

26. Expanding the Formula: Programs for Practitioners

Paramount in our thinking should be the fact that the Academy is the graduate educational organization for practitioners of ophthalmology and otolaryngology. It is their requirements that we are here to serve and serve them we must if we are to forge ahead into the increasingly complex areas of medical education demanded by modern and future social developments. . . .

. . . The Academy knows the path it treads. It needs now to take bigger strides.

CLAIR M. KOS, 1969

MEDICAL KNOWLEDGE has increased more in the past 100 years than in all of man's history. The huge leaps in the understanding of disease processes, in the discovery of new drugs, and in the ability to treat have brought greater sovereignty over disease. Along with this have come new responsibilities for investigation, proper application, preventive medicine, and better physician education and distribution so the entire population can benefit from the most modern medical care.

Although conscientious practitioners of medicine have from time immemorial considered it their duty to remain lifelong students of their art, the rapidity with which knowledge has expanded has made it a continual challenge to close the gap between what is known and what is utilized. The increasing body of scientific knowledge and of technical procedures in diagnosis and treatment has required more structured methods for undergraduate,

graduate, and continuing education of the physician. And it has befallen the American medical profession of the twentieth century to first improve medical education, then to provide for specialty training, and perhaps not finally, to cast new programs for keeping the physician's knowledge up to date.

As a medical society, the Academy performed admirably in making contributions to all three major phases of physicians' education, but most particularly to graduate specialty training and continuing education, which were for a significant part of the century intertwined. It was once said, with reference to the Academy, that the medical societies were doing some of the best postgraduate teaching.¹ Many Academy programs were initiated at a time when continuing practitioner education meant broadly picking up where specialty training programs left off, as well as providing refresher courses and keeping the specialist abreast of recent developments.

Rapid communications systems, which helped take up some of the slack between knowledge and its application, also brought sharper public awareness of medicine, tinged with some overabundant expectations of what medicine could accomplish if properly practiced. One result has been a growing public demand for access to the best medical care possible, fed by a whole complex of social, economic, and political issues.

One facet of this demand has been a public call for quality assurance from practitioners of medicine. Traditionally, the medical profession has been a leader, not a laggard, in this area. Physician efforts to upgrade the caliber of medical practitioners during this century have probably been largely responsible for attracting public attention to the problems of educating physicians and keeping them educated. Often the profession had to work hard to dispel suspicion and apathy and generate public support for the needed programs and facilities. Across-the-board improvements in all phases of physician education raised the general level of training of the American doctor to probably the highest in the world.

By the 1960s there were rumblings about government-imposed continuing education standards for physicians, and some branches of medicine had begun self-evaluation procedures. Public scrutiny of the medical profession was being threaded through attempts to rectify inequities in the health care system.

There was concern among Academy leaders that the society had been marking time, resting on its laurels. Medical response was necessary to insistence that physicians deliver the most up-to-date medical care. Academy programs were reassessed in the light of new needs and trends in medical education.

Reports at the 1969 annual meeting from Clair Kos, the new executive secretary-treasurer,^{2(pp164-170)} from Dean Lierle, secretary for home study, and from an Ad Hoc Cur-

riculum Committee chaired by John Woodworth Henderson all suggested that the Academy might be falling short of its obligation to members and needed to formulate plans for expanded responsibility in graduate education.^{2(pp184-187)} The unanimous judgment was that the home study concept should be broadened to include a variety of educational programs for both practitioners and residents. Intersecting this line of thought was interest in the possibilities of in-training examinations, given nationally, which were new to specialty education.

In 1968, the first Annual Ophthalmology Residency In-Training Examination was conducted under sponsorship of the Association of University Professors of Ophthalmology. This was the third specialty in-training examination, preceded by ones in orthopedic surgery and neurosurgery.³ The Society of University Otolaryngologists had also expressed interest in starting one but lacked funds.

The Academy took over sponsorship of the ophthalmic examination in 1969. The valuable way in which program directors and residents (and why not practitioners too?) could deduce educational needs from the test results pushed the idea of using this assessment procedure and the almost 30-year-old correspondence Home Study Courses as springboards toward creation of programs for practitioners.

FIRST PLANS AND PROGRAMS

To frame a curriculum of continuing education programs, the Council provided for two secretaries. Dean Lierle was elected secretary for continuing education in otolaryngology. Pending constitutional revision, the secretarial post for public relations was converted to the post of secretary for continuing education in ophthalmology, and Bradley R. Straatsma was elected.^{2(pp187-188)}

Drs Lierle and Straatsma were assisted initially by advisory committees of four: in oto-

laryngology, George F. Reed, Peter N. Pastore, Michael M. Paparella, and Paul H. Ward; in ophthalmology, Robison D. Harley, Melvin L. Rubin, Robert D. Reinecke, and Bruce E. Spivey. Within a few years, more than 200 Academy members were working on the faculties and committees for various programs (Tables 12 and 13).

As projected, development of new Academy programs would be based on the old principle of providing the materials and guidance that the participant could utilize for self-teaching. Modern educational methods offered new format possibilities for home study programs as well as new techniques for self-instruction. Two important features to be built into all programs were a mechanism for self-assessment and detailed feedback to the participant. Both were considered an integral part of the educational process.

THE COURSES

The first task in both specialties was to modernize the format and expand the content of the Home Study Courses. The courses had served marvelously well their intended purpose of presenting the basic sciences to residents. For the first 15 years or so, they had proved an educational windfall for many practicing specialists who used them as refresher courses or, probably more often than not, as a supplement to the meager basic instruction they had received during their training period. Changing specialty education and practitioner requirements had somewhat outmoded this one-dimensional role.

The courses were redesigned to integrate fundamental scientific knowledge with clinical application. The new courses could be used as an introduction to the specialties, as a part of residency training, or as a means of maintaining competence. They were first offered in 1970 as the Ophthalmology Basic and Clinical Science Course and the Continuing Education Course

in Otolaryngology. Both were two-part courses divided into eight sections and normally requiring two years to complete. The ophthalmology course has since been expanded to ten sections.

These courses are the most comprehensive of the continuing education programs and serve as a central point around which other programs have been and are being developed. Both courses present what is considered vital knowledge for anyone who plans to practice or is practicing ophthalmology or otolaryngology. Course content is continually revised and updated.

Material covered in the courses is interrelated with knowledge requirements of an annual assessment examination in each specialty and with the certification procedures of the American Board of Ophthalmology and the American Board of Otolaryngology. For this reason, they are extremely valuable to residents who constitute the majority of registrants. In the long-range perspective, the courses, and their coordination with assessment procedures, could play an important role in recertification requirements in the specialties.

Self-Evaluation

During the 1970-1971 academic year, the continuing education committees also launched a type of comprehensive assessment examination by means of which practitioners and residents could evaluate the strengths and weaknesses of their knowledge as a guide to future educational activity.

IN OPHTHALMOLOGY.—In addition to the residency in-training examination, the ophthalmologists offered a separate practitioner assessment procedure called the Ophthalmic Knowledge Self-Assessment Program. First presented in the fall of 1970 and reoffered in 1971, the program drew the participation of more than 1,800 practicing ophthalmologists, or almost 25% of all ophthalmologists practicing in the

country. This was considered a most successful response. In 1972, the in-training examination and the practitioner assessment program were combined into the Ophthalmic Knowledge Assessment Program (OKAP).

Test items are built around the subject categories included in the Basic and Clinical Science Course and are designed to evaluate basic science information as well as clinical knowledge and judgment. Particularly meaningful to practitioners is a special scoring category that includes all test items concerned with vital knowledge, current information, and clinical judgment.

In 1975, the OKAP was administered in conjunction with the written qualifying examination of the American Board of Ophthalmology. Further cooperation between the Academy's OKAP Committee and the American Board resulted in one OKAP examination that is now used for residents, Board candidates, and practitioners.

IN OTOLARYNGOLOGY.—The Annual Otolaryngology Examination was inaugurated in the spring of 1971. First called the Annual In-Training Examination in Otolaryngology, but thrown open to practitioners as well (in fact, about one fifth of those taking it were practitioners³), the new name and an expanded emphasis on the practical aspects were adopted for the 1973 examination.

Questions for this assessment procedure, as well as for the Continuing Education Course and the examinations of the American Board of Otolaryngology, are derived from a pool of testing material created by a Task Force on New Materials. The Task Force, sponsored jointly by the Academy and the Board, was first assembled in December 1969 as otolaryngologists began laying out their blueprint for continuing education. It serves the important function of coordinating Academy postgraduate programs with the evaluation procedures of the Board.

FEEDBACK.—Results of both the ophthalmology and otolaryngology examinations are reported in a similar fashion. Participants receive a profile of their performance in major subject categories and a percentile comparison of their performance in relation to that of others at the same level of training or clinical experience.

The breakdown into subject categories allows residents, residency program directors, Board candidates, and practitioners to pinpoint areas of knowledge where improvement is needed. Since those taking the examinations vary from the junior resident to the long-established practitioner, it is both fair and helpful for the participant to see his performance compared with that of his peers.

For practitioners, the examinations are a private way of evaluating knowledge. Results are reported only to them, and it is hoped that the examinations will serve as a first step in planning continuing education activity.

ESPECIALLY FOR PRACTITIONERS

A diversity of educational content, a practical approach, and a maximum degree of independence for the participant have been prime considerations in styling educational programs for the practicing specialist. The goal is to offer programs that will meet a variety of professional interests and preferences and with which the practitioner will be entirely comfortable.

For practitioners, the continuing education committees have aimed at self-contained programs. Basically, this means that when the educational package arrives in the participant's mail, it contains everything from initial description of educational objectives to final faculty feedback, usually in the form of references and discussions of the principal concepts presented. All programs include a self-graded test, and feedback is often keyed to test questions.

Ophthalmology Self-Education Program

The Self-Education Program in ophthalmology got under way in May 1972 with a self-scoring examination sent to all Academy members. The purpose was to allow members to confidentially assess knowledge and invite their interest in ordering a section of the new program.

For the Self-Education Program, the eight subject areas of the Basic and Clinical Science Course were modified to meet the particular needs of the practitioner. As planned, members could receive free of charge two sections each year, which seemed a reasonable work load for the practitioner. The first-blush offering in 1972 attracted more than 2,500 requests.

In 1974, the material developed for practitioners was included in the Basic and Clinical Science Course, and the two programs were merged. Ophthalmologists in practice are encouraged to order two sections of the course each year. In this way, the busy clinician can be continually reviewing major areas of ophthalmic knowledge and can complete a review of the entire ophthalmologic spectrum every few years.

Otorhinolaryngology Self-Improvement Program

In May 1972, the first patient management problems were mailed to the 1,669 registrants for the unique Otorhinolaryngology Self-Improvement Program. The program was designed to present the otolaryngologist with a wide range of patient problems that would be encountered in clinical practice.

Included in the program each year are eight simulated cases, each of which begins with the hypothetical patient's initial complaint. The participant is challenged to correctly diagnose the condition, to institute proper treatment for the patient, and to totally manage patient care. As the participant proceeds through the various management alternatives, the results or consequences of his decisions are exposed by means

of an invisible print process. Complications that develop in the patient as a result of his decisions must also be managed.

Participants privately pit their diagnostic acumen and management techniques against those of a peer group of experts. Summaries of what is considered appropriate case management, references, and a self-scoring system are included.

Self-Instructional Packages, Otorhinolaryngology

Instructional packages, each containing a comprehensive review of one subject in otolaryngology, were introduced in 1976. As the program builds, with new packages added each year, there will be a large catalogue of prepackaged reviews from which Academy members and others may order those of particular interest or pertinence to their practice. As of 1978, there were 16 packages available that were intended for use by medical students, residents, and primary care physicians as well as by the practicing specialist.

Videotapes

The most experimental undertaking in the attempt to acquaint members with the latest ideas, information, and techniques has been the Continuing Education Television Program (CETV) in each specialty.

In 1951, a revolutionary new system called video tape recording was introduced in the television industry.⁴ The invention, whereby both audio and video were recorded on a single tape, required a good deal of further development and refinement. During the 1960s, the electronics industry came out with equipment that allowed playback of reel-to-reel videotape on a television set, but the cost, technical complexity, and lack of any standardization of equipment were overwhelming drawbacks. Teaching institutions and the federal government constituted the entire market.

Debut of the videotape cassette, U-matic format, in 1972 brought this technology into the domain of popular and individual use. Within the past few years, medicine has adopted the videotape cassette as an excellent medium for professional and patient education. The medium is still brand new, but it shows signs of promising to vastly spread the use of audiovisual education.

The Academy committees on continuing education were quick to see that the videotape cassette for the first time made audiovisual education possible on a small-scale, individual basis. The advantages of an audiovisual medium in presenting certain medical procedures and surgical techniques were obvious. Cost loomed as the only large obstacle. Videotapes would be an expensive mode of education for the Academy as producer and for the physician as consumer.

From the Academy standpoint, it was projected that the cost of a videoextension program could be financed by users. For the physician, there would be a substantial initial investment in equipment for playing a videotape through a color television set, plus the continuing purchase of new tapes. Nevertheless, the continuing education committees believed the physician's investment in education via videotape would compare favorably with alternative investments in education, such as attendance at meetings and courses, which physicians took for granted.⁵ In 1973, the committees embarked on arrangements to produce videotape programs.

New videotapes are produced every year, and they are sold separately or, most often, through subscription to a volume of eight to ten tapes. Authors and topics for videotape programs are selected by the CETV committee in each specialty. In turn, the author is responsible for planning and production of the videotape. Most authors act as writer-director-leading person for their videotape. Assisted by

professionals in the field of audiovisual communications, they plan the script and visual material for use in the videotape. They must also prepare printed material and a self-assessment exercise to accompany each tape.

A completed video program is submitted to the CETV committee in ophthalmology or otolaryngology. These committees ensure that each tape accepted for inclusion in the videoextension program is of the highest educational and technical quality. In the final phase, duplication of the master tape onto videocassettes or other formats is handled by a professional producer.

PRESENT AND FUTURE VISIONS

When the Academy created the offices of continuing education in 1969, the broad charge was to provide a continuum of education in ophthalmology and otolaryngology that would stretch from medical school to the last day of practice. Already a mammoth amount of work has been accomplished (Fig 55). But it is really only the beginning.

There is particular concern with public demand for some guarantee of physician competence. The offices of continuing education have paid close attention to, and participated in, evolving plans for a system that might satisfy this demand. Indeed, they are committed to retaining leadership—medical leadership—in any system by devising programs that could provide the educational basis for continuing recertification. Since 1973, most Academy annual meeting and continuing education programs have been acceptable for category 1 credit hours toward the AMA Physician's Recognition Award, a means of tangibly documenting educational activities.

Continuing physician education—the need to develop a structured and appraisable framework for it—is now requiring and receiving much the same type of soul-searching analysis



Fig 55.—Brochures for educational offerings in otolaryngology in 1976.

previously accorded to medical and then graduate medical education.

In moving toward a continuum of education, the continuing education committees have extended their reach downward to the medical student level, and in ophthalmology, outward to interprofessional education. The ophthalmologists worked jointly with the Association of University Professors of Ophthalmology to produce the *Ophthalmology Study Guide for Medical Students*, first published in 1975 with subsequent editions in 1976 and 1978.

To enhance ophthalmic knowledge in other branches of medicine, an Interprofessional Education Committee was established in 1976. The Committee developed a slide-and-script package, entitled "Introduction to Ophthalmology," intended for use before paraprofessional or lay audiences. A television tape was prepared for primary care physicians, cosponsored by the American Academy of Family Practice.

Otolaryngology's Task Force on New Materials has formulated a large pool of test items for use by department or division chairmen in creating examinations for medical students. The up-to-date reviews in the Self-Instructional Packages can be used by anyone wishing to become more familiar with a subject, and the Committee predicts that at some future time programs will be expanded to provide educational material for other specialties.

Development of teaching aids, both audio-visual and printed, is another area that promises to expand. The Academy has been producing, or sponsoring production of, teaching aids for more than 50 years (see chapter 23, "Teaching Aids"). Never, however, has the output been on such a scale as it is for the continuing education programs. For these programs, professional services in the field of education have been utilized to help ensure effective program materials. When Academy manuals became the responsibility of the continuing education committees in 1973, both

committees began a thorough housecleaning, updating or discontinuing old manuals and arranging for preparation of new ones.

The whole of educational programs outside the annual meeting is now centralized under the secretaries for continuing education and their committees. Their job is to constantly revise, update, expand, and create programs to meet whatever the dictates of the time happen to be (Fig 56). Their intent is to maintain a continuing dialogue of education with Academy mem-

bers, prospective members, and fellow members of the medical profession and health care team.

This is by far the largest educational enterprise ever undertaken by the Academy, but like all programs developed in the past, it is a response to the needs of the time. Also like past programs, it is both possible and successful because of the willingness of Academy members to give their time and effort to teaching in the abiding tradition of medicine.



Fig 56.—Ophthalmology committee reviewing and revising Continuing Education Programs in 1978. Clockwise from left: Melvin L. Rubin, Paul R. Lichter, William H. Spencer, David Paton (partially hidden), David M. Worthen, Dr Paton's assistant, Dorothy Tienter (continuing education registrar), and Thomas H. Pettit.

TABLE 12
CONTINUING EDUCATION IN OPHTHALMOLOGY:
ADMINISTRATION AND PROGRAMS, 1970-1978

Secretary			
	Bradley R. Straatsma Los Angeles		1970-1974
	Bruce E. Spivey San Francisco		1975-1977
	David Paton Houston		1978-
Advisory Committee			
Robison D. Harley Philadelphia	1970-1974	Paul R. Lichter Ann Arbor, Mich	1975-
Melvin L. Rubin Gainesville, Fla	1970-1978	Joseph C. Yarbrough, Jr Anderson, SC	1977-
Bruce E. Spivey San Francisco	1970-1974	Thomas H. Pettit Los Angeles	1978-
Robert D. Reinecke Albany, NY	1970-1977	William H. Spencer San Francisco	1978-
David Paton Houston	1973-1977	David M. Worthen San Diego, Calif	1978-
Paul Henkind Bronx, NY	1975-		
Program, Yr Initiated	Total Registration	Chairman	
Basic and Clinical Science Course, 1970	8,000+	Robison D. Harley, 1970-1973 David Paton, 1973-1978 William H. Spencer, 1978-	
Ophthalmic Knowledge Assessment Program, 1970 (combined with in-training examination, 1972)	15,000+	Melvin L. Rubin, 1970-1978 Thomas H. Pettit, 1979-	
Self-Education, 1972 (merged with course, 1974-1975)	3,756	Bruce E. Spivey, 1972-1974	
Continuing Education With Television, 1973	5,000+ tapes sold	Robert D. Reinecke, 1973-1977 David M. Worthen, 1978-	
Exhibit, 1971, and Film, 1973	...	Paul R. Lichter, 1976-	
Manuals (see chapter 23, "Teaching Aids")		Paul Henkind (coordinator)	
Interprofessional Education, 1976 Slide and script sets	600+ sold	Paul R. Lichter, 1976-	
<i>Ophthalmology Study Guide for Medical Students</i> (developed with Association of University Professors of Ophthalmology, Bruce E. Spivey, cochairman)	14,000+ sold		

TABLE 13
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ADMINISTRATION AND PROGRAMS, 1970-1978

Secretary			
	Dean M. Lierle Iowa City		1970
	George F. Reed Syracuse, NY		1971-
Advisory Committee			
George F. Reed Syracuse, NY	1970	James B. Snow Oklahoma City	1971-
Peter N. Pastore Richmond, Va	1970-1974	Byron J. Bailey Galveston, Tex	1973-
Michael M. Paparella Minneapolis	1970-1978	Roger Boles San Francisco	1975-
Paul H. Ward Los Angeles	1970-	George A. Gates San Antonio, Tex	1976-
		Donald P. Vrabec Danville, Pa	1979-
Task Force on New Materials (32 members)			
	George F. Reed, chairman		1970-
	Paul H. Ward, associate chairman		1970-
Program, Yr Initiated	Total Registration	Chairman	
Continuing Education Course, 1970	10,000	Dean M. Lierle, 1970-1971 James B. Snow, 1971-1978	
Annual Otolaryngology Examination, 1971	9,000+	George F. Reed, 1971 Paul H. Ward, 1972-	
Exhibit, 1971	...	Michael M. Paparella, 1971-	
Otorhinolaryngology Self-Improvement, 1972	8,000+	Peter N. Pastore, 1972-1974 Michael M. Paparella, 1975-1978	
Continuing Education With Television, 1973	4,500+ tapes sold	Byron J. Bailey, 1973-	
Manuals (see chapter 23, "Teaching Aids")		Roger Boles, 1974-	
Self-Instructional Packages, 1976	9,000+ sold	George A. Gates, 1976-	