Editorial by Dr. Wallis Concerning HOD Defeat of Specialty Certification

After the 1986 rejection by the AOA House of Delegates, an editorial by Dr. Wallis, the Executive Director of the National Board of Examiners in Optometry (NBEO,) appeared in the AOA Journal.

This editorial offers a good overview of how specialties and certification of specialists developed in medicine and why he believed it was a mistake for the HOD to have rejected specialty certification and why it will eventually take place.

Competence assessment in optometric specialty certification: the missing element[a]

Norman E. Wallis, Ph.D., O.D.[b]

Introduction

Almost 20 years ago, one of optometry's best known prognosticators, Henry B. Peters, presented a paper[1] on the matter of optometric specialties that is remarkable in its relevance to the current state of the profession. While some of Dr. Peters' projections of manpower needs may be open to question, and while his crystal ball was not clear enough to accurately predict the current "entrepreneurial" rush taking place in most health care delivery professions including optometry, his opinions and observations on the issue of specialty certification are no less critical now than then. His model is still valid and his concerns are still here — perhaps even more so.

Yet, in spite of the work of three AOA project teams (1968,[2] 1973,[3] and 1984[4]) and a Commission on Optometric Specialties (1986[5]), the profession, as represented by the recent decision of the House of Delegates of the AOA, has yet to embrace the concept that specialties in fact exist within optometry.

However, whatever the profession's ultimate response to the growing evidence that some form of specialization continues to evolve at various levels of sophistication and definition, there will eventually be a need to "certify" that a member of the profession who purports to offer "specialized" care to the public is indeed qualified and can be identified in an honest and meaningful way.

Specialty evolution

A great deal can be learned by studying what has evolved in other professions, and within different national health delivery systems. Of historical interest is that the first formally recognized specialty board in medicine in the United States was in ophthalmology. Originally formed in 1917 as the American Board of Ophthalmic Examinations, it changed its name in 1933 to the American Board of Ophthalmology. At the time of its inception, other specialty areas were being identified. These usually arose from a group of practitioners who identified a particular area of clinical interest, developed an association or academy, published a journal, and ultimately established a board for examinations in the new sub-discipline. Early in the development of medical specialties, the need for some national coordinating body was recognized, and in 1934 the Advisory Board for Medical Specialists was created, and a constitution and bylaws adopted. From this point on, official recognition of medical specialty boards in the U.S. was based on compliance with the policies and procedures of the Advisory Board and the American Medical Association (AMA) Council on Medical Education. In 1948 a more formal relationship with the AMA was established, and in 1970 the Articles of Incorporation of the Advisory Board were amended to form the American Board of Medical Specialties (ABMS), with a full-time executive director and headquarters in Illinois. Thus for all new specialties, and the growing number of sub-specialties that have evolved from already approved specialties, the ABMS is the regulating body. ABMS is structured as a "federation" of the various medical specialty boards, and as such, representatives from these boards are involved in all decisions with the associated and inherent interpersonal political complications.

During this same period a different model of specialty identification and approval evolved in Canada. From the beginning of specialty certification, the Royal College of Physicians and Surgeons of Canada (RCPSC) was accepted as the recognized "umbrella" organization to control the development and recognition of specialties, as well as the education of all specialists in Canada. Given the differences in the health care delivery systems that have evolved to date in our two countries, even though we share the same continent, these two models probably serve each respective health care system quite well. In the U.S., we have a fractionated and complicated "fee-for-service"/"free-for-all" medical system, supervised by a federation of different competing factions at times; in Canada, a national health system

Dec. 1987 58(12)

exists with significant government control and planning, and a national umbrella organization controls the manpower needs of the specialties and their services.

While other major health disciplines, such as dentistry and podiatric medicine, are of interest and could be reviewed, it is apparent that the evolution of specialties in all disciplines is a function of the history of the discipline, serendipity, and politics. This leads us to optometry and the AOA Commission on Optometric Specialties.

Through the work of three task forces and considerable heated debate on the floor of the House of Delegates of the AOA, a Commission on Optometric Specialties was empowered to develop recommendations for the orderly development of specialties, if and when it became necessary within U.S. optometry. There is a compelling logic to the development of a "national plan" by our national organization. It allows the profession, as represented by the largest membership organization in U.S. optometry, to have input and control in the formulation of policies and procedures for such an evolution when the time is "right." In fact, this was one of the original proposals of Dr. Peters in 1967, even though the other key elements representing education, accreditation and credentialing have been left out of this process in any meaningful way so far.

The Commission on Optometric Specialties, in my view, is to be congratulated for the logical and thoughtful way it has evolved its most current position of a two-stage recognition process for both optometric specialties and optometric specialty organizations. The mix of talents and experience represented by that commission has been sufficiently broad-based and mature to utilize and review experiences of other disciplines. Further, the documents that the commission has generated to define the process are compelling in their simplicity and logic. As a first step, the commission requests that the profession itself come forward and demonstrate that so called "specialties" exist by being compared against eight reasonable criteria. In fact this basic approach is common to all the existing specialty overview organizations, including the ABMS and the RCPSC, which have criteria for the recognition of specialties and subspecialties of existing disciplines. Once the "specialty" has been recognized by the commission, another set of criteria would be used to compare an application from an organization for recognition as *the* credentialing board in this new "specialty." Obviously, in any decision involving human beings, significant judgment factors come into play, and consequently vested interests can try to exert pressure so that their views are accepted by the majority of the decision-makers.

In spite of this good start, the future of specialty certification is now open to speculation, because of the action of the AOA House of Delegates in San Diego, in June 1986, which voted *not* to implement the commission's plan. I leave to people closer to the action to resolve this problem, but fully subscribe to the view that if and when the AOA House of Delegates feels that the profession (and presumably the public is included in this decision) is ready for optometric specialties, then the plan that has been proposed should be implemented.

Specialty certification

Putting aside all politics, organizational concerns, discipline differentiation and other major impediments, the most critical element that has not yet been given a great deal of consideration, even in the well conceived plans of the commission, is how the profession should expect competency of specialty knowledge and skills to be *assessed* and *documented.*

By its very evolution and nature the concept of specialty certification suggests that individuals who identify themselves as "specialists," either through formal recognition or by self-proclamation, presumably are confident that they know more and can do more in a particular area of the health field than "generalists." This is the perception of the public, and is the opinion of third-party payors, particularly in Canada, where only board certified specialists can be reimbursed for certain designated medical specialty services. In fact, a number of U.S. state medical boards issue limited practice licenses to people on the basis of their specialty qualifications. Given the turmoil of the American health care delivery system, the evolution of various cost containment approaches and organizational structures, and the freedom we enjoy to promote and market any number of entrepreneurial medical business relationships, it is quite likely that some method of objective evaluation of credentials will be necessary in the future. This is particularly likely if a practitioner or organization expects to receive payment from third parties for those clinical services rendered that reasonable people outside of optometry believe require "special" knowledge and clinical skills not readily available to the public by an optometric "generalist."

So how does one measure competence, at any level? This is a problem that the optometric state boards have wrestled with since the first law was enacted defining the profession in 1901 in Minnesota. The state boards of all licensed professions act as gatekeepers to control access to "practice" on the public in an effort to protect the health and welfare of their residents. Given the sovereignty that statehood implies, it is likely that states will continue to zealously guard their rights to regulate practice.

In the development of licensing laws, and the qualifications for initial entry into the profession, the profession and the public seem to have settled on a fairly consistent model for purposes of checks and balances:[6] 1) graduation from an approved educational program, and 2) independent assessment of compe-

"What is required is the identification and definition of another higher level in the hierarchy of knowledge and skills, in a circumscribed clinical area within the broad scope of optometric practice."

tence through external (i.e., non-college or university based) examinations. With these two elements successfully completed (i.e., education and external assessment), and with any other administrative requirements that might exist (e.g., residence, age, and payment of fees) in order, new practitioners, or practitioners migrating from one state to another, are given the privilege of practicing their profession.

This model has served the profession well over the years. Optometric education has expanded, particularly since the mid-1960s with the infusion of federal money through the original Health Professions Educational Assistance Act which provided the resources to upgrade faculties, facilities and curricula. At the same time, state boards have increased their expectations of candidates for licensure, because of the expansion in scope of practice of optometry brought about by changes in the optometric practice statutes.

Some might argue about the need for this independent assessment of competence. After all, haven't the graduates spent 4 years taking tests, and don't they have the doctor of optometry degree to "prove" their competence? Unfortunately, not all graduates of all optometry schools have the necessary complement of skills to safely practice the profession. This is not exclusive to optometry, and is true of other disciplines in the health professions. State boards, therefore, become the mechanism to determine whether or not the person they are considering giving the privilege to practice has reached the competency levels expected in that state.

What is this competency level that is expected? It is *entry-level* competence — essentially a base level of competence below which it is doubtful that the person being assessed could practice "safely" on the public. Entry-level assessment at the point of licensure is nothing more than making a judgment to assure the public of the state that the candidate for licensure, *at that point in time*, has the basic knowledge and skills necessary for "safe" practice. It is *not* intended to identify other levels of competence or ability. In most states, with the exception of almost universal mandatory continuing education (which is a separate issue), that is where the matter ends!

If one subscribes to the concept that a "specialist" is a practitioner who is first a generalist, and then for whatever reason, and in whatever manner, develops additional advanced knowledge and skills in a subdivision of the general discipline, then the same model for competence assessment used for licensure, i.e., entry-level competence, could very well hold for specialty certification, i.e., a higher, specialized, competence. One would expect documentation of additional educational and/or clinical preparation, along with proof of a higher level of knowledge and skills through some form of assessment mechanism.

Competence assessment

In the outlined model of licensure for entry-level to the profession, through the stages of educational preparation and acceptable performance on challenge examinations, there are some implied general psychometric principles that must be taken into account if the system is to be of sufficient quality to stand up to public scrutiny. This system for assessment of entry-level competence has been in operation in optometry since 1901. As we look at the key elements in certifying optometric specialties, it is not unreasonable to learn from those years of experience and effort. What is required is the identification and definition of another higher level in the hierarchy of knowledge and skills, in a circumscribed clinical area within the broad scope of optometric practice.

The first of these elements is easier to deal with than the second. The educational requirements for becoming eligible for the external assessment of specialty level competence can probably be readily agreed to by those members of the profession that are recognized to have amassed their own expanded base of knowledge and skills that has evolved into an optometric specialty. I am sure that the profession-at-large would agree with the perceptions of these leaders and experts regarding the development of standards of eligibility. I cannot conceive of anyone believing, for example, that a new graduate from optometry school, who by definition is trained to be at the entry-level of skills for the practice of optometry, could be even considered eligible for specialty certification! But with the continuing development of residency training programs, the accumulation of concentrated clinical experience in practices devoted to particular areas of optometry, and methods of self-study and personalized learning, the necessary basic and clinical "education" can be reasonably evaluated and an appropriate level of "eligibility" determined. This assessment of eligibility for initial licensure is done by the state boards, and the universal standard that has been accepted at the entry-level is proof of graduation from a professional program

accredited by the AOA Council on Optometric Education.

The development of the second element in this model, the stringent and external assessment of competence, is much more complex and often seriously misunderstood, or even worse is underestimated in importance by most practitioners and educators.

There are four sub-skills that need to be assessed for an overall decision on practitioner competence: cognitive skills, psychomotor skills, communication skills, and affective skills. Each of these four components of competence can be assessed through one of two methods: cognitive skills (knowledge) through a written assessment; and psychomotor, affective, and communicative skills through a clinical skills assessment (known to most practitioners as a "practical").

While it took only a few words to write this statement, let me emphasize that to execute this properly is a complicated, time consuming and expensive matter. For example, the National Board of Examiners in Optometry, which acts as the national testing agency for approximately 44 of the 54 licensing jurisdictions and prepares national standardized written examinations designed to assess knowledge skills at the entry-level, operates with an annual budget of almost $1 million. To develop and administer one single multiple-choice format examination of 150 test items in a specific area of current practice at the entry-level on an annual basis, for example ocular pharmacology, costs approximately $50,000. This paper is not the appropriate forum to discuss the specific elements in the methods and controls used by the National Board in test construction and scoring. However, the point should be obvious that for state boards to use the results of these examinations in lieu of preparing their own, sound test construction principles must be applied, and these are very costly to implement. These same psychometric principles are just as applicable and necessary in optometric specialty certification!

First, the *validity* of the written examinations, i.e., matching the content of the examinations with the expected knowledge and skills required in the practice of the specialty area, is crucial for the examinations to evaluate competency. Second, the *reliability* of the measurement must be established so that a candidate's performance score is a good representative estimate of the level of basic knowledge of that individual at the time of the examination.

The goal of paper and pencil (written) knowledge-based examinations is to sample as much as possible from the broad domain of the discipline, in the shortest period of time, with the largest number of possible data points. By doing so, psychometric measures can then be used as quality controls on the examinations to assure fairness. The judgment as to whether or not the person has met the predetermined standard in a reliable manner based on this sample is another critical decision. The National Board staff, committees, consultants and item writers, a total of approximately 200 people, spend countless hours involved in development, administration, scoring and review each year; hence the complexity of the process, and the associated costs.

What of the other three elements of competence assessment? These competencies *cannot* be assessed through written examinations. Only from observable performance on examinations, with trained examiners utilizing a standardized and psychometrically sound approach, can the examining board — be it a state board for entry-level or a specialty board for higher certification — assure itself that the required clinical skills have met the predetermined standards. The same statistical and psychometric requirements hold for practical examinations as they do for written examinations, albeit based on different premises and scoring methodologies. Again, the development and administration of standardized clinical skills assessments is an expensive proposition.

The International Association of Boards of Examiners in Optometry (IAB), the federation of state licensing boards in optometry, has been working for several years with its member state boards, and with consultants from the National Board, to develop a standardized clinical skills assessment mechanism. State boards, either individually or grouped together in regional boards of examiners, could then use this to administer a more valid, reliable, and fair examination for the candidates, and the public that relies on state boards' decisions. Again, many hours of subject matter and psychometric consultation have been necessary to move even partially in this direction.

It is my view that the development of specialty certification assessment instruments must be held to the same exacting standards of examination preparation as is the case at the entry-level decision, for the same reason: If optometric specialty certification is to have meaning to the public, in the same way that licensure does to protect the public, then the same quality in the assessment process must be expected.

Professional evaluation

Has this critical element in specialty certification been evaluated by the profession? Unfortunately, no! Even the fine documents of the Commission on Optometric Specialties, and the logic and completeness of its presentation, do not adequately address the issue of *measurement of competence.* The criteria published include statements requiring any organization wishing to be recognized as *the* board for certifying specialists in an already approved specialty area to meet certain standards in its ability to construct and administer valid and reliable competence assessment programs. But no specific standards have been enumerated against which the

commission, if and when it gets to this point, can assess the applicant organization's *own* competence at competency assessment.

I am convinced that the typical leader in the "special interest areas" (to use the term currently preferred within the profession), or educator for that matter, who is likely to deal with developing performance criteria in optometric specialties, totally underestimates what is involved in this task. Without exposure to the subtle issues involved, it is unreasonable to expect leaders in other areas to adequately conceptualize the considerations involved. I say this from a personal perspective having spent 16 years in optometric education and 6 years with optometry's national testing agency.

Unfortunately, the evolution of the concept of "special interest areas" in practice avoids an honest understanding of the critical issues involved in competence assessment, which has to be the most important concern of the profession in identifying a specialist. Even with AOA's recent supervising role in developing documents that lay out a reasonable and workable plan for the ultimate recognition of specialties, this issue is not addressed in a forthright manner.

State boards have learned, and are continually reminded, that arbitrary decisions on a person's "right" to practice can lead to litigation. Considering the enormous costs involved in graduating from an optometric college, and the assumption of many individuals that an academic degree confers a "right" to practice, all state boards are aware of the need to be able to defend their position of not granting a license on the basis of failing an examination. The National Board's examinations allow subscribing state boards to be able to make a defensible decision on the cognitive skills needed for entry-level competence. And the evolving standardized clinical skills assessment examination model of the IAB will make the decision-making in clinical practical examinations more valid and reliable, and hence more defensible. While it may not be likely that the initial rejections of applicants for specialty certification on the basis of having failed a set of written and/or practical examinations will lead to litigation against the specialty board, the changing face of health care competition may hasten the day for this to occur. If a candidate could show that the decision to fail was not based on sound testing principles, and if third-party payment schedules for clinical services were related to specialty certification at some point in the future, this scenario may become a common one. Hence from the very beginning, any optometric specialty board *must* be able to defend its decisions on objective performance criteria derived from psychometric standards, not on intelligent practitioner "insight."

The future

The debate continues to smolder within the structure of the AOA, and the special interest groups within optometry continue to provide their own credentialing programs. Certainly the world of optometric practice will not come to an end if nothing else happens from this point. The debate has been useful, the decisions have been fair and democratic, and the public has probably been served by the elevation of the issue as a point for discussion within the profession.

But what of the changing face of health care delivery in America, and the competing demands on optometric practice from other health-related disciplines? And what of the very pragmatic need of future optometrists to be able to practice successfully, and to look at the cost of their optometric education as a worthwhile investment in a career that provides professional stimulation as well as the opportunity to serve other members of the same species? In my view, there will be an increasing need in this tight health care market for practitioners to identify special areas of *competence* (not "interest") to attract patients, and for the doctors to have outlets for their special skills. And if they do identify themselves as having special competencies, then I believe that the profession has a responsibility to make sure that the public understands what that means.

My impression is that the ultimate driving force will not be the profession of optometry, but the market forces that are already affecting all of health care delivery. Already upon us is the era of public demand for valid identification of people who supposedly have special qualifications; third-party payors who will ultimately pay for services provided only by those who have proven competence in a special clinical area; and the evolving for-profit and corporate structures within health care delivery. From a corporate viewpoint, a planner seeking a range of clinical competencies for a highly efficient and cost-controlled environment will no doubt first look for people who can document by objective performance criteria their competence in special areas and who are willing to concentrate on these areas to meet a demand within that environment, be it an institutional setting or a panel of private practices. And it is highly unlikely that a hardnosed health planner or administrator, faced with the problems of making the corporate structure financially viable, will accept the "credentials" issued by self-serving organizations or by self-proclamation by the so-called experts themselves.

To me, even though the debate is in a holding pattern at this point, the issue of specialty certification will not go away, and it will continue to press for a logical and thoughtful plan. I only hope that when that time comes, we will be sufficiently mature and experienced as a profession to face up to the real issue of quantifiable assessment of a high level of competence being the ultimate key to the quality of the "credential" of "specialist," and a public service worthy of our profession's history. ■■