MEMORANDUM

SUBJECT: Recognition of Specialists in Other Fields

FROM: Dr. Edward L. Turner, Secretary
Council on Medical Education and Hospitals
American Medical Association
535 North Dearborn Street
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DATE: June 18, 1954

At the December, 1953, meeting of the Board of Trustees of the American Medical Association, the Committee on Specialists in Other Fields indicated that it believed the subject of the relationship of American medicine to professional nonmedical groups in the health field was of such importance that a small ad hoc committee could not do justice to the problem. The Committee recommended that the Board of Trustees and the Council on Medical Education and Hospitals and its staff, in association with the appropriate councils and bureaus of the American Medical Association and relevant professional groups undertake a detailed investigation of all facets of the problem and that following the receipt by the Committee of a report from the Council on its findings and recommendations, the Committee on Specialists in Other Fields will submit its recommendations to the Board of Trustees. The Board concurred in this recommendation of the Committee and reported to the House of Delegates in December, 1953. Following adoption of the report by the House of Delegates, the Board of Trustees voted to request the Council on Medical Education and Hospitals to study this matter and to report back to the Board at the earliest opportunity as to a possible plan of procedure, the recommendation of the Committee including personnel needs, cost, and so on.

The Council on Medical Education and Hospitals has been making a careful analysis of the various facets of this problem and recognized the need for aid from allied professional organizations. An expression of

This memorandum is being published with the consent of Dr. Edward L. Turner.
opinion on the part of various medical organizations will be of great assistance to the Council in formulating the recommendation it should prepare for the Committee on Specialists in Other Fields. The following material has been prepared in order to present the general trends and to seek your counsel and advice.

The rapid increase in knowledge over the past three decades has led to the necessity for the development of many subgroups or specialty areas in what were formerly covered by larger general fields of interest in medicine. For example, in the field that was once just medicine we now recognize, besides the general internist, allergists, neurologists, psychiatrists, dermatologists, gastroenterologists, cardiologists, chest specialists and other experts. Similarly, in the surgical area there are now such specialties as thoracic surgery, urology, neurosurgery, plastic surgery, proctology, ophthalmology, otolaryngology, and orthopedics in addition to the general surgeon. Even in some of the narrower specialty areas such as radiology, we now see further subdivision such as has been brought about by the recognition of diagnostic roentgenology and therapeutic radiology.

In some of the specialty areas in other fields essential to adequate modern diagnosis, prevention, and therapy, similar increments of knowledge have been taking place which have necessitated varying degrees of specialization and widespread recognition of the need for such developments.

The area of microbiology may be utilized as a specific example of one of the fields that has seen great advances during recent years in its various disciplines such as (a) virology, (b) mycology, (c) bacteriology, (d) parasitology, and (e) immunochemistry. The rate of progress in this over-all field has been tremendous, and the field of microbiology in general is a very broad one, encompassing many other disciplines than medicine. Medical microbiology, on the other hand, has a unique place in the diagnosis, prevention, and therapy of disease, with all its areas of concern constantly assuming roles of ever-greater importance.

In order to qualify as a competent medical microbiologist it is necessary that an individual have the broad background and training of general microbiology essential to adequate understanding of this field. Since in order to obtain such training it is necessary that a potential medical microbiologist spend a long period of time working toward a degree that will give him authoritative recognition in his field, the question of the Ph.D. degree versus the M.D. de-
gree assumes considerable significance and brings up the main reason for focusing attention on this problem at the moment.

An increasing number of specialty areas closely allied to medicine and requiring the equivalent of Ph.D. training are either seeking or have already sought some form of recognition or endorsement through the development of independent American boards or sub-specialty boards in their fields. Suggestions have been made in regard to the establishment of a new American Board of Microbiology and an American Board of Medical Microbiology in recent years. In the course of these efforts, certain problems have been encountered in regard to the possible relationship of such boards with medicine. The problem now confronting us is whether a mutually satisfactory solution to this situation can be developed that might well serve as a pattern of possible future developments in specialty areas requiring a similar high standard of training for eligibility as a specialist.

Using the microbiologists as an example again, it should be pointed out that if a microbiologist devotes adequate time to his basic training in this field so that he can qualify as a specialist in medical microbiology, the time spent in completing the requirements for a Ph.D. degree is essentially the equivalent of that required in obtaining an M.D. degree. Although there are certain obvious advantages for a medical microbiologist to have a full M.D. background in addition to his Ph.D. training, the question may be raised as to whether in the area of diagnosis which he covers the former degree in itself is or is not essential to the task he must assume. Actually, much of the time spent in certain phases of preparatory work qualifying for the degree of M.D. would be essentially wasted time for the individual who specifically plans to be a medical microbiologist. The same problem confronts those who might be primarily concerned with areas such as biochemistry. In view of the increasing time demands for training in all areas today, there seems to be a very real need for recognition of the possibilities of conservation of time in preparation for activities in various special fields.

The biochemist, the psychologist, the biophysicist, the health educator, and others requiring Ph.D.-type training, and who are to become part of the over-all team approach to medicine today, fall into a category somewhat similar to that of the microbiologist, as has already been indicated.

It is of paramount importance that in the diagnosis and care of
patients the physician constantly remain the pivotal figure and that these various areas of activity allied to medical diagnosis, prevention, and therapy be as closely coordinated with medicine as possible. If such coordination is to be effectively accomplished there must be mutual understanding of the obligations of the various individuals representing these allied specialty fields to each other and to the patient. Such close cooperation can best be obtained through recognition of the responsibilities lying in the various areas of activity and through setting standards of the type that will render the best possible over-all end results from the standpoint of the welfare of the patients. The question may be raised, therefore, as to whether in light of the contributions which these qualified specialists in the areas associated with medicine make today in prevention, diagnosis, and therapy in cooperation with practitioners of medicine, they should or should not have some form of recognition or endorsement through recognized specialty or subspecialty boards, if their training and experience so indicates and providing they possess either an M.D. or Ph.D. degree or both. It is fairly obvious from the current trend of events that some of these groups have been seriously endeavoring to obtain endorsement for the development of such specialty or subspecialty boards during recent years. At the present time it is apparent that some will proceed to develop their own organizations in the relatively near future, with or without the sanction of the medical profession. The question can be raised as to whether it is more desirable to have these organizations proceed entirely independently or whether there might be certain mutual advantages through having close liaison with such groups and with medicine in general.

Actually, the questions that are presented in this situation seem to be relatively simple, but are deserving of very serious consideration at this time when there are constantly increasing efforts being made to set up boards in these various fields related to medical activities. Among these questions are the following:

1. In view of the importance of these specialties in other areas in the prevention, diagnosis, and treatment of disease, do you believe that the medical profession has a responsibility in assisting in developing the standards to be maintained by them?
2. If the medical profession has a responsibility in this regard, how can it best be assumed?
3. Should the Council on Medical Education and Hospitals of
the American Medical Association and/or certain other interested groups endeavor to assist in the development of certifying boards or agencies which would establish and maintain standards mutually acceptable to the Council and the specialty group?

4. What in your opinion is the best form of cooperative or liaison relationship between the medical profession and these various specialized groups?

Your cooperation in giving consideration to this problem and in sharing your views with the Council on Medical Education and Hospitals will be of great value in helping arrive at a solution in the best interest of all concerned.

Edward L. Turner, M.D.

Committee on Clinical Chemistry
The Committee on Clinical Chemistry of the American Chemical Society met at the Netherlands Plaza Hotel, Cincinnati, Ohio, on April 1 and 2, 1955. The main topics under discussion dealt with legislation as it pertains to clinical chemistry. John G. Reinhold, past president of the Association, was present as Chairman of the committee.

New Editor of Standard Methods
Dr. David Seligson, director of the Division of Biochemistry, The Graduate Hospital, University of Pennsylvania, was appointed editor-in-chief of Standard Methods for Clinical Chemistry, a laboratory manual sponsored by the Association and published by the Academic Press, New York. The first volume appeared in 1953, and Volume II is now in preparation. Dr. Seligson’s appointment on March 15, 1955, is for a five-year period.

New Sections
Greater Kansas City
The Executive Committee of the American Association of Clinical Chemists has approved a Greater Kansas City Section. The charter date for this section was February 16, 1955.

Texas
The Executive Committee of the American Association of Clinical Chemists has approved a Texas Section. Temporary officers appointed at the organizational meeting were: President pro tem, Major J. A. Rivera of Fort Sam Houston; Secretary pro tem, Dr. J. W. Goldzieher of San Antonio. The charter date for this section was April 8, 1955, and is the ninth local section to be established.
REPORTS FROM THE SECTIONS

Metropolitan New York

A. Saifer

A symposium on bone and calcium metabolism was held on Tuesday, April 26, 1955, at Blumenthal Auditorium of the Mount Sinai Hospital. Franklin C. McLean of the University of Chicago spoke on "Homeostatic Regulation of Calcium Ion Concentration in Blood." Daniel Laszlo, Montefiore Hospital, presented "New Tools for the Study of Mineral Metabolism in Man." Albert E. Sobel, Jewish Hospital of Brooklyn, was symposium chairman. A general discussion followed the formal presentations.

The following slate of officers was elected for the year 1955: Chairman, Julius Carr, The Mount Sinai Hospital; Vice-Chairman, Harry Goldenberg, Hillside Hospital; and Secretary-Treasurer, Abraham Saifer, Jewish Chronic Disease Hospital. Members of the Executive Committee are Charles L. Fox, Jr., I. J. Greenblatt, Alexander I. Greenstein, Bernard Klein, Mary H. McKenna, and Kurt G. Stern.

Washington-Baltimore-Richmond

Marlan E. Webster

One of the largest exhibits devoted exclusively to medical research instruments in this country was held at the National Institutes of Health, Bethesda, Md., May 2–5, 1955, under the sponsorship of the manufacturers whose products were exhibited.

A symposium on "Recent Developments in Research Methods and Instrumentation," sponsored by the Washington-Baltimore-Richmond Section of the Association, the Washington Section of the American Chemical Society, the Instrument Society of America, and the Society of American Bacteriologists was held concurrently.


There was an interesting demonstration of new apparatus, with many of the exhibited instruments in actual operation. The exhibit, which has been an annual event for the past five years, attracted a wide representation of research workers and other personnel from medical installations, pharmaceutical houses, universities, and hospitals in various parts of the country, as well as visitors from the many research installations in the Washington area.

The third meeting of the 1954–55 year was held on March 3, 1955, at the National Institutes of Health. A symposium on recent advances in hematologic technics
was presented by Lt. Col. Joseph H. Akeroyd, who discussed the development and recent advances in the Coomb's test; Dr. William H. Crosby, Jr., who commented on the difficulties encountered in the standardization of methods for clinical hemoglobinometry and suggested the use of the Drabkin technic; Naomi Benjamin, who discussed the methods, errors, and reason for determination of red cell indices; and Dr. William A. O'Brien, who reported on the various technics for the determination of blood volumes.
Code of Ethics of the American Association of Clinical Chemists, Inc.

Approved and Passed by the National Executive Committee, September, 1953

ARTICLE I: DEFINITIONS AND GENERAL CONSIDERATIONS

What Constitutes Clinical Chemistry

Section 1

Clinical chemistry is that branch of chemistry which deals with the composition of the secretions, excretions, concretions and fluids of the human body in health and disease, and the chemical composition and metabolism of cells and tissues. Also the search for the presence of substances (or their derivatives) given for diagnostic or therapeutic reasons and the search for poisons (or their derivatives) are properly included in the field of clinical chemistry.

What Constitutes a Clinical Chemist

Section 2

Any individual equipped by education and experience to engage in the practice of clinical chemistry as defined above shall be considered a clinical chemist.

Responsibility of the Clinical Chemist

Section 3

The profession of clinical chemistry, as an adjunct to the profession of medicine, has as its ultimate responsibility the welfare of the public. The clinical chemist shall use to the best of his ability his scientific skills and knowledge to the benefit of all men without regard for racial or religious origin.

Education and Experience

Section 4

The clinical chemist shall have as his goal the acquisition of the best available education and experience in chemistry. He shall strive to constantly enlarge and improve his knowledge.
Relationship to the Medical Profession

Section 5

The clinical chemist shall deal with the medical profession at all times at the highest professional level. The compensation by the patient for chemical services shall include no rebates or commissions to any persons for solicitation or referral of analyses.

Relationship to the Patient

Section 6

The clinical chemist shall perform no services to the patient except on advice or prescription from any licensed practitioner of the medical arts. All reports and discussion of chemical findings shall be only between the chemist and the physician in charge.

ARTICLE II: PUBLICATION, PATENTS, AND ADVERTISING

Dissemination of Scientific Information

Section 1

The clinical chemist shall freely discuss with his fellow chemists and with scientists in related fields, advances in the science of clinical chemistry. To withhold information for personal gain shall be considered unethical. This Section shall not apply to information classified by a government agency for reasons of national security.

Publication of Research Findings

Section 2

An obligation to publish, after critical evaluations, new knowledge pertaining to the science of clinical chemistry obtained through research or other observations, shall be acknowledged.

Advertising and Publicity

Section 3

The clinical chemist shall not use, or allow his name to be used, in advertising directed to the public. Professional announcements shall be brief, dignified and consistent with accepted customs in medical and allied fields. The clinical chemist shall not seek publicity, yet he shall recognize the right of the public to have access to information concerning the public health and welfare. Publication of a scientific article or book
shall precede the release of such material to the lay press. Because of the
danger of misinterpretation, he must use restraint and great caution in
releasing information having diagnostic or therapeutic implications.

Patents and Commissions

Section 4

The application of discoveries and developments in clinical chemistry,
directly effecting public health and welfare, should not be limited by un-
reasonable restrictions for personal gains to the clinical chemist.

ARTICLE III: OBLIGATIONS AS A CHEMIST

Accuracy of Chemical Analyses

Section 1

The clinical chemist shall have as his goal the attainment of the highest
precision and specificity that existing procedures permit.

Reporting of Significant Figures

Section 2

The analyst shall not report figures or decimal places that lack sig-
nificance.

Critical Survey of Methods

Section 3

It shall be considered inadequate practice for a clinical chemist to
use any procedure that has not been adequately studied in his own labora-
tory.

Replicates and Recoveries

Section 4

The systematic use of controlled procedures, such as replicates and re-
coveries, shall be considered indispensable to good practice.

Results of Uncertain Magnitude

Section 5

The clinical chemist shall not report any result of uncertain magnitude
of error, unless this uncertainty is clearly made known to the recipient of
the report.
ARTICLE IV: INTERPRETATION OF RESULTS

Relationship to the Physician

Section 1

The clinical chemist shall, at the request of the physician in charge of the patient, outline to the physician the significance of any chemical findings, and suggest further determinations that would aid the physician in making a diagnosis or prognosis. The clinical chemist shall under no circumstance transmit to the patient either the results or the interpretation of the results. The clinical chemist shall receive no compensation from the patient for interpretation of results to the physician.

ARTICLE V: THE CLINICAL CHEMIST AS AN INDIVIDUAL

A Scientist at All Times

Section 1

The clinical chemist shall conduct himself as a scientist at all times.

High Regard for Medical Profession

Section 2

The clinical chemist shall hold in high esteem the profession of medicine, to which he is an adjunct.

Relationship with Analysts

Section 3

The clinical chemist shall carefully supervise the analysts working in his laboratory. He shall train these workers to the best of his ability, encourage them to attain the highest professional competence, and teach them by word and example to adhere to the ethical standards herein outlined.

Publications and Collaborators

Section 4

The clinical chemist shall contribute as much as possible to research and advancement of his specialty. He shall encourage those working in his laboratory to do likewise. He shall accept as collaborators whenever possible the junior members of his staff and encourage these members to contribute to the science of clinical chemistry. He shall to the best of his
ability assist physicians and other scientists by fully collaborating in their efforts to advance medical science.

ARTICLE VI: CONCLUSION

The ethics of the clinical chemist shall at no time be inferior to the standards long prevailing in the medical profession. The outline here presented can act only as a general guide, and shall be periodically reviewed and revised. It is for the individual to judge his professional conduct in the light of his obligation as a scientist to serve mankind.