteria for early graduation? From this study of self-selected early graduates of the Temple University School of Dentistry for 1972 and 1973, the following criteria for selection of candidates for early graduation may be considered.

- 1. Grade point averages at the end of the sophomore year should be high. We can infer that preclinical GPAs are important for consideration, since achieving a higher final cumulative GPA depends upon having achieved higher GPAs throughout the four years. Each school will want to set its own standards for how high the preclinical cumulative GPA should be for candidates for early graduation.
- 2. Students should show high competence in clinical work both in quality and quantity. This study showed higher mean semester averages for both junior and senior second semesters, when the GPAs are based primarily on clinical performance. Therefore, the students' clinical competence should be identified as early as possible.

Besides the above criteria the schools may wish to include the attitudinal aspect as another criterion for selection. For example, at Temple University School of Dentistry students who apply for early graduation now must be reviewed by a committee on professionalism composed of faculty and students who consider their professional attitudes and ethics.

The above recommendation is based on the results of a study of a sample of self-selected early graduates from only one school of dentistry. Therefore, these recommendations may not be applicable to other schools because of the fact that dental schools differ in their philosophies, objectives, and their methods of achieving quality education. Future investigations should involve samples which are representative of dental schools nationwide.

Finally, since students involved in this study were self-selected as candidates for early graduation one may raise the question of whether personality variables influenced their decision. This question will remain unanswered until studies are conducted which will include personality characteristics as independent variables.

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A Commentary on

The Mounting Cost of Dental Education

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It is not unusual in these days of gross economic stress to hear complaints, rational or otherwise, regarding special areas of our economy. When the area of discussion happens to touch on the cost of a vital health service and the education of that health service personnel, it does indeed call our attention to the need for concrete action.

The author has been associated rather directly with the rising cost of dental education for some 16 years, as dean of an emerging school from 1955 to 1971, and cannot say that it is any surprise to see that almost the whole contents of the April 1975 issue of the *Journal of Dental Education* devoted to the cost of dental education in its various aspects.

We are wondering if this knowledge were to be presented in less technical and statistical terms not only to our own professionals, but to the general public who eventually pay for it, whether more economically sound approaches to the overall problem could be found. We do not invite a noninformed group of people to challenge our methods, but we do suggest that if our present methods were made clear, they, the people, might question some of the extravagance which we indulge in. Thus, we might awaken to the fact that we cannot move technically and academically faster than we can afford to pay the bills. The public seems to have acquired the notion that if the government on any level pays the bill for a service, that it is "free" to them. But is it? Is there really anything for nothing that we do not eventually pay for "through the teeth"?

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Parents of children, whether in private or public schools start paying the educational costs from kindergarten through professional schools either through that hard-earned tax dollar or by tuition. Our students expect the best education possible even though they know that the costs are mostly absorbed by the institution, or by governmental or other subsidies. And the less they pay themselves the more they expect from others, quite naturally. Those who work with extra diligence to help support themselves usually show more appreciation for what they are receiving.

Getting back to the original premise, the cost of dental education has been mounting by leaps and bounds for many years, perhaps by greater leaps than most consumers' products. In 1955 — starting a new school — the cost of tuition was \$800 per year. When this dean was in school, over 50 years ago, the cost was \$200 per year and the school made a profit. It was not as good an education as that for \$800 in 1955, but it met the needs and standards of the times. The 1955 endeavor for \$800, adjudged a fine education, did not tax the students or the institution with any great deficit and did not depend upon Uncle Sam's tax dollar. Sixteen years later we find tuition rising to over \$3000 a year, with thousands more from federal withholding taxes of the general public needed to help pay for that dental education.

According to our statisticians in the *Journal of Dental Education*, the average cost of educating a dentist has risen from \$1,316 per student in 1950, to \$9,050 per student, per year in 1973.

Most dental schools are admittedly turning out good products by standards set by the ADA or the schools, and generally so-judged by the products themselves — the graduates. But a question needs to be asked in the light of the cost of that product. Could it be accomplished just as effectively by a lesser expenditure by the institutions, the government, the students and their tax-paying sponsors? Maybe not But we submit that it is important in these critical economic times to study the alternatives.

When the nation was abruptly faced with the crisis of a shortage of fuel and energy brought about by years of extravagant waste, it was found possible to do with less fuel and still get to where one needed to go. Fifty-five miles an hour instead of 70 not only saved fuel and dollars, but lives. Perhaps it is necessary to slow down progress in some ways if we find it essential to be more prudent in our expenditures.

No, we do not advocate lessening of service to mankind, but

perhaps this is a time to consolidate by giving more of the people what only a few have been getting. This can only be done by cutting the cloth to fit the pattern within the ability of all society including institutions and government, which we have at last realized is not a bottomless well.

Of course we expect to be asked, "What would you do about it?" And we will frankly answer, "We don't know, but someone might" Perhaps that someone who is often referred to as "they," the imponderable could be "you." We herewith submit a few alternatives which should be studied and even tried for size. Sometimes a group of simple alternatives when gathered together can make a big impact on a major problem. One hundred pennies still make a dollar even if it doesn't buy very much.

ALTERNATIVES

A Ceiling on New Programs

There should be a ceiling on any new programs in dental school which do not have a precise need in the adequate curriculum and which do not have outside funding for support.

Continuing Education Self-Supporting

All continuing education programs must be self-supporting including compensation for use of facilities.

Over-Expansion of Numbers

Expansion of numbers of students as a price for per capita support by government must stop. Such grants often cost the school more than it gets. Schools which are forced to accept more students than what the government had allowed space for in building grants, lower the teaching ability for said space and violate the intention of the original grant.

American Dental Association's Influence on Cost

The ADA Council on Dental Education must meet the exigencies of the times during periods of economic stress and not force large expenditures on schools for the sake of idealism. What might have been a good requirement during affluent times cannot hold true during unusual times and can only lead to frustration and lowering of educational morale.

Review of Curriculum

A review of the curriculum of each individual school by the school itself could point up many avenues of economy. Some courses might be curtailed, eliminated, or combined without serious effect on the product and in fact may allow more efficient teaching in essential aspects. This step would take courage by the administrators. Have we not observed local, state, and national governments facing up to such needs recently? There is no room for the fatted calf now. The 8-12 hour teaching week in some schools needs reconsideration. At today's prices, we need to cut inefficiencies everywhere.

Expand Graduate Education

Many hours of very sophisticated undergraduate education which can only benefit a few within the alloted time could be delayed until graduate programs are developed which could be supported by the students themselves. This would not curtail progress, but the time and money could be used more economically for all at the undergraduate level.

Community Programs

Many community dental programs are really the responsibility of local governments and more of the expense should be shouldered by them, with schools furnishing expertise and the students gaining the necessary knowledge by participation. Salaries could be assessed to agencies where they belong and fewer expensive faculty might be needed.

Proper Use of Part-Time Faculty

The need for sufficient full-time faculty is acknowledged for the continuous education in our high standard of professional training. But we must not down-grade the usefulness of the good practicing part-time teachers who should get adequate compensation to insure responsibility and dedication. With ample full-time faculty to provide background support, many part-time competent teachers at modest salaries can save expense and often add to the quality of the teaching. The pressure for more full-time faculty can wait for affluent times.

Tenure

Tenure of faculty needs to be re-examined for its efficiency. Employment protection for the individual teacher has merit, but the principle of retaining, on the payroll, forever, those who may not perform their best or who grow weary or lazy after tenure at a high salary, needs review as a means of cutting costs. It may be a hallowed area of discussion, but it requires serious consideration.

Paper Work

In our complex society when we are involved with government in so many ways, with bureaucratic control in so much of our operation, there is the time consuming pattern of paperwork at its worst. Financial and other reports required constantly by the ADA, HEW, and other agencies, research grant applications added to the administrative demands of each institution call for thousands of hours of the time of all personnel in a dental school. Much of this has to be taken from the teaching time of high salaried chairmen and assistants and is academically unproductive, adding nothing to the education of the students. Teachers and researchers are prolific in sending out questionnaires for others to fill out — taking hundreds of hours. The results are often never heard of again.

If these statistical "demons" would consider the time element before they cover the field with surveys and requests for reports, often for self-aggrandizement, thousands of dollars could be saved in every school.

More good clerks and secretaries (at 10 to 15 thousand dollars a year) could save many dental educators (at \$30,000) from wasting their time and energy on paperwork for which they are least trained and in which most are less than interested.

Moratorium on New Schools

With the increased use of the "pill," statistics show that there is a reduction in births which will have a future impact on population as it affects both need for dentists and dental services in the next generation. This would seem to presage the possibility of placing a moratorium on the building of new schools for some time. In an era of easy transportation, there is no longer a need to have a dental school right in one's backyard. The overall cost nationally could be reduced and such money applied to more essential purposes.

SUMMARY

Of course all of these items of possible economy cannot apply to all schools, or for that matter, perhaps to any in their entirety. But unless consideration is given to some options and quickly, many private and public schools, as well as dentistry itself will be subject to a rude awakening. Most advocates of speedy, hastily developed national health plans are forced to slow down now for want of available funding. Even the almighty federal government and certainly most states are not presently in a position to save the situation. It is for the schools themselves to tighten their belts and use their ingenuity. The writer is always pleased to quote a letter received from a fine dental educator, the late Dr. Willard Fleming of California, who wrote after a survey visit to our first school. "You and your faculty have surely shown real ingenuity in doing all you have done with so little." There seems to be no longer that premium, reward or credit for thrift and frugality — its time for a change.

This article was stimulated by a series of articles in the April 1975 *Journal of Dental Education* by Galagan, Genyea, Bruce, Kelly, Rushing, Redig, Burger, Maher, Lomonaco, Chambers and Hamilton.

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Recent history shows that the government, despite its splendid intentions, is incapable of matching the vitality, the wisdom, and the ingenuity of free men.

William E. Simon U.S. Secretary of the Treasury

Prevention in Dental Education

Progress, Problems, Opportunities

MICHAEL C. WOLF, D.D.S., M.P.H.

The objectives of a relevant undergraduate curriculum in preventive dentistry ¹ are to provide a service to patients and to produce a graduate dentist who:

- —Understands the general philosophy and principles of disease prevention.
- —Knows the cause, or theory of the cause, of the most prominent oral diseases and disorders.
- —Is experienced and competent in the clinical application of preventive measures.
- —Is trained and experienced in the education, motivation, and supervision of patients in good oral health practices.
- —Is so motivated by the concept of preventive dentistry that he will apply it to the maximum degree in his practice.

Motivation is the difficult part to teach. The ultimate goal of preventive dentistry, though, is not motivating patients — it is changing their behavior. Motivation is merely one means to that end. The basics of prevention is taught very quickly in the first year, first semester course through lectures, readings, and videotapes. The rest of the first semester, and all of the second semester course, is spent in applying this information.

A PREVENTIVE PHILOSOPHY

Throughout the first year, we try to teach a preventive philosophy which this anecdote helps to explain:

Mark Twain was a master at using profanity. His wife detested this, and decided to cure him of this habit by out-cussing him.

Presented at the Annual Session of the American Dental Association, Washington, D.C., November 12, 1974.

Dr. Wolf is Associate Professor and Director of Preventive Dentistry, Department of Community and Preventive Dentistry, Fairleigh Dickinson University School of Dentistry, Hackensack, New Jersey.

One day, after some undeleted expletives from Mr. Twain, she let fly with a stream of choice words capable of mummifying all the pulps within hearing. He was amazed, but when she finished, redfaced and puffing, he leaned back, lit a cigar, and said, "Well, my dear, you seem to know all the words, but you don't know the tune!"

We teach the words to our students very quickly, but our real goal is to teach the tune. Anybody can learn the words; when you know the tune, then you're starting to be a doctor.

Here is an example of what is meant by the tune. A 1972 survey of dentists with preventive practices found that only 7 per cent used a recall appointment to reinforce the skills and behavior that patients learned during home care instruction. Only 3 per cent scored their patient's plaque at recall visits; and only 4 per cent thought to assess their own teaching techniques based on their patient's oral condition.² This is not prevention; this shows no understanding of prevention, or of patient learning, or of what the dentist is supposed to be doing. And it comes very close to taking money under false pretenses.

When we discuss plaque control programs, students tell of acquaintances of theirs who were charged \$50 by dentists who never bothered to find out if flossing skills were actually learned, who never counseled patients in good nutrition, and who never followed through at a recall visit. These people are to preventive dentistry what denturists are to prosthodontics.

Our experiences at Fairleigh Dickinson University Dental School parallel the experiences of practicing dentists all over the country. For example, before 1970, we did not have a department of preventive dentistry. This does not mean that the faculty paid no attention to prevention. Many dentists were quietly teaching and practicing prevention for many years. Prevention is not a new concept, and its techniques are well known. Dr. Levi Parmly was advocating the use of dental floss 150 years ago; G. V. Black restated it 80 years ago; C. C. Bass said it 35 years ago. Little is new, except for the research that has placed a scientific foundation under Parmly's teachings, which were empirical. What is new is the medium; the Age of McLuhan if you will. And if the medium is the message, so be it

Columbia Dental School now has a department of preventive dentistry which is run by the same person who taught preventive dentistry when I was a student there in the 1960s when there was no department. There are not too many people who know more

about caries and plaque than Irwin Mandel or can teach it better, but he has packaged it differently — and with all due respect, he is probably more successful in getting his message across in the 1970s than he was in the 1960s, due no doubt to the "prevention explosion" of recent years. Those dentists who have awakened the majority of practitioners to ideas and methods that were available but unused should be proud of their contributions.

An indication of this progress was a 1972 report in *Dental Currents* that "the number of dentists in America offering their patients a plaque control program has more than doubled during the past year." ³ But this was illusory, as we shall see.

In addition to teaching a philosophy, students are involved in prevention as early as possible. Dr. Lewis Fox has been quoted as saying, "Dentistry was conceived in the womb of prosthesis and reflects the heritage thereof." ⁴ When you and I went to dental school, what was the crowning glory of the freshman year? (Besides passing anatomy.) A set of false teeth! By the end of May, we had those dentures waxed, flasked, polished, and perfect. About five years ago, Dr. Henry Goldman decried the practice of holding up a perfect set of complete dentures in front of freshmen, and saying, "This is what you will be working to construct." At our new school, said Dr. Goldman, we will show students a perfect natural dentition, with healthy tissues, and say, "This is what you will be working to preserve. The other is what you will be working to prevent."

In the first two weeks of school, freshmen are shown the condition of their own mouths: gingivitis, plaque, faulty restorations and poor occlusions are pointed out. These are diagnosed by the sophomores. The instructors, in a 1:3 ratio, are the seniors. Freshmen are really impressed when they receive instruction from their colleagues.

Translating this into private practice compares to getting an entire office staff involved in prevention. Motivation is only one means to our goal; modeling behavior is another. If the dentist does not really believe in a preventive philosophy, neither will his staff and his patients. The seniors and sophomores are the staff, and the freshmen are the patients. And the staff not only knows the words, but they carry a pretty good tune. Recent graduates teaching part-time in the clinic, or coming back to visit, are telling the students, "You know, it works!"

So much for our progress — now for the problems. The title of this paper should really be "Progress and Challenges" because a

problem is a challenge that has not been overcome yet; it is really an opportunity in disguise.

PROBLEMS IN MOTIVATION

One challenge we face is sustaining the students' motivation, or more accurately, to continue to produce desired behavior in the junior and senior years.

In a 1973 study of plaque control dropouts, it was found that "interest in plaque control by practicing dentists peaks at about one year and then exhibits a marked falloff." ⁵ Psychologists state that intermittent reinforcement, rather than constant reinforcement, is needed to produce a lasting change in behavior. It happens among dental students, too. One reason is their fixed requirements in all clinical areas. Another is that endodontics and periodontics and orthodontics become more attractive to students than home care instruction and diet counseling. By the end of the sophomore year, the bloom is off the rose of prevention. If the juniors and seniors will not speak the words, let them at least hum the tune, and have the freshmen, sophomores, and hygiene students do the prophylaxes and the fluoride applications and diet counseling and teach home care.

In the first semester, freshmen examine and chart the mouth and give prophylaxes to each other. They are eager to see patients and to really get their fingers wet. Since they are so anxious to get started, they are politely informed that any gingivitis or significant accumulation of plaque or gross caries in their own mouths will delay their clinical debuts. If this does not change behavior, nothing else will. They see patients, mostly orthodontic patients (before the bands go on) starting in January. They examine, chart, disclose and score plaque and gingival conditions, give home care instruction, diet counseling, prophylaxes, and topical fluorides. Seminars are held each Friday where students can discuss their clinical experiences during the week.

It is also planned to have freshmen interview new adult patients before they are seen in oral diagnosis. They will take histories and review the patients' experiences and attitudes toward dentistry and toward their own health. Students are dealing with tissues in their first year; it is also important for them to deal with people. After the students do these preclinical interviews, they will be able to follow their patients' progress until treatment is completed. Their patients may even be assigned to them for recalls and subsequent treatment.

The next challenge will be to actively involve the juniors and seniors in the management of these patients — that is, to provide intermittent reinforcement of their learning and behavior. At present, the upper-classmen are not following up on plaque scoring and topical fluoride applications as well as they should. However, we can discern an improving interest and commitment each year, and we hope that the students who have actively participated in prevention as freshmen and sophomores can be integrated into a team approach to dental care when they reach the clinic.

More and more students are interested in other areas of prevention. Three years ago it was rare to see a senior — and not too many juniors — participating in Children's Dental Health Week. That is not the case today. Fourth-year students are not only aware of their responsibilities to the community, but are sincerely interested in teaching prevention to children. In addition, students are becoming dissatisfied with the February frenzy that is Children's Dental Health Week, and are trying to build a sustained educational program in the schools. Freshman and sophomore students are arranging programs for preschool children in an inner city Head Start program and in a local suburban school system. School teachers will come to the dental school to learn to be dental health educators, and the children will devote at least 15 minutes a day to brushing, and flossing in their classrooms. The ADA program for schools and the Tooth-keeper program of the ASPD represent serious efforts by the dental profession, and are proving their merit.

INTERPERSONAL RELATIONS

The last challenge provides our greatest opportunity. This is in the area of behavioral science and interpersonal relations. In the study previously cited, a survey of 800 dentists who either terminated or materially changed a functioning plaque control program — 800 dropouts. They were asked the following question: "If you had it all to do again, knowing what you know now and based upon your prior experience, do you feel that you could make a formal plaque control program (as we defined it) function well in your office?" Sixty-six per cent said no, 18 per cent were unsure, and only 16 per cent felt they could succeed if they tried again.6

The study concluded that "the evident failure of these dentists was primarily with interpersonal skills in the behavioral sciences, not in clinical ability." They added, "We get the impression that

these practitioners relied primarily instead of supportively on the hardware and toys and gimmicks of plaque control — perhaps because they felt unskilled in interpersonal relations...Their plaque control program was not, in fact, 'their' program. It was someone else's and they borrowed or modified it for their own office without first developing an underlying philosophy...we would speculate, but cannot substantiate, that these same men and women do not have well managed practices. When a dentist does not relate well to people; has a staff not fully trained or motivated; borrows and installs another man's program in his own office without foundation or philosophy; and has no systematic means of assessing patient progress or reinforcing patient learning — that program must fail. As these practitioners can testify, it certainly does." ⁷

TEACHING BEHAVIORAL SCIENCE

Fairleigh Dickinson University offers a course in behavioral science in the sophomore year. It really begins in the first year in discussions about developing a philosophy of prevention; about how patients learn, and how to present a treatment plan to a patient in a manner that regards him as a person with feelings, and needs and fears; about how to alleviate these fears. In the behavioral science course, we ask and talk about the student dentist. Why did you decide to become a dentist? What are characteristics of patients? What happens when the dentist's values conflict with the patient's values? How can we reduce these conflicts? What is fear? What is anxiety? How much is normal? How do you recognize it? How do you treat it? How do you interview a patient?

An interesting experience took place in this course. We had made a role-playing videotape in which a senior student portrayed the dentist and a freshman student played the patient. We created a situation in which the patient was extremely anxious and nervous, and arrived late for her appointment. The students ad libbed for seven minutes and produced a tape which provoked almost two hours of lively discussion in class. Approximately 90 per cent of the sophomores felt that the "doctor" had completely mishandled the patient, and that he should have dealt with the cause of the patient's anxiety rather than the symptom, *ie*, lateness.

We showed the tape to the seniors, and almost all of them felt that the dentist did a fine job of dealing with the patient and that no improvement in interpersonal relations was needed. When told of the differing reactions, the seniors scoffed that the sophomores had not treated patients yet "Just wait," they said, "they'll find out!" Some admitted later that they changed their minds, and that they thought the sophomores were right.

Obviously, this does not demonstrate the "success" of the behavioral science course. As Dr. Aaron Katcher has emphasized, intuitive judgments cannot substitute for scientifically valid data in proving the effectiveness of a curriculum. However, students are being made aware of the importance of understanding people, and this is surely the first step in the education and training of good doctors.

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Locus of Control as An Indicator of Patient Cooperation

Implications for Preventive Dentistry

MARSHALL P. DUKE, Ph.D. BURTON COHEN, D.M.D.

A major problem facing most prevention oriented practitioners, and especially orthodontists, is that of motivation and successful patient education. It is often difficult at the beginning of an extended corrective procedure to know whether or not a patient is going to be motivated, whether instructions will be followed, appointments met, etc. A recent article (Williams, 1972) broached this problem when, through use of measures of personality including the locus of control dimension, the author was able to determine which of his patients were likely to follow oral hygiene programs.

Briefly, locus of control is a belief held by people regarding the degree to which they see themselves as being in control of what happens to them. A person with an external locus of control (an "external") believes that whatever happens to him is a result of luck, chance, fate, powerful others, etc. In other words, this person does not perceive himself as being responsible for either the good or bad things which happen to him. This person might be the one who feels oral hygiene is useless because he "has bad teeth," "doesn't use a good toothpaste," "has had bad dentists in the past," etc. The "internal," on the other hand, believes that he is in control of what happens — if his teeth decay, he can see that he had something to do with it; if he fails a test, he can see that it was because he did not study sufficiently (not that the teacher is poor, or the test too hard, or any other reason).

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The locus of control dimension as a personality characteristic has been the focus of well over one thousand studies within the past ten years. Externality, as a belief, has been found to be related to poor achievement in school, to greater anxiety, to less popularity, or to psychopathology. Internals have been found to do better in school, to be better adjusted, to be more popular. Further, it has been found that in situations in which self-monitoring is important, internals have fared much better than externals.

It would follow from these considerations that patients who are internally controlled would not only respond better to preventive dentistry efforts but to operative and corrective procedures as well. Were this to be the case, it might be possible to utilize personality information routinely in case planning, since knowing the locus of control beliefs of patients will result in extra effort being directed at externals and less effort required for internals. This is to say that internals could be allowed (and would respond much better to) self-control of their preventive oral hygiene programs; externals, however, will be more likely to require some outside structuring and guidance if their dental health is to be maintained.

METHOD

In a moderately large office setting, 20 patients were asked (as they appeared for service) to fill out a Dental Attitudes and Information Survey (DAIS) which, in reality, was the 20 items on the short form of the Nowicki-Strickland Locus of Control Scale for Adults (ANSIE), plus ten "fill-in items" having to do with dental habits and beliefs (Nowicki & Duke, 1974). This scale, presented in Table I, is a paper and pencil test consisting of items to be answered "yes" or "no." The test can be taken by adults with only a fifth grade reading level. Satisfactory reliability for the ANSIE has been demonstrated; with three samples of college students totalling 750 subjects, internal consistency estimates range from .75 to .81. Test retest reliability for 58 subjects tested four weeks apart was .86. Scores have not correlated with social desirability or intelligence. Tests were not scored in the dental office, but by the senior author in another setting. Only after all patient ratings had been made in the office were ratings and scores brought together. This was done to avoid the possibility of biasing the ratings of patients.

Cooperation and progress ratings were made by a dentist (B.C.) and a dental auxiliary. These were made on each patient,

TABLE I DENTAL ATTITUDES AND INFORMATION SURVEY (DAIS)

| YES | NO | |
|-----|----|---|
| | | 1. Do you believe that you can stop yourself from catching a cold? |
| | | 2. Do you believe that brushing your teeth really matters? |
| | | 3. Are some people just born lucky? |
| | | 4. Are you often blamed for things that just aren't your fault? |
| | | 5. Do some people have "good" teeth and others "bad" teeth? |
| | | 6. Do you believe that if somebody studies hard enough, he or she can pass any subject? |
| | | 7. Do you feel that most of the time parents listen to what their children have to say? |
| | | 8. Have you ever refused to follow a dentist's advice? |
| | | 9. Most of the time do you find it hard to change a friend's (mind) opinion? |
| | | 10. Do you think that cheering more than luck helps a team to win? |
| | | 11. Do you believe that some dentists are better than others? |
| | | 12.Did you feel that it was nearly impossible to change your parent's mind about anything? |
| | | 13. Have you picked your dentist carefully? |
| | | 14.Do you feel that when you do something wrong there's very little you can do to make it right? |
| | | 15. Do you believe in saving a tooth no matter what? |
| | | 16. Do you believe that most people are just born good at sports? |
| | | 17. Are most of the other people your age and sex stronger than you |
| | | are? |
| | | 18. Do you believe that using dental floss can help reduce decay? |
| | | 19.Do you feel that you have a lot of choice in deciding whom your friends are? |
| | | 20. Have you ever had a good luck charm? |
| | | 21. Do you think that eating too many sweets can cause cavities? |
| | | 22. Have you felt that when people were angry with you it was usually |
| | | for no reason at all? |
| | | 23. Do you believe that when bad things are going to happen they just are going to happen no matter what you try to do to stop them? |
| | | 24. Are you the kind of person who prefers to make his or her own appointments rather than be reminded? |
| | | 25.Do you think that people can get their own way if they just keep trying? |
| | | 26. Do you feel that when somebody your age wants to be your enemy, there's little you can do to change matters? |
| | | 27. Do you feel that what the dentist does often has little to do with your feelings and wishes? |
| | | 28. Do you feel that it's easy to get friends to do what you want them to do? |
| | | 29. Do you feel that when someone doesn't like you, there's little you can do about it? |
| | | 30. Most of the time, do you feel that you have little to say about what your family decides to do? |

independently, after 15 weeks. Patients were rated on a scale from 1 to 10 with (1 representing very poor cooperation and 10, excellent cooperation). The inter-rated reliability coefficient was .88.

RESULTS AND DISCUSSIONS

Subjects were divided into "good" and "poor" patients on the basis of a comparison of mean ratings. Mean locus of control score for poor patients was 7.20, (S.D. = 2.54), for good patients. 4.60 (S.D. = 2.00). A t test resulted in a value of 2.45 (18 degrees of freedom) p < .05. Thus, the poor patients were significantly more external than the good patients. According to the theoretical considerations stated earlier, this finding is in support of the idea that it may be possible to arrange differential treatment of patients on the basis of personality. The poor patients in the current sample were noncooperative; they did not follow the instructions of the dentist; they missed appointments; they generally appeared to be non-self monitors. Were it to have been possible to identify them earlier in their treatment as externals, special considerations and preparations may have been made for their care. For example, the external patient might be asked to keep a diary of oral hygiene procedures performed daily between visits and to bring this diary for the dentist's perusal at each appointment.

For children, other systems might be worked out wherein parents are asked (as external powers) to administer stars or other small rewards for successful completion of preventive techniques. On the other hand, this extra effort would not be necessary for the internal patients who theoretically and actually are self-controllers. These patients ("the good patients") in the current study would be more content and more likely to follow dental instructions if they are "given their own head," so to speak. Internals enjoy being in charge of what happens to them and easily perceive the relationship between good oral hygiene and dental health. They, therefore, would not require as much structure as the externals.

Following cross-validation in various settings, it is believed that locus of control, as an easily measurable personality dimension, may be useful in the early identification of problem patients. Further, the identification of the "internals" can allow the dentist more time to deal with the person with this extra encouragement and supervision. Further application of the DAIS as introduced here may also be found in improved recall systems. To be specific, internals tend to prefer to direct their own behavior and they reject

any attempt to gain control of their appointment setting. Externals, on the other hand, would seem to be most comfortable with a more directive approach to recall. For example, a recall card sent to an internal might indicate that six months have passed and that the dentist suggests that when the patient would like to, he or she should call for an appointment (leaving control for the appointment in the patient's hands). For externals, the recall notice may be more direct, eg, "We strongly suggest that your appointment be made during the week of..." These possibilities are being tested in the junior author's office and will be the focus of a forthcoming report; preliminary results, however, are most encouraging.

The application of psychological principles and understanding of personality and behavior has lagged far behind progress in other areas of dentistry. It is obvious, however, that as no two dental problems are exactly alike, no two dental patients are exactly alike, and any method for increasing the understanding of dental patients can only serve to further enhance and improve the quality of dental care. There have been few attempts to consider patient personality in treatment, but as this and past studies have shown, this approach is certainly viable.

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Two recipients of the "Distinguished Alumnus Award" of the Baylor Dental Alumni Association are shown displaying their plaques. They are Dr. L. M. Kennedy (left), president of the American Dental Association, and Dr. P. Earle Williams, president of the American College of Dentists. Dr. Dan Peavy (right), president of the Baylor alumni organization, made the presentation.

(Continued from page 128)

Brigadier General Jack Pollock, deputy commander of the U.S. Army Health Service Command, was recently honored by the U.S. Army — Baylor University Alumni Association for his contribution to the field of health care administration, by being made an honorary member of the Alumni Association.

Robert J. Nelsen, executive director of the College, has been reelected a member of the National Council on Radiation Protection and Measurements.

Theodore C. Levitas of Atlanta, Georgia was elected President of the American Academy of Pedodontists at its recent meeting in New Orleans. J. Sanders Pike was named president-elect, and Gordon H. Rovelstad was elected vice-president. Serving on the Academy board of directors are Kenneth C. Troutman of Richmond, Virginia; Thompson M. Lewis of Seattle, Washington; and Stephen J. Moss of New York. Donald H. Bowers of Columbus, Ohio is editor of the Academy Newsletter.

- P. P. Sahmi of New Delhi, India has been re-appointed Honorary Dental Surgeon to the new president of India. He is also an honorary member of the President's Body Guard Club.
- I. Lawrence Kerr of Endicott, New York was the commencement speaker at the graduation ceremonies of the University of Oregon School of Dentistry in June.
- **Harold M. Fullmer,** associate dean of the School of Dentistry of the University of Alabama is the new president-elect of both the International Association for Dental Research and the American Association of Dental Research.
- W. Harry Archer, distinguished professor of the School of Dental Medicine, had confirmed upon him by the chancellor and Board of Trustees of the University of Pittsburgh the honorable title and status of Emeritus in recognition of his scholarly contributions in teaching, writing, and service to international dentistry.



Dr. Jerel N. Owens, recent graduate of the School of Dental Medicine, University of Pittsburgh, who received the American College of Dentists award for being selected as the 4th year student best representing the ideals and principles of the College, being congratulated by Dr. H. Cameron Metz, Jr., (center), Chairman of the Western Pennsylvania Section, American College of Dentists, and Dr. Milton E. Nicholson (left), Secretary-Treasurer.

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