

The Journal of the Association of Schools and Colleges of Optometry

# OPTOMETRIC EDUCATION

Volume 20, Number 2

Winter 1995

**Special Issue**



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RESIDENCY  
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**VOL. 20  
NO. 2**

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# EDITORIAL

## Postdoctoral Clinical Education A Vehicle to the Future

**A**s a health care profession, optometry is a relative newcomer to the area of postdoctoral clinical training. Unlike our sister professions that often use residency training as a basis for entering practice, we have apparently been satisfied with the practice capability of our doctoral graduates so that we train only 10-12% of our graduates in residencies. Still, no one would deny the importance of our residencies to our profession's present and future needs, and it has been suggested in this special issue of *Optometric Education* that we can expect to see substantial growth in optometric residencies.

If this turns out to be an accurate prediction, then the important question to ask ourselves is: "to what end and purposes do we anticipate and possibly pursue such growth?" This question has significance because other professions that train larger percentages of their graduates have arrived at that point for differing reasons and with differing results. While I am not suggesting that we try to deny the realities of the health care, professional and educational markets that will ultimately influence where this profession goes, I do think we need to be deliberate in our planning efforts for growth and know the reasons why we might want such growth.

Historically, medicine's global responsibility for human health created an early need for postdoctoral clinical internships and residencies as a basis of practice. There was just so much information to learn and so little time for meaningful clinical experience during the doctoral program, that a dichotomy of didactic and clinical

education almost naturally occurred between the M.D. degree and the start of independent practice. Also, the need, more obvious in medicine, to provide for specialty practitioners abetted the movement toward an increasingly divergent array of postdoctoral training programs in medicine. Unfortunately, the dynamics of this flow of events caused an overwhelming emphasis on the specialties, a position from which medicine today is attempting to, at least partially, retreat.

Podiatry's history is different in that its movement into residencies as a requirement for practice was



occasioned by a need for surgical training opportunities. These opportunities, usually occurring in hospital or surgi-center settings, likewise created an almost automatic separation of the doctoral and the postdoctoral training systems. When this became such a problem for podiatry a few years ago, it started planning for 1-year internships between the D.P.M. degree and the residency in order to smooth out the transition to clinical practice involvement.

Compared to these two examples, optometry is unique in that it is still producing a "practice-ready" clinician from its schools. This proves to be an advantage in this age of health care reform because it has helped to ensure that optometry has not become

over-specialized and is still serving its primary care patient base well. In essence, we have been blessed by not having a set of practice dynamics similar to medicine and podiatry which might have led to a dichotomy of our educational processes.

**N**evertheless, there are significant advantages to residency training that are increasingly recognized by new graduates and optometric educators alike and, while no one is sure what changes health care reform will bring, it is evident that our education-practice dynamic will change. So we need to recognize the reasons we train residents and how their training complements the clinical education they have received in optometry school. We need to recognize these things so we can plan just how our growing reliance on residency training, be it for primary care or more specialized practice, can help maintain rather than hinder our educational institution's ability to provide excellence in entry level practice capability at graduation.

We should avoid repeating the errors of others in rushing away from an academic basis of clinical education toward a too heavy emphasis on a postgraduate clinical training base. Doing this should be relatively easy if we plan well. Unlike some sister professions, we have the advantage of a residency training system that is currently growing gradually. However, we should not take this advantage for granted. There is no doubt that growth will occur, and most probably at a rate we can

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## Editorial

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manage, thus enabling us to preserve the best features of our current system while adding other advantages that residencies bring.

The profession has already taken the lead in this growth management process in several ways. The AOA Summit on Optometric Education dealt with the myriad issues of optometric education, including residencies. The ASCO Committee on Clinical Affairs adopted a leadership stance on residency programs issues. The AOA, ASCO and other organizations such as the Veterans Health Administration of the Department of Veterans Affairs have sponsored programs and workshops to deal with residency programs. Finally the COE has added membership in residency expertise and has undertaken new

standards and accreditation process deliberations.

The parameters surrounding our position in residency training, the forces at work in health care reform, and our profession's many activities, discussions and forums lead me to the conclusion that, as we approach the new millennium, residencies will be a powerful yet well-integrated tool for clinical education in optometry. We will have a vehicle taking us into the future.



Felix M. Barker, II, O.D., M.S.  
Editor

## Future Meetings

**ASCO Spring Executive Committee Meeting** — February 22, 1995. Southern Council of Optometrists, Atlanta, Georgia. Contact: Martin A. Wall (301) 231-5944.

■

**ASCO Spring Board of Directors Meeting** — February 23, 1995. Southern Council of Optometrists, Atlanta, Georgia. Contact: Martin A. Wall (301) 231-5944.

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**ASCO Committee Meetings** — June 21, 1995. Nashville, Tennessee. Contact: Rebecca M. Defibaugh (301) 231-5944.

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**ASCO Executive Committee Meeting** — June 21, 1995. Nashville, Tennessee. Contact: Martin A. Wall (301) 231-5944.

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**ASCO Annual Meeting** — June 22-23, 1995. Nashville, Tennessee. Contact: Martin A. Wall (301) 231-5944.

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## INDUSTRY NEWS

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### Vistakon Videoconference

Vistakon introduced 1-DAY ACUVUE®, the world's first daily disposable contact lens, to a combined audience of more than 3,000 eye care practitioners and staff members through a 12-city satellite videoconference in the Western U.S.

Hosted by Vistakon's president, Gary K. Kunkle, the videoconference featured Craig H. Scott, vice president of marketing; Stanley J. Yamane, O.D., F.A.A.O., vice president of professional affairs; and eye care professionals Barry Farkas, O.D., F.A.A.O., New York; Frank Schneider, O.D., M.A., Las Vegas; and Melvin Freeman, M.D., Seattle. Each of the 11 downlink locations featured Vistakon representatives and clinicians who are experienced with the new lens.

The comprehensive one-hour presentation covered the opportunity 1-DAY ACUVUE represents, results of extensive clinical and marketing studies, product rollout plans, and most importantly, detailed information on how doctors can integrate the new lens and wear modality into their practices.

In the days following the videoconference, repeat performances were given in eight western cities. These meetings included a videotape of the videoconference and live Question and Answer with a Vistakon representative and a doctor experienced with the lens. An additional audience of more than 500 was reached through these meetings.

"We're committed to making this product a success because we believe that 1-DAY ACUVUE is the best way to wear contact lenses," said Kunkle. "No other product or modality can offer better eye health, convenience, vision

or comfort than 1-DAY ACUVUE. When it comes to contact lenses, shortest is best."

Interested eye care practitioners can contact their Vistakon sales representatives or call 1-800-874-5278.

### CIBA Co-Sponsors Internship

CIBA Vision Corporation recently donated \$6,000 to co-sponsor a summer internship at Kaiser Permanente Health Plan, a Mid-Atlantic States-based managed care organization. The internship was developed to offer an optometry student the opportunity to obtain management and project experience in an interdisciplinary medical center-based practice.

Byung-Joon Ahn, O.D., a 1994 graduate of the Pennsylvania College of Optometry, was selected as this year's internship recipient. He was chosen based on his interest in managed care, excellent references, and his ongoing commitment to the public health arena. Ahn is pursuing a masters in Public Health degree at Harvard University in the fall.

"Working for Kaiser Permanente has given me insight into the day-to-day administrative role of one of the leading HMOs. It has provided me with an indispensable foundation for understanding the changing role of optometry in today's health care market," said Ahn. "I feel this experience will help me achieve my career goal of holding a leadership role in a health care organization or a teaching role in an educational center."

"This internship reflects Kaiser Permanente's and CIBA Vision's on-going commitment to all aspects of optometric education,"

said Sally M. Dillehay, O.D., M.S., manager of professional services, CIBA Vision. "In addition, it provides a student with valuable first-hand experience in a large managed care practice setting, a true asset in the constantly changing environment of health care."

### Wesley-Jessen Creates New Practitioner Positions

Educational innovation in the contact lens field is synonymous with Drs. Newton Wesley and George Jessen. Now the company that bears their names is following in its founders' footsteps. Just as Drs. Wesley and Jessen trailblazed the U.S. by providing personalized contact lens education, Wesley-Jessen is offering the same with two new O.D.s on the trail.

Suzanne H. Nylander, O.D., F.A.A.O., and Judith L. Kremer, O.D., have joined Wesley-Jessen as professional development specialists, reporting to Dwight H. Akerman, O.D., F.A.A.O., director of professional services. Their newly created positions are designed to add value to Wesley-Jessen products and enhance Wesley-Jessen's partnership with practitioners through staff training, continuing education lectures and practice management consultations. In addition, both will implement Wesley-Jessen's programs at optometry schools, ophthalmology residencies and opticianry programs.

Dr. Nylander, based in Raleigh, NC, will be in charge of the eastern half of the U.S. A 1982 graduate of the University of California - Berkeley School of Optometry, Dr. Nylander joined Wesley-Jessen from American Optical Corp., where she was director of

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## Industry News

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professional relations. Prior to that she was a regional sales manager at Coburn Optical and was in private optometric practice.

Dr. Kremer, based in St. Louis, MO, will serve the western half of the U.S. A 1993 graduate of the University of Missouri - St. Louis, School of Optometry, she has practiced optometry in both corporate and private offices. She also completed a one-year contact lens residency at the University of Missouri - St. Louis, School of Optometry.

### Sunsoft Appoints New VP of Sales and Marketing

Kim Little brings over 14 years of sales and marketing management experience in the vision care industry to Sunsoft Corporation. Prior to Sunsoft, Kim was the corporate director of sales and marketing with Atlanta-based ATC Services, a company that provided contract staffing services to healthcare organizations throughout the United States. Kim also served as director of marketing and director of sales training and development for CIBA Vision Corporation in Atlanta, Georgia.

### Bausch & Lomb Announces Johnson Retirement

Harold Johnson, a 20-year Bausch & Lomb veteran who engineered the company's move into planned replacement and daily wear contact lenses, has resigned as president of the contact lens division.

Johnson, whose sparkling career at Bausch & Lomb culminated with a seven-year reign at the contact lens division, said he has decided to retire in March 1995. He will retain the title of corporate senior vice president until that time.

Replacing Johnson as president of the contact lens division is Carl Sassano, a senior vice president who has been with Bausch & Lomb for 20 years. According to Sassano, the move, effective Sep-

tember 6, resulted in no immediate changes or restructuring of the division.

"We will continue the strategy that Hal's laid out during his time in this position," said Sassano. "We will be a major player in planned replacement and disposable contact lenses and remain a technical leader in the industry," he said.

Sassano, who reports to Bausch & Lomb president and chief executive officer Ron Zarrella, said that it will probably be six months before he outlines any new plans or marketing strategies for the division."



### Polymer Technology President Appointed to Foundation Board

Polymer Technology announced that Robert F. Thompson, president of Polymer Technology, has been appointed to the board of directors of The Boston® Scleral Lens Foundation for Vision Rehabilitation.

As a director of the foundation, Thompson will monitor the fiscal resources of the foundation and help formulate policy decisions that advance its mandate to make The Boston Scleral Lens available to all who need it. As one of six members of the board, Thompson will support clinical and technical research, promote the advancement of this technology through scientific meetings and publications, and encourage the transfer of fitting and manufacturing technology to other countries.

### Paragon Launches New Tint in FluoroPerm® 60

Paragon Vision Sciences is pleased to announce the launch of FluoroPerm 60 in a brown color-enhancement tint. The newest addition to FluoroPerm's pal-

ette of colors was developed in response to the need of dark-eyed patients and those being refitted from PMMA.

Paragon will initially provide the brown tint only in FluoroPerm 60, without UV inhibitors. The tints were expended for FluoroPerm 60 due to its popularity in specialty lens designs and its options for daily or flexible wearing schedules. All three FluoroPerm materials are available through Paragon's worldwide network of authorized laboratories and are backed by Paragon's one-year warranty against deposits.

"Brown-tinted RGP's are less noticeable than other colors as they move on dark-eyed individuals," states Catherine Todd, Paragon's director of marketing. "We have been successful in reaching our goal of creating a warm shade in an undeniable brown. Most other 'brown tints' on the market actually have a gray or yellow cast."

### CIBA Supports National Optometric Organizations

CIBA Vision Corporation recently sponsored the National Optometric Association's (NOA) 25th annual continuing education convention with a \$1,500 educational grant. In addition, CIBA Vision provided the National Optometric Foundation, the fundraising division of the NOA, with a \$3,500 educational grant. The National Optometric Foundation provides scholarships and financial assistance for minority optometric students.

"CIBA Vision is honored to support such worthwhile activities as part of our continuing commitment to excellence in education," said Richard E. Weisbarth, O.D., F.A.A.O., executive director of professional services and customer satisfaction. "We hope our contributions enable the NOA to continue to bring quality education programs to eye care practitioners as it has done for the past 25 years and to continue to help minority optometric students achieve their goals."



# This Venerable Educational Bastion

Alden N. Haffner, O.D., Ph.D.

*The New England College of Optometry recently celebrated one hundred years of excellence. President Larry R. Clausen welcomed guests to the celebration of the centennial. Dr. Haffner represented ASCO and the American Optometric Association at the ceremony. His presentation is reprinted in Optometric Education so that we can share in saluting a college that has contributed so much to the growth and development of the optometric profession.*

**M**embers of the Board of Trustees of the New England College of Optometry, distinguished President Larry Clausen, ladies and gentlemen who hold higher and professional education in esteem, colleagues, friends all:

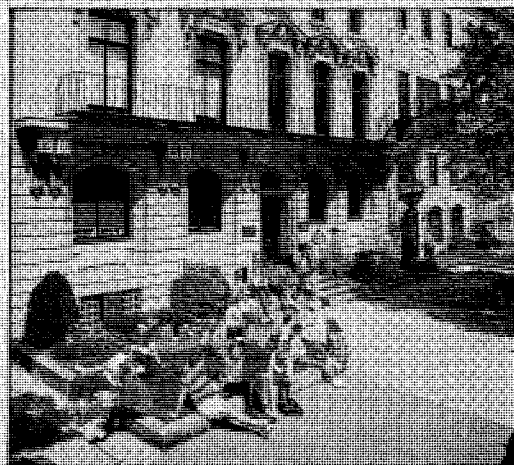
This is a rare moment in the history of our professional calling because one of the pillars of our scientific and educational strengths has reached the centennial of its founding. But it would be wrong, terribly wrong, though I must admit quite easy, to focus on that event ten decades ago. Rather, it is my view that it would be enormously more significant to use this impressive occasion to herald the growth, the development, the sophistication and the evolutionary stature of optometry that this 100-year-old institution has, materially and in other vital ways, been able to foster.

The real and critical achievements of this venerable educational bastion are its progeny, the cadre of women and men who have provided care, in hosts of communities and for their citizenry, with an extraordinary commitment to standards that this institution fostered. All other accomplishments are secondary in importance.

The New England College of Optometry, long before most other institutions, provided that essential vision of an evolving profession in science that made optometry grow. That it produced leadership and talent, that it provided solidity and steadfastness that have been unswerving in its directions and unstinting in its commitments, all bespeak its strengths and, moreover, its importance in the fabric of optometry. To deny any of these elements is to belie the history of the last one hundred years.

I am here to hail this great period and to remind us all that the remarkable metamorphosis we are now in

the process of completing in our profession, and those that occurred in the past that were equally vital and fundamental, would, I assure you, not have been possible without the strengths in education, in science and in leadership provided by the New England College of Optometry.



Beyond any doubt in my mind, its achievements have been impressive, and they presage much, much more in the history of its future generations. It is poised, together with its brethren in the optometric education enterprise, to institutionalize the growth of optometry resulting from its metamorphosis as a primary eye care profession, and wisely to help strategically to steer our calling to become a greater public utility.

With sound science, with an unrelenting commitment to

excellence in pedagogy, and with a tireless exuberance for professional progress, this institution will continue to fulfill its destiny in the life and times of optometry in that complex panoply of public service that we know as health care.

My appearance on this auspicious occasion is in behalf of the trustees and membership of the American Optometric Association and, as well, in behalf of all of the institutions of the Association of Schools and Colleges of Optometry.

President Clausen and dear colleagues and friends: I salute you for all that this institution has done. Harken well to the future, for your past is simply the beginning of a greater destiny. Let future generations remember these words. God bless all of you and may God continue to shine brightly upon the New England College of Optometry. ■

*Dr. Haffner is president of the State College of Optometry, State University of New York.*

# The 1994 Revised COE Accreditation Standards

Felix M. Barker, II, O.D., M.S.

Irwin B. Suchoff, O.D., D.O.S.

## Introduction

Since it first began residency accreditation in 1976, the Council on Optometric Education (COE) of the American Optometric Association (AOA) has done so using its written standards of accreditation. Until very recently, these standards were called "evaluation guidelines" and were located within an all-purpose AOA document entitled the *Accreditation Manual: Optometric Residency Programs*.<sup>1</sup> This Manual contained not only the evaluation guidelines used in accreditation, but it also stipulated the process of accreditation review and decision making.<sup>2</sup> In the fall of 1989, the COE was in the final stages of a complete revision of its professional degree standards, and at this time the Council also decided to turn its attention to the development of a similar revision of its residency standards. The objectives of this process were to ensure that the COE residency standards were

thorough, consistent with modern optometric residency education and logically organized in a format that would facilitate their use in the accreditation process as working standards. Furthermore, the new standards were to be developed with continuous feedback from the concerned constituencies of the profession.

## The Standards Review Process

The process used in reviewing the residency standards is depicted as a flow chart in Figure 1. The first step in the process was to evaluate the current COE residency standards in comparison to the standards of other professions. This step was taken to ensure that the standards encompassed all appropriate residency education areas. The residency standard areas selected (Table 1) were then identified and organized to coincide as closely as possible with those used for professional degree programs. Each area covered was presented as a general standard; various substandards were listed which supported each of the general standards. As they were developed, drafts of the standards revision were presented to the COE for review. Subsequently they were circulated by

staff to a wide spectrum of potentially interested individuals and groups. This review and comment process occurred several times over the course of the standards development and resulted in critical input from the field regarding new standards as they evolved.

It was fortunate that the very first draft of the standards was available for informal distribution and discussion by those residency educators attending the American Optometric Association sponsored Conference on Optometric Residency Education that was held in St. Louis in August 1990. Other important input to later drafts came as a result of informal discussions that took place at the VA-ASCO Workshop on Optometric Affiliations held the following year in Tahlequah, Oklahoma, and the Georgetown Conference Summit on Optometric Education conference on postdoctoral education. Taken together, these conferences were important to the standards review process because they provided forums for the interactive discussion of key issues between residency supervisors and college residency administrators.

## The Revised COE Standards

The revised standards<sup>3</sup> became effective in July 1994 and now provide more detailed evaluation than was possible with past versions.<sup>2</sup> The previous evaluation guidelines had been written in a more narrative style, and, while covering a great many of the points of the new revision, they lacked the specificity that the new standards were designed to provide. In contrast, the substandards outlined in the new document clearly delineate the detailed requirements of each major standard area. The logical sequencing of the new standards and substandards is also expected to make the process of preparing a self-study and conducting an accreditation visit easier for both the COE site visitor and the program supervisor.

The new COE standards define an optometric residency as "a planned program of post-O.D. clinical education which is designed to advance significantly the optometric graduate's preparation as a provider of patient care services beyond entry level practice. A residency must be a minimum of one year and consist mainly of appropriately supervised clinical eye/vision care provided by the resident. A residency should also include a well designed mix of self-directed learning seminar participation, instructional experiences and scholarship."<sup>2</sup>

Dr. Barker is an associate professor at the Pennsylvania College of Optometry. He is also editor of *Optometric Education*.

Dr. Suchoff is a professor and director of the residency programs at the State University of New York, State College of Optometry.



A major change in emphasis with the new standards is the creation of a separate first category entitled "mission, goals and objectives." In the previous standards document, this important area was treated only as a small part of the criteria for curriculum. However, consistent with current trends in education, institutional self-analysis and commitment to mission are judged by COE to be critically important to any successful academic pursuit, thus making them essential foundations of the new standards. In addition, attention is given to outcome analysis which provides for the necessity to link planning to a successful educational end point. Embodied within this standard is not only the requirement to write a mission, goals and objectives statement for the residency, but also the requirement that the sponsor and the affiliate optometry college must have statements within their own goals and objectives committing them to residency training.

The second major area of evaluation in the new standards is that of administration. The standards allow for the establishment of a residency by a COE accredited school or college of optometry or by another clinic, hospital or health care facility provided that there is an affiliation agreement with an accredited optometric educational institution. An important feature of this standard is the requirement that the sponsor and affiliate demonstrate "deliberate educational intent" in establishing the residency. This obviates the likelihood of a residency being set up purely as a manpower supplement in a clinic. There must be a clearly written memorandum of understanding regarding the responsibilities of sponsor and affiliate to the resident and to the program. This standard also addresses the issue of training the resident in a collegial model of an autonomous practitioner and not as a technician or assist to the supervisor.

The standards also outline the requirements for adequate resources and facilities. A principal concern is that the residents' salaries be assured for the length of the programs and not be based on achieving clinic revenues. The residents must have adequate space and equipment allocated for their clinical activity, and the clinic operation and quality of care must be provided within an environment of sound management and planning. Adequate numbers of patient care encounters with appropriate "diagnostic diversity"

<b>Standard I</b>	Mission, goals, objectives and outcomes
<b>Standard II</b>	Administration
<b>Standard III</b>	Resources and facilities
<b>Standard IV</b>	Faculty
<b>Standard V</b>	Residents
<b>Standard VI</b>	Curriculum
<b>Standard VII</b>	Clinic management and patient care policies
<b>Standard VIII</b>	Research and scholarly activity
<b>Standard IX</b>	Continuing education

for the focus of the residency are a necessity. Library and other educational support facilities are also required, usually with the involvement of the educational affiliate.

The supervisor of the residency must have appropriate qualifications to supervise the resident and must have a faculty appointment at the school or college. The supervisor must be actively involved in the resident's education and must provide an appropriate role model by practicing in a professionally autonomous fashion within the clinical setting of the program. While other faculty and clinical staff are discussed in the standard, it is the supervisor who is most important to the COE accreditation. If the residency supervisor were to leave the program, this substantive change and its impact would have to be evaluated by the COE.

The standards cover the eligibility, recruitment and contractual aspects of the resident's position. Here the components of a resident's agreement are set forth with some guidelines for minimum requirements of the contract made with the resident. Resident handbook/documentation requirements and periodic evaluations are also stipulated.

The establishment of a mission-related statement of curricular activities is covered in Standard VI. A principal concern is that the resident's clinical activities be reasonably independent, though supervised; interdisciplinary and co-management aspects of care are highlighted as important considerations of curricular implementation. A planned didactic educational component is required, and instructional activities by the resident are suggested as another form of resident learning. Residency programs are also encouraged to provide significant opportunities for continuing education and

scholarship as stimuli for life-long, self-directed learning by the resident.

## Conclusion

With the numbers and types of residencies expected to grow<sup>2</sup> in the coming years, it has become important that the COE standards be revisited. The 1994 revision of the COE residency standards is designed to be general in its coverage and is, therefore, applicable to the evaluation of any optometric residency, regardless of its clinical emphasis. The specificity and organization of detail provided by the new standards will ensure a uniformity and depth of review which is enhanced for all programs. Under the new standards, existing residencies will be able to more easily review the status of their programs, and prospective supervisors and sponsoring organizations will have a clearer picture of what is required prior to committing to a new program. Finally, as the new standards are implemented, the ongoing involvement of the residency educator and administrator communities will certainly lead to their continual refinement in future revisions. ■

## Acknowledgements

The authors wish to thank Joyce L. Urbeck, administrative director of the Council on Optometric Education, for her help in preparing this paper.

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# The Optometric Residency Accreditation Process—Planning for the Future

Irwin B. Suchoff, O.D., D.O.S.

Felix M. Barker, II, O.D., M.S.

Joyce L. Urbeck

## Introduction

The Council on Optometric Education (COE) first accredited a residency program in 1976. In the ten-year period from 1979 to 1989, another 49 postdoctoral clinical educational programs, primarily sponsored by Veterans Administration (VA) hospitals, were added to the COE's list of accredited residencies. Since then, the number of accredited programs has risen to 55, with another four in the "candidacy pending" status.

*Dr. Suchoff is a professor and director of the residency programs at the State University of New York, State College of Optometry. He serves on ASCO's Committee on Clinical Affairs.*

*Dr. Barker is an associate professor at the Pennsylvania College of Optometry. He is also editor of Optometric Education.*

*Ms. Urbeck is administrative director of the Council on Optometric Education of the American Optometric Association.*

From the time of its earliest residency accreditation in 1979, the COE has conducted residency review processes according to its *Accreditation Manual: Optometric Residency Programs*.<sup>1</sup> This manual has always served as the official documentation of both the Standards of Accreditation and the COE process for residency review. Although the manual has evolved gradually through several revisions, it had been a remarkably stable document during its first 11 years.

However, in the early 1990s the COE, following the revision of Standards for Professional Degree Programs, established a task force to rewrite its Standards for Residency Accreditation. These new, more detailed standards were put into effect in July 1994<sup>2</sup> but with no revision in the review process component of the former manual. At the time of the revision of COE residency standards, task force efforts turned toward the issue of accreditation process review, the discussion of which is the purpose of this paper.

The topic of the residency accreditation process is not a new issue for optometry. As the number of residency programs grew during the 1980s, so did the COE's concern about the maintenance of an efficient and effective accreditation process. As early as 1986, the Council discussed the need to develop mechanisms to promote continued efficiency and reliability of the residency evaluation process. COE recognized a need to develop a review mechanism that would not require the presence of a COE member on each site visit. The Council also recognized that a more formalized training program would be required for consultants who were not COE members to help ensure reliability of the accreditation process.

While the necessity of streamlining the process of residency accreditation was not forgotten by COE, it was put on a "back burner." This was because COE became more involved with the immediate tasks of redeveloping its mission statement and revising its Standards for Professional Degree, Residency and Technician Programs. As the COE has reached the final phases of these important tasks, the issue of critiquing its residency review processes has been moving forward in priority. Two factors have contributed to this new look at the residency review processes:

- **The projected growth in the number of programs and positions**

There is evidence from the Georgetown Conference, Summit on Optometric Education<sup>3,4</sup> and elsewhere<sup>5</sup> of a growing consensus within the optometric community favoring an increase in the number and diversity of available residency programs. Furthermore, commitment to residency education by the Association of Schools and Colleges of Optometry (ASCO) has been demonstrated by its long-range blueprint designed to foster residency growth.<sup>6</sup> It is noteworthy that ASCO has recently added two members to its Clinical Affairs Committee, specifically to represent residency issues. The AOA had, one year earlier, added a member to the COE for this same purpose in their accreditation activities.

- **The impact of COE's new residency standards**

While covering much the same area as the previous standards, the new COE residency standards<sup>2,7</sup> are



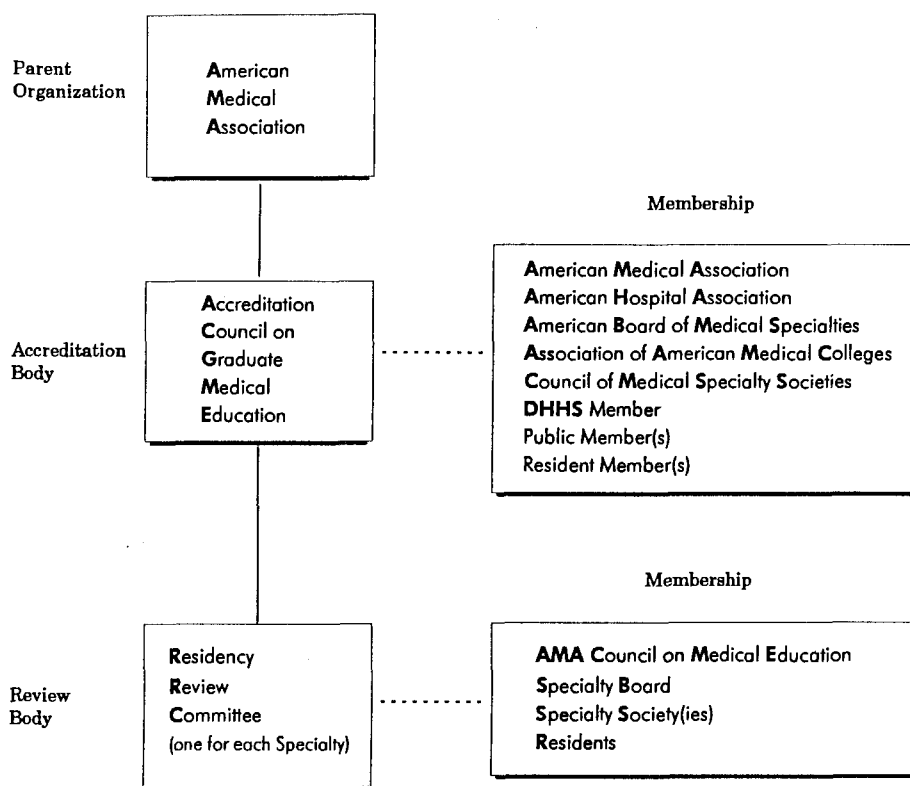
changed in many important ways. They cover a broader, more encompassing range of accreditation issues which parallel the professional degree standards. At the same time, they provide for much more specificity within each standard. This creates the need for a more comprehensive, rigorous and time consuming accreditation process. Self-studies, site visits and reports will all take more time and effort than under the previous standards.

Based on these two concerns, it is, therefore, likely that the COE workload will increase. And this workload is already busy, because in addition to the time spent by COE members on site visits, the COE staff spends 40% of its time involved with residency issues; approximately 25% of the COE's regular meeting is also devoted to residencies. Therefore, in 1991, the COE appointed a task force to analyze the optometric residency accreditation process. A major charge of this task force was to compare optometry's residency evaluation mechanism to those of our sister health care professions, looking for potential alternatives that would enhance COE's effectiveness and efficiency.

The task force determined that, although it varies somewhat from one profession to another, the process of residency accreditation occurs typically under the auspices of a "parent" professional organization that usually delegates the authority and responsibility to an accreditation body, frequently referred to as a "council." Councils are constituted to set standards, policies and procedures for accreditation as well as conduct the accreditation process by receiving program self-studies, conducting site visits and making accreditation determinations. These accreditation bodies and any subcommittees they may create usually involve the representation of other appropriate organizations of the particular profession.

Councils almost always delegate all or part of their accreditation function to one or more subcommittees; in medicine and podiatry these are called residency review committees (RRCs). This division of labor allows the parent body to spend more of its time on standard setting, policy making, self-evaluation and, in some cases, accreditation of schools and colleges of the profession. Furthermore, the content requirements of many specialty residency programs often make delegation a necessity.

**FIGURE 1**  
**Medical Residency Accreditation**



However, as the responsible agent of accreditation, the council of any profession usually reserves the ultimate accreditation authority. Any delegation of authority can be reversed by the accrediting body. Delegations of accreditation authority or function, therefore, are typically subject to time limits, review and potential reversal.

The 1992 task force analyzed the processes of five health care professions: medicine, osteopathy, dentistry, pharmacy and podiatry. A summary of that report follows.

### **Accreditation in the Health Care Professions**

#### **Medicine**

Medicine has the longest history of postgraduate training, and it is a history that has been based in the proliferation of specialties of practice area. It is not surprising, therefore, that the medical residency accreditation process is one that is centered on the concept of specialization.

The authority for accreditation in medicine rests with the Accreditation Council for Graduate Medical Education (ACGME)<sup>7</sup> (see Figure 1). ACGME is composed of four representatives

each from the American Medical Association (AMA), American Hospital Association, American Board of Medical Specialties, Association of Medical Colleges and the Council of Medical Specialties as well as an individual from each of the following categories: a resident, a public member and a federal member.

ACGME is responsible for the development of general standards of accreditation for all residencies, but approves the more content oriented "special requirements" for each specialty after they are developed by subcommittees called residency review committees (RRCs).

In medicine, there are as many as 26 RRCs, each with a variable number of members, which are formed by representatives from a variety of sponsoring groups, including the AMA Council on Medical Education, specialty boards and societies. In addition to developing special requirements for accreditation, RRCs receive accreditation applications and conduct site visits. Accreditation decisions are typically made by the RRCs but only after specific delegation of this authority from the ACGME.

## Osteopathy

Osteopathy is much simpler and less delegatory in its accreditation process than the allopathic model. The American Osteopathic Association (AOA) Board of Trustees retains accreditation authority but it delegates the inspection function to its Council on Postdoctoral Training (COPT) which receives reports from the residency sponsor and from the professional organization(s) representing the practice specialty in question. COPT assigns site visitor(s) and, based on these three inputs, recommends accreditation status and terms to the AOA Board.<sup>8</sup>

## Dentistry

Dentistry undoubtedly has the most complex organizational structure. While dentistry's Council on Dental Education recognized specialties and deals with other educational policy areas, the American Dental Association has vested accreditation of schools and residencies with its Commission on Dental Accreditation which is composed of 20 members drawn from nine constituencies.<sup>9</sup>

The Commission develops and approves standards and conducts all accreditation processes through the actions of three subcommittees. First, residency content review is conducted by one of ten (four member) advisory committees on advanced education, each of which is concerned with a given specialty. Secondary review takes place when the advisory committee recommendation is forwarded to the Committee on Advanced Dental Education and the Committee on Dental Educational Institutions, after which the Commission presumably acts.

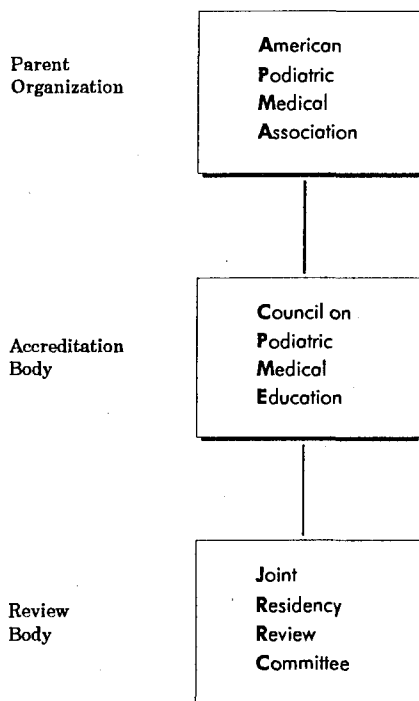
## Pharmacy

The accreditation process in pharmacy residency training resides with the American Society of Hospital Pharmacists (ASHP). The ASHP Commission on Credentialing makes recommendations concerning policy and standards to the ASHP Board for concurrence or approval. Accreditation decisions are made by the Commission based on authority delegated from the ASHP Board.<sup>10</sup>

## Podiatry

The American Podiatric Medical Association (APHA) has authorized the Council on Podiatric Medical Education (CPME) to approve residency programs (see Figure 2). CPME has eleven members, eight of whom are podiatrists representing various areas of residency

**FIGURE 2**  
**Podiatric Residency Accreditation**



involvement, e.g., academics, practice, political podiatry, who are nominated via an "at-large" process. The remainder of the Council are public members. The CPME adopts all standards and procedures for approval and makes specific residency approvals based on the recommendations of its Joint Residency Review Committee (JRRC).

Four residency training areas are represented by the JRRC which is comprised of five podiatric specialists, one "at-large" member and two CPME members, one of whom is the chair. JRRC residency reviews include an evaluation team report which is considered at semi-annual JRRC meetings held just prior to council meetings. Recommendations for or against approval are then forwarded to the Council for action.

## Optometry

The American Optometric Association (AOA) has authorized the Council on Optometric Education (COE) to serve as the accrediting body for the profession of optometry.<sup>1</sup> The COE is comprised of 11 members; three are AOA member optometrists who have outstanding professional experience, three are optometrists associated with

an accredited optometric institution, two are members of state boards of optometry at the time of their initial appointment, one is associated with an optometric technician program and two are public members. One of the three members associated with an accredited institution must be either involved in residency administration or education or be a graduate of such a program.

The COE accredits professional optometric degree programs, technician programs and residencies. COE sets standards and adopts procedures for each type of accreditation, including residencies. Site visits are chaired by COE members, although at least one consultant who is not a COE member participates in each visit.

## Task Force Recommendations

After thoroughly reviewing these models of residency accreditation, the task force recommended that:

- The COE must move toward some form of delegation of the residency evaluation process in the near future.
- The format used by podiatry deserves further study and consideration as a possible model for optometry.

The subcommittee prepared a document that included an outline of two potential models for optometry residency accreditation, one closely patterned after the podiatry residency review model and a second consultant model. The subcommittee shared this document with Jay Levrio, Ph.D., director of the Council on Podiatric Medical Education, and met with him prior to the spring 1994 COE meeting. The subcommittee gained insights into the operations of a residency review committee and discussed the pros and cons of both models with Dr. Levrio.

After deliberation, the subcommittee recommended to the COE that the consultant model appeared to be the most appropriate avenue to take at this time. The subcommittee is now charged with revising the *Accreditation Manual: Optometric Residency Programs* and with drafting proposed procedures to implement this model. The manual and the proposed procedures will be distributed to the optometric and accrediting community for review and comment prior to their adoption.

In the proposed consultant model, the COE would organize, train and manage a pool of qualified consultants (initially 10-15 individuals) for the purpose of residency accreditation. The consultant pool will be trained in site

visit protocols, interviewing techniques and report writing.

While not eliminating the periodic participation of COE members on site visits, these consultants would also be specifically trained to become chairs of evaluation teams and be qualified to conduct their site visits without a COE member present. A communication/liaison mechanism would also be established between the consultants and the COE to facilitate the accreditation decision making process of the Council.

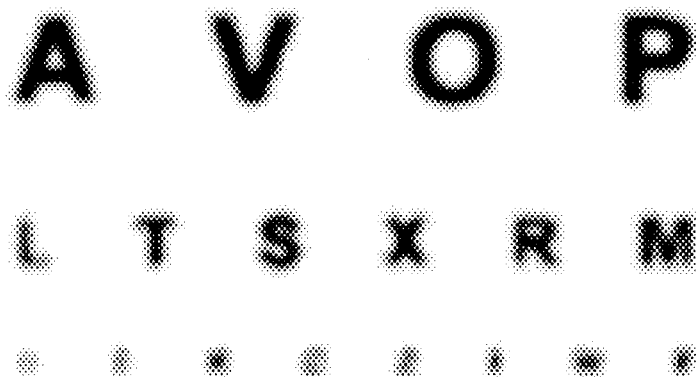
## Conclusion

It is clear that residency education is important to optometric education and that its significance will undoubtedly grow in the future. Through the development of new standards for residency accreditation and the pending plans to develop a trained residency consultant pool, the COE is moving forward to enhance the residency accreditation process. ■

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# Residency Education

## A Residency-Trained Optometrist's Perspective

Gwen Gnadt, O.D., M.P.H.

I remember the first day of optometry school at the University of Alabama at Birmingham (UAB). The student affairs office had planned a full day of speakers to "orient" us to optometry and to the school. Many of those speakers and handouts are a blur to me now (no I am NOT presbyopic!). However, to this day, I remember the presentation by Dr. John Amos, who was then UAB's director of residency education. He said that optometry school would lay a good foundation for our entry into the profession of optometry, but a residency education would help to set one apart from the mainstream of optometry. A residency could help one to gain more specialized experience. In addition, he noted, for those interested in academia or in Veterans Administration employment, preference is often given to residency trained optometrists. As one who had an urge for more knowledge and experience, I decided to do a residency.

I had some idea about "what I wanted to be when I grew up to be an optometrist." I knew I enjoyed academics and teaching, so I decided to make myself more marketable to an optometry school. Which optometry school was another question. I knew I wanted my residency experience away from my optometry school. I had no problems with the school, but I felt I would prefer a different perspective in a residency.

Coordinating a two profession family is always a challenge, and our family was no exception. My husband began looking for jobs during my third year of optometry school. This was also the time I began researching various residency programs. I inquired about

programs through my residency director and at the American Optometric Student Association meeting. I was not selective about a program, although I wanted it in an area in which I needed more experience. My husband accepted a job offer in New York after being assured of the potential for a long-term stay in the area. Our daughter was now in school, and we wanted things to be more permanent.

I applied to several residencies in the area. Each residency had its unique offerings. Some residencies would have required me to live away from home for most of the week, something I was willing to do if the experience made it worthwhile.

The residency which was my first choice, and which also chose me, was the Northport Veterans Administration Hospital in Northport, New York. The residency was affiliated with the SUNY College of Optometry. It was advertised as a residency in rehabilitative optometry, but it offered much more. My residency experience included low vision, vision therapy, head trauma rehabilitation, post-op, primary care and specialized disease clinics. Every day began with a lecture by an attending optometrist. In addition, I gained experience in teaching by helping to supervise fourth year optometry students who rotated through the clinic. Our program included all day meetings each week with the other SUNY affiliated residents. We went to the SUNY College of Optometry, listened to formal lectures and made presentations.

I am not doing exactly what I expected I would be doing when I finished my residency. I stayed on at the VA part-time,

first as a consultant, then as a staff member and attending optometrist and finally as the coordinator of the new PRIME residency program for optometry at our facility. In addition, I am in private practice. My residency helped me to develop skills in areas in which I needed more experience. It enabled me to become a State of New York low vision specialist, and it allowed a transition year in a state which was unfamiliar to me.

The residency helped me with my medical decision-making skills. I could not look at the eyes as a single entity. My patient population often had complicated problems. I had to listen to patients and evaluate their medical histories in order to put together the entire picture. I had to integrate with other medical disciplines in order to address some of the patients' problems. The residency made me comfortable in my ability to do this and do it in a timely manner.

Our ability as optometrists to look at the entire patient is what sets us apart from other eye care practitioners. This point is brought home to me almost every day by the patients I see in my private practice, at nursing homes and at the hospital. My residency education provided me with a large number of patients with diverse medical and ocular problems and with the tools to address these problems. These advantages are not unique to my particular residency, but should be universal to all residencies.

I am one happy and satisfied residency graduate! □

Dr. Gnadt is in a private practice, Eye Vision Associates, in Lake Ronkonkoma, New York. She is also the coordinator of the PRIME residency program for optometry at the Northport VA Medical Center.

# Optometric Residency Training In School- and College-Based Programs

Holly Lester Myers, O.D.

Susan C. Oleszewski, O.D., M.A.

Since the establishment in 1975 of optometry's first residency — the Kansas City Veterans Administration Medical Center — the profession has acknowledged the importance of postgraduate clinical education by expanding the number of residency positions available to graduates.<sup>1</sup> According to the 1994 *Directory of Residency/Postgraduate Programs*,<sup>2</sup> published by the Association of Schools and Colleges of Optometry (ASCO), the AOA Council on Optometric Education (COE) lists 58 accredited residencies which accommodate 113 graduate optometrists pursuing postgraduate clinical training. Adding in the number of non-accredited residencies and programs in the process of accreditation, there are presently available a total of 154 positions (see Table 1).

It can be seen from Table 1 that there are many clinical training programs

located at schools which are not COE accredited. Some of these programs may be in the formative stage of developing their accreditation self-study, but in others the clinical training is inextricably intertwined with other activities such as graduate study<sup>3</sup> which makes regular COE accreditation difficult or inappropriate to pursue. Accredited or not, many schools and colleges sponsor postdoctoral clinical training.

Compared to the health care professions of medicine, dentistry and podiatry, which train nearly all their graduates in postdoctoral residencies, optometry is able to offer residency opportunities to only 12% of its graduates. Nevertheless, this number is likely to grow over time, particularly as new residency sites are developed in community-based hospitals, surgicenters and other clinics that turn to optometry as a cost effective alternative to the public's need for eye care.

Another important feature of the role of school- and college-based residencies

is highlighted in Table 1. It can be seen that the interface between school and traditional hospital programs is quite complementary in its topical emphasis. More specialized areas of residency training are often seen in school programs; more general and disease oriented emphases are seen in hospital residencies. New growth in residencies will probably be seen in non-school programs, thus underscoring the importance of the school and college residency programs' specialty thrust in helping to balance our profession's ability to train an appropriate mix of practitioners.

## Clinical Training of the Resident

The definition outlined in the recently adopted Revised COE Accreditation Standards describes a residency as "a clinical education program providing the postgraduate optometrist with patient care experiences and other academic pursuits designed to ensure that the resident attains a high level of clinical expertise."<sup>4</sup>

As a clinical training program, it is therefore essential that the patient care experiences of the resident be of a sufficient quantity and diagnostic diversity. In this regard, the school or college-based residency may offer outstanding opportunities to meet this important curricular need. Many school clinics have high percentages of geriatric and socio-economically disadvantaged patients and can, therefore, offer access to a wider variety of more complex eye and systemic disorders. Caring for a large and complex clinical population challenges the residents' diagnostic and management skills, thus enabling them to more fully realize their own clinical maturity in the shortest period of time.

The available patient population should also meet the specific needs of the residency topic or specialization by providing the necessary quantities of appropriate patient types. Pediatric, low vision and other specialty populations often seek care at teaching centers. University settings also have a captured patient base in the form of students and staff providing excellent opportunities in advanced refractive care and contact lenses.

## The Didactic Component

Our residency classes today matriculate the best and brightest from our undergraduate optometry programs. This challenges residency educators to

*Drs. Myers and Oleszewski are assistant professors at the Pennsylvania College of Optometry.*

**TABLE 1**  
**Accredited Residencies/Fellowships**

PROGRAM EMPHASIS	# PROGRAMS					# POSITIONS				
	Total	School Base		Other		Total	School Base		Other	
		Accr.	Non-A	Accr.	Non-A		Accr.	Non-A	Accr.	Non-A
Pediatrics/VT	8	7	1	-	-	12	12	-	-	-
Contact Lenses	9	4	4	-	1	14	8	5	-	1
Geriatrics	9	-	1	7	1	11	-	1	9	1
Hospital Based	30	-	-	24	6	45	-	-	37	8
Primary Care/ Family Practice	11	4	5	1	1	24	18	4	1	1
Ocular Disease	16	1	1	5	9	22	5	1	5	11
Rehab Optometry/ Low Vision	15	3	1	7	4	26	7	1	11	7
<b>TOTALS</b>	<b>98</b>	<b>19</b>	<b>13</b>	<b>44</b>	<b>22</b>	<b>154</b>	<b>50</b>	<b>12</b>	<b>63</b>	<b>29</b>

Accr = Accredited; Non-A = Non-Accredited

provide didactic curricula comprised of the most current scientific and clinical information in what is usually a rapidly changing field. Lectures, seminars and library work in the residency are important and help to encourage the

resident in the life-long independent pursuit of learning.

Didactic programs should be challenging and well-organized. The significant human and other resources available within an academic institution

are often a strong feature of a school- or college-based residency. This is especially true for more specialized residencies. Residencies in primary care are broadly based, whereas residencies in pediatric optometry/binocular vision, contact lenses and geriatric optometry are usually more focused upon their specialty area. Appropriate coverage of specialty topical material is often aided in school-based residencies through the more extensive use of readily available didactic education resources.

Lectures, case conferences, grand rounds, seminars and journal clubs are common features of school programs which can further be tailored to the interests of the individual resident. Courses in both the core and elective optometric programs as well as adjunct courses within the college or university system are also accessible to residents based on their personal interest and direction. They can be a distinct advantage to residents who have graduated from other schools. Finally, library and other informational-technology services, as well as wet laboratories and computer facilities, are also available to enhance resident learning experiences.

### Faculty

Of critical importance to any educational program is the faculty. The extensive faculty resources available at a school or college-based residency

**TABLE 2**  
**PCO Residency Placement**

PROGRAM YEAR	CLASS SIZE	TOTAL PLACED	CLINICAL ACADEMIA	PRIVATE/HMO PRACTICE	HOSPITAL/MILITARY
1984-85	13	13	6	6	1
1985-86	13	13	2 + 1 pt	10	1 + 1 pt
1986-87	13	13	3 + 1 pt	10	-
1987-88	13	13	4	8	1
1988-89	13	13	5 + 2 pt	7	1
1989-90	13	13	3	9	1
1990-91	14	14	3 + 1 pt	10	1
1991-92	10	10	4	6	-
1992-93	13	13	1 + 6 pt	12	-
1993-94	11	11	3	8	-
<b>TOTAL</b>	<b>126</b>	<b>126</b>	<b>34 + 11 pt</b>	<b>86</b>	<b>6 + 1 pt</b>
<b>PERCENT</b>	<b>N/A</b>	<b>100%</b>	<b>27%</b>	<b>68%</b>	<b>5%</b>

pt = part-time



strengthen the basis of the program. In addition to the resident's clinical preceptor(s), there is usually a wide array of other educators including: specialty and subspecialty providers, pathologists, microbiologists and physiologists who can add significantly to the resident's training experience.

In addition to being experts in their clinical care areas, the residency faculty in academic institutions are professional educators with varied educational and scientific expertise. The typical career path of institutional faculty involves attainment of specific educational credentials and other measures of excellence critical to the specific needs of the educational endeavor.

Finally, not only does faculty excellence influence the general quality of the resident's program, but the presence of outstanding faculty provides for very positive personal role models for the individual resident.

## **Instructional Activities by Residents**

In school-based institutional residencies, teaching can comprise between 5 and 40% of the resident's schedule. Residents may teach in laboratories or lecture in case conferences, or in a classroom format. In patient care activities, residents not only function as clinical trainees, seeing their own patients, but they also act as clinical preceptors to undergraduate optometry students. This may be an occasional responsibility or up to 25-30 hours of their program. In general, the educational role of the resident can be a very positive factor in the resident's learning. It is well known that the act of teaching another individual is often the best form of learning.

Preceptorship can also be advantageous to the resident because the students being supervised function in much the same way as high level technical support for the resident. This enables the resident to practice in a more "case management" role, making higher order clinical decisions on a larger number of cases than would be possible in a direct care mode.

In such a supervisory setting, one might be concerned that the resident's own technical and testing skills might lie fallow. But the preceptorship model of clinical care ensures that the teacher (in this case the resident) frequently performs both routine and specialized test procedures in demonstration and as a check on student accuracy.

Finally, at the schools and college of optometry, the resident also will be precepting alongside more senior faculty. The camaraderie that exists among the doctors staffing the service often leads to informal discussion of cases as well as shared consultations which broaden the resident's patient experiences. This extensive opportunity to share patient experiences with a large group of experienced faculty clinicians is a great advantage of school and college-based residency programs.

## **Facilities**

Other important adjuncts to a quality clinical experience include the physical space, facilities and instrumentation that support the delivery of care and the attainment of the program objectives. School-based programs often include the most modern and comprehensive diagnostic and therapeutic equipment and services which will significantly enhance residency training. Advanced diagnostic and treatment services such as A-scan and B-scan ultrasonography, fluorescein angiography, electrodiagnostic testing, endothelial photography, automated visual field testing, ocular photography and therapeutic lasers are just a few of the potential advantages to a residency.

## **Research**

While not usually a large part of most residencies, research is a critical curricular component. The COE standards certainly address the importance of research; the presence of both basic science and clinical research activities at the school enriches the potential areas of research involvement for the resident. At the Pennsylvania College of Optometry, we have been fortunate in this regard. The recent establishment of our Glaucoma Service as an NEI trial site for the Ocular Hypertension Treatment Study will influence our residents as to the importance of research.

## **Outcomes Assessment**

An important feature of the COE's new standards is the requirement to provide for outcomes assessment of the training provided. This can be particularly effective within an institutional setting where evaluation processes are typically an ongoing process. The current and future impact of a residency program upon the profession or its educational process can be judged by measurement of post-training placement and other professional activities

As an example of the positive effects of residency training, data from our own residency programs at the Pennsylvania College of Optometry are provided in Table 2 which shows the placement characteristics of our program's graduates since 1984. It can be seen that all residency graduates were placed successfully, but it is of particular interest for us that there is balance between the number selecting private practice versus educational careers, thus showing that training in a school program provides the means and interest for residents to effectively enter private practice as well as teaching.

## **Conclusion**

There is no doubt that residencies improve our graduates' abilities to manage patients using highly sophisticated clinical skills. Our profession has benefitted substantially from the fruits of our residency-trained graduates thus far. Residency-trained optometrists are excellent role models in schools and colleges, and clinical organizations and hospitals prefer to recruit residency trained practitioners. The enthusiasm, aggressiveness and work ethic instilled in such practitioners by their postgraduate training are helping to move our profession forward.

It is also clear that the wide variety of training sites currently available to the optometric profession lends both strength and diversity to our future manpower pool. School- and college-based programs enrich the residency training environment by adding critical human and other resources found only at academic institutions. ■

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# The Status of Optometric Residency Programs at Department of Veterans Affairs Health Care Facilities

Timothy I. Messer, O.D.

## Introduction

Since 1975 the Department of Veterans Affairs (VA) has funded optometric residency programs affiliated with a school or college of optometry. This paper provides an overview on the status of VA residency programs through a description of general characteristics, including some historical perspectives.

Residency programs at VA facilities provide graduates of optometric institutions with one year of extensive clinical training in a hospital or outpatient clinic setting. Direct patient care responsibilities occupy the majority of a resident's week<sup>1</sup>. This care is provided

under the supervision of qualified optometrists who hold faculty appointments at the affiliated Association of Schools and Colleges of Optometry (ASCO) institution. To complement and enhance residents' clinical experience, the remainder of their week is spent rotating through other clinical services, attending seminars or clinical rounds, precepting fourth-year optometry students and engaging in scholarly activities such as research.

The typical veteran patient encountered by a resident is a geriatric male afflicted with ocular disease and/or systemic disease with ocular manifestations. The mix of cases presenting at each clinic, however, is actually quite varied and is dependent upon the mission of the facility.

There are currently 35 VA programs with a total of 68 funded residency positions; this number represents a 15 position increase from the previous academic year. Fifteen programs have one resident, 10 have two residents, eight have three residents, one has four

residents, and another has five residents. A number of the programs with multiple positions serve more than one facility, such as the five residents serving the two separate hospitals which comprise the Brockton VA Medical Center.

Currently, 15 schools and colleges of optometry are affiliated with at least one funded VA program. VA program representation at nearly all ASCO institutions has only been realized this current academic year with the addition of three new programs (Table 1).

Every residency position is designated by a title which is intended to reflect the major area(s) of training provided at the program. Within the VA, the eight different titles currently in use are derived from four different clinical areas: hospital-based optometry, rehabilitative optometry, geriatric optometry and primary care optometry. Nineteen programs are simply titled according to one clinical area: hospital-based optometry (18 programs) and rehabilitative optometry (one program). The remaining 16 programs utilize two to three areas of clinical emphasis in their titles, e.g. geriatric/rehabilitative optometry. The variety and diversity of current titles within the relatively confined institution of VA optometry has instigated a review of this topic. The Clinical Education Committee of the VA Optometry Service Field Advisory Group is currently discussing this issue in an attempt to develop recommendations for title guidelines that uniformly and appropriately identify programs.

Resident selection occurs in March and is facilitated through the utilization of a matching system. A private non-profit corporation, Optometric Residency Matching Services, Inc. (ORMS), currently provides this service. An application booklet produced by ORMS has been disseminated to all fourth year optometry students across the nation since the 1993-1994 academic year. ORMS determines matching selections through an objective algorithm utilizing preference ranking forms of both the applicants and the program supervisors. The process readily provides for both the ASCO institution and the VA supervisor of each program to jointly determine the ranking order on the supervisor's form.

The characteristics of applicants have recently been described<sup>2</sup>. For the two years reviewed in that paper (1991-1992 and 1992-1993), all ASCO institutions across the nation were represented in

*Dr. Messer is an optometrist at the SouthWestern Blind Rehabilitation Center, Tucson VA Medical Center. He is also an adjunct assistant professor at the Southern California College of Optometry; chairman of the resident recruitment committee, VA Optometry Service Field Advisory Group; and president of Optometric Residency Matching Services, Inc.*

the overall applicant pool, and all but two institutions had at least one graduate selected for a residency position. Also, the ratio of applicants exceeded positions by greater than two to one for those two years as well as for subsequent years (Figure 1). Interestingly, the number of applicants jumped significantly — from 113 for academic year 1992-1993 to 157 for 1993-1994 — coincidentally with the initial dissemination of the ORMS application booklet to all fourth year students.

The resident stipend as of academic year 1994-1995 was \$19,222. Stipends hovered between \$11,000 to \$14,000 from 1975 until 1989. Only since 1990 has the stipend been periodically raised to approximate the average stipend paid to residents in non-VA accredited residency programs. Residents receive approximately 13 days of annual (vacation) leave and approximately 13 days of sick leave.

When a VA facility and its ASCO affiliate mutually decide to establish a residency program, two primary steps must be completed. First, the facility must receive residency program approval, and second, position funding must be obtained. Both approval and funding allocation are managed by the Office of Academic Affairs in the VA Central Office.

The criteria for approval are: a Memorandum of Affiliation with an optometric institution exists, the facility's Deans' Committee (or equivalent) has approved the program and the program is appropriately accredited.

## Accreditation and Position Funding

The process of residency program accreditation, as elucidated elsewhere in this issue, begins with the submission of a self-study to the Council on Optometric Education (COE) of the American Optometric Association. VA programs are initially awarded a "Candidate Pending" designation by the COE, provided their self-study adequately delineates the intention of the residency program to conform to recently adopted residency standards. A full accreditation designation is only possible once a program has received position funding (to be discussed below) and is into its first year of matriculation. At that time, a maximum of seven years of "Accredited" status may be granted to a program based upon the recommendations of the COE site visit team. Twenty-seven of the 35 VA residency programs are currently

**TABLE 1**  
**ASCO Affiliate Distribution**  
**Modifications Over Time**

	Affiliate Distribution of VA Residency Positions			
	'79-80	'84-85	'87-88	'94-95
NECO	2	9	9	13
SCCO	1	3	5	6
PCO	1	6	6	5
PUCO	0	3	4	6
SUNY	1	4	4	6
UCB	0	3	4	6
TOSU	1	2	2	6
IU	1	3	5	4
UAB	1	4	4	4
UH	1	3	4	3
ICO	2	1	3	3
UMSL	0	0	2	1
FSU	0	0	0	1
NSU	0	0	0	1
SCO	0	0	0	1
Total	11	41	52	68

operating under the maximum seven-year accreditation status.

Upon receiving residency program approval, the next step is to obtain position funding. Each fall, all VA facilities are given the opportunity to submit a request to Academic Affairs for new positions. There typically is no shortage of interest in obtaining an optometry resident position as evidenced by the 29 new positions recently requested<sup>3</sup>. From the inception of VA optometric residencies in 1975 until the mid-1980s, many position requests were granted as position funding steadily increased; however,

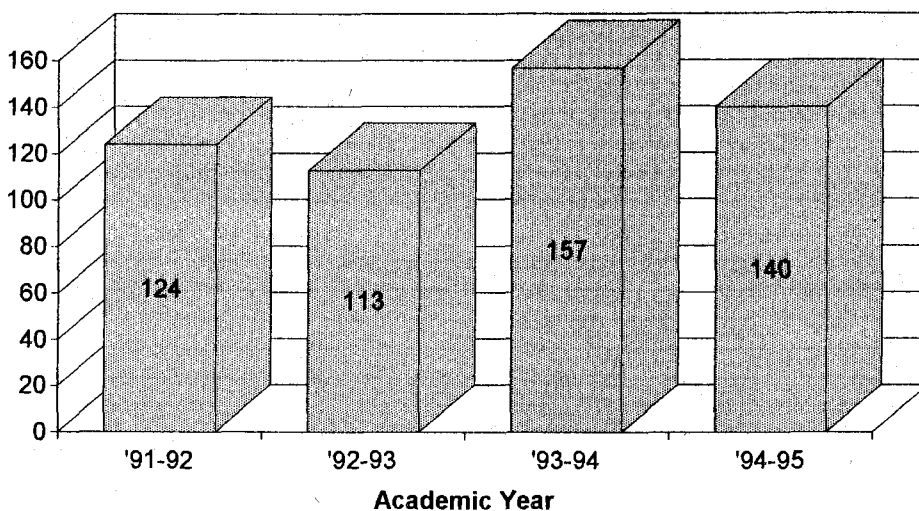
from 1986-1987 through 1993-1994, position funding remained stagnant at just above 50 residents (Figure 2). During this period of funding stagnation, the only residency allocation activity was a position redistribution to new programs resulting from other program position reductions or program cessations. The loss of a residency position or program in these circumstances was for various reasons such as the termination of an affiliation agreement.

It should be mentioned that facilities with existing optometric residency programs must annually seek renewal of their positions. Renewal requests are submitted in the fall, coincidentally with new position requests. Both existing and hopeful residency programs are given equal consideration in the final allocation process, which is based upon program quality. Some of the characteristics scrutinized to determine program quality are the productivity of the optometry clinic, program accreditation issues, optometric representation on the facility Deans' Committee, participation in special programs such as blind rehabilitation, the integrity of the educational environment as evidenced by such factors as the level of optometric clinical privileges and program autonomy as evidences by reporting relationships.

## Growth in Residency Positions

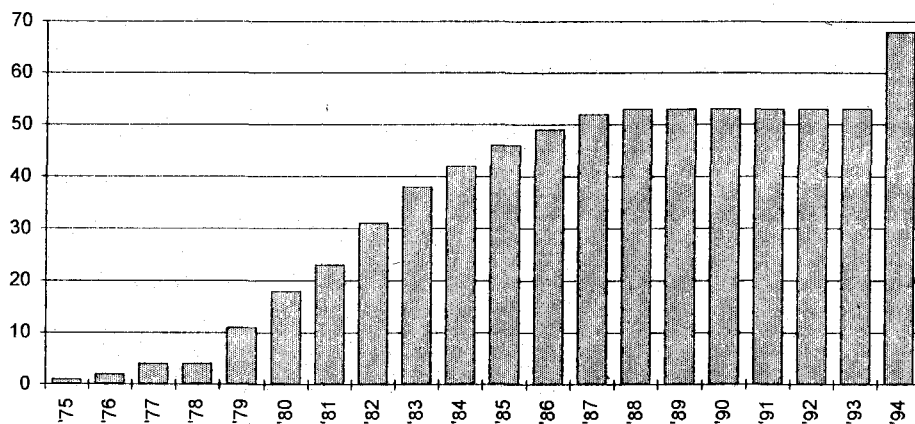
The 15 position increase of the 1994-1995 academic year is a result of a new, additional funding mechanism through

**FIGURE 1**  
**Total Number of Residency Applicants Annually**





**FIGURE 2**  
**VA Residency Position Count Modifications Over Time**



the implementation of a special VA program — the Primary Care Education (PRIME) Program. The PRIME Program,

coordinated through the Office of Academic Affairs, is discipline-wide, i.e., not solely optometric. With the current

climate of health care reform, the VA is seeking to provide training in primary/managed care through PRIME, emphasizing the integration of all disciplines in the team care approach.

Of the 171 VA health care facilities across the nation, 49 were awarded PRIME programs (four-year funding). Ten of these facilities received funding for either one or two optometry residents, accounting for the previously mentioned 15 position increase. In addition to the standard residency curriculum, the optometry residents in this program are fully integrated into the clinical and didactic activities occurring at the entry point of health care delivery at the facility, such as in an ambulatory care clinic.

Interestingly, only facilities with existing optometric residency positions were eligible for PRIME positions. Thus, the increase in PRIME positions this current academic year specifically did not lead to the addition of programs. Yet, as mentioned previously in the discussion regarding VA program distribution among the ASCO institutions, three programs were added this current academic year. These additions were the result of the redistribution of positions necessitated by one program position reduction and two program cessations.

A new and completely separate request for PRIME proposals for the upcoming 1995-1996 academic year has recently been disseminated to VA facilities. Every facility with an appropriate medical school affiliation is eligible except those selected as a PRIME program site for the initial awarding cycle. Additional optometry positions may therefore be forthcoming.

Affiliated residency programs at VA facilities discussed in the preceding paragraphs are currently experiencing a long awaited resurgence in growth. As the practice of optometry continues to expand, the skill levels attained by residents will be needed to serve the populace, both directly through clinical activities and/or indirectly as optometric educators. ■

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# Expanding Community-Based Residency Training for Optometrists

Barry J Barresi, O.D., Ph.D.

Michael H. Heiberger, O.D., M.A.

**T**he Department of Veterans Affairs, through its Veterans Health Administration (VHA), now has in place a national system of optometric residency programs affiliated with the schools and colleges of optometry. However, no such national system has been established for community-based optometric clinical residency programs. Even in the face of well-established and widely distributed clinical sites for optometry student clinical training (externships), very few of these teaching sites have been developed by the schools and colleges into sponsors of clinical residency education. This paper explores the opportunities and obstacles to resid-

ency program development in community-based settings.

## Programs Grow But Distribution Uneven

The number and national distribution of optometric residencies is expanding. Diversity in type of clinical sites and affiliation models is increasing. A 1993 ASCO survey revealed that, outside of the VHA, sixty-nine optometry residents are based in 45 residency programs. These programs are distributed across the nation with fifteen schools and colleges of optometry participating in non-VHA residency education. Primary care and family practice programs accounted for forty percent of all non-VHA resident positions. Other program types include pediatrics/vision therapy (22%), eye disease (16.9%), cornea/contact lens (11.9%), low vision (6.8%), and geriatrics (3.4%). These non-VHA residency programs are community based and are located in a variety of settings such as:

- College-operated eye clinics or centers. These may be on or off the main campus. Residents either spend their time in one location or rotate through several locations.
- Optometric services as part of general medical clinical facilities. An example of this type of program is the first HMO-based residency for optometry, established this year, by State University of New York and Kaiser Permanente, the largest group model HMO in the nation.
- Community and migrant health care centers. These facilities, usually located in inner city or rural areas, are often federally subsidized and care for disadvantaged population groups.
- State and local health department clinics or military medical centers.

Community-based residency training for optometry is growing, but the pattern of growth is not occurring uniformly across the country. The 1993 ASCO survey of residencies revealed that almost 50 percent of the community-based resident slots in accredited programs were at just two colleges, SUNY and the Pennsylvania College of Optometry, both located in the Northeast. By contrast, the development of the Department of Veteran's Affairs affiliated residency programs are widespread with programs distributed rather evenly across the country and involving all schools, thus reflecting planned growth within a centrally directed system.

## Real and Imagined Barriers to New Residency Programs

Residency education is undoubtedly part of the mission for each and every optometry school. This is apparent in the growth of residency programs at all schools, even though much of the growth has been within the Veterans Affairs programs. Community based residency programs have been developed unevenly across the country.

Some of the obstacles to the development of new programs may well include: program costs, program quality, sufficient patient care experiences and meeting accreditation standards.

### Program Costs

The 1993 ASCO Residency Survey showed that most schools and colleges with non-VHA residency programs are taking on the full financial burden of program costs. Sixty-eight percent of residents and sixty-six percent of residency faculty are on the payroll of

*Dr. Barresi is vice-president and dean for academic affairs at the State College of Optometry, State University of New York.*

*Dr. Heiberger is an assistant clinical professor and director of policy, planning and evaluation at the State College of Optometry, State University of New York.*

the college. The primary source of funding for these programs is patient services revenue. Over sixty-five percent of the residency programs generate revenue for the schools and colleges with seventy-seven percent of revenue coming directly from patient fees generated by the resident and faculty. Other programs use a variety of contracting arrangements to support resident stipends and faculty salaries.

### **Program Quality**

Maintaining the educational and patient care quality aspects of residency programs requires a significant commitment of resources of the sponsoring agency and the affiliated college of optometry. Such commitment often is not anticipated until program planners consider the expected standards for program accreditation.

### **Sufficient Patient Care Experiences**

The hallmark of residency programs is that they provide a rich and diverse clinical experience for the resident. Some clinical externship sites that are perfectly suitable for fourth year student extern rotations may need a couple of years to develop a sufficient patient load for residents.

### **Meeting Accreditation Standards**

The revised Standards for Optometric Residency Accreditation, recently published by the Council on Optometric Education, place additional burdens on both the sponsoring organization and on the college of optometry. These burdens have been deemed necessary to assure program quality and are essential if programs are to be considered eligible for various federal benefits (loan payment deferment, clinic reimbursement for patient care and even the possibility of direct subsidy of the resident). Some residency sites are also required to meet standards promulgated by the Joint Commission on the Accreditation of Health Organizations (JCAHO), an umbrella health care accrediting body.

### **Overcoming The Barriers to New Residency Programs**

It is important to look at existing residency programs, in optometry and elsewhere, with particular attention to those that have been around for a while. It is unlikely that these programs would have survived for long if they were not coping successfully with the issues of cost, quality and compliance. The very fact that optometric residency pro-

grams have been increasing in number attests to some level of determination on the part of the schools and colleges of optometry to meet the identified need for advanced clinical education.

### **Cost**

Cost in administrative time, faculty support and resident stipends come to mind as the primary obstacles. However, the 1993 ASCO Residency Survey suggests that there is not an insurmountable funding problem. Many schools have found a way to make accreditation quality residency programs financially viable. It appears that most schools and colleges have solved the problem of limited funding by finding allies and partners to jointly develop residency clinical sites and programs. These allies include neighborhood health centers, hospital outpatient departments, referral center practices, health maintenance organizations, and other private and public ambulatory health care settings. Funding, for the most part, comes from self-paying patients and private insurance. In 1993, less than half of the patient fees supporting non-VHA optometry residencies came from Medicare and Medicaid reimbursements. Public revenues may increase as more disease-related services are provided to Medicare patients. Both Medicare and Medicaid related patient revenue may only be viable in the future, however, within managed care systems, and it is in these systems that an optometric presence must increase.

### **Quality**

Often, the presence of a residency program within a community-based facility will serve as an incentive for the facility to monitor more closely its quality of care. This attention to quality can easily lead to an increased patient load needed for residency education and to increased reimbursement, also needed to support the residency.

### **Compliance With Accreditation Standards**

Contemporary accreditation practices rely primarily on a program setting its own mission, goals, objectives and priorities. The accreditation process thus becomes a positive factor in helping a program to define what it is doing, to acquire the resources necessary for program success and to involve all parties to the program in an active manner in the program's success. This can only serve to further enhance program quality and to position the

program to take maximum advantage of patient care cost reimbursement and other outside funding.

## **Additional Benefits of Community-Based Residencies**

Benefits of a community-based optometric residency accrue to both the sponsor and the academic affiliate (school or college). Briefly, some of these are: enhanced patient care, faculty development, clinical research, managed care networking, enhanced fund raising potential and enriched sites for externships.

### **Enhanced Patient Care**

Sponsors are assisted in their patient care service mission while the quality of care is enhanced by collaboration with an optometric college.

### **Faculty Development**

In addition to gaining a residency program, the affiliated college acquires a new clinical base for faculty development. The completion of a residency program has become almost a universal requirement for new clinical faculty. In addition, the optometric staff at the sponsoring facility becomes faculty or adjunct faculty at the affiliated school or college.

### **Clinical Research**

Certain residency locations might provide specific populations that are particularly suited to clinical research projects that the affiliated school or college wishes to pursue.

### **Managed Care Networking**

Links between the community-based facility and the school or college are useful to both for making contact with and developing relationships with managed care entities. Such relationships may well be crucial to both as changes occur in the nation's health care delivery system.

### **Enhanced Fund Raising Potential**

This is another benefit that accrues both to the sponsoring organization and to the school or college of optometry. Enhanced community visibility for the school or college is helpful in institutional fund raising. The affiliation with a school or college is often helpful to the community-based sponsoring clinic in its pursuit of resources.

### **Enriched Sites For Externships**

While the schools and colleges of



optometry currently have vast networks of clinical sites and externships for the professional education of optometry students, residency education has lagged behind clinical externship development at most schools and colleges of optometry. The addition of residency programs at appropriate community-based sites serves both the need to develop residency education and the need to strengthen the quality of the externship experiences at these sites. Residency education brings additional college resources, closer examination of program standards and the presence of a resident as an additional clinical supervisor for externs.

### **New Directions for ASCO— Taking the Lead**

The profession needs a national plan for residency education with targets for growth in the number, national distribution and diversity of programs. Hopefully, the Clinical Affairs Committee of ASCO will assume this charge over the next year. This Committee is best suited, in concert with other organizations, to convene meetings and promote other activities to foster new residency program startups. Some possible initiatives for ASCO include: conducting workshops, providing forums for academic and administrative officers, acting as a liaison with governmental and other sources of support, sharing information with other health professions and research.

#### **Conduct Workshops**

Leadership and administration skill workshops for residency program directors would give impetus to the development of new programs and help to improve existing ones. Emphasis should be on community-based residency programs.

#### **Provide Forums for Academic and Administrative Officers**

Discussion forums for college administrators would help to overcome hesitancy to make strong institutional commitments to residency education. The recent ASCO survey of residencies shows that some colleges and schools may not succeed in residency development because they are not trying to build new programs. Only a minority of schools even have plans to substantially increase residency training sites. However, it is not clear if the lack of plans mirrors the colleges' limited mission in residency education or if

new residency programs are not planned because leadership perceives that the barriers are insurmountable. The issues for each institution must be addressed at the top echelon of leadership.

#### **Liaison With Governmental and Other Sources of Support**

Meetings between ASCO and other national organizations and key national leaders to explore issues which impact on the affiliation of schools and colleges of optometry with community-based sponsors of residencies should be encouraged. Such entities include the United States Bureau of Health Professions and Bureau of Primary Care, the various state Offices of Community and Rural Health, the National Governors Association, national provider associations and interested private foundations.

*The 1993 ASCO survey of residencies revealed that almost 50 percent of the community-based resident slots in accredited programs were at just two colleges, SUNY and the Pennsylvania College of Optometry.*

#### **Sharing Information With Other Health Professions**

ASCO should seek joint conferences with other professions interested in community-based clinical training (e.g., family practice medicine and podiatric medicine) to share strategies of program development.

#### **Research**

ASCO, in conjunction with the COE, should keep, and regularly revise, a database of optometric residency programs. In addition, the Council on Clinical Affairs should promote research on issues related to residency program development. One example might be to develop a model for the optimum size and staffing required to support residency education.

## **Optometry's National Commitment to Community Based Primary Care**

Market restructuring and government health reform is shifting more emphasis to primary care in community-based multidisciplinary settings. Optometric education is attuned to this trend and can look with pride over the continued growth and vitality of community-based clinical education for optometry students. Yet leaders in optometric education must accept that the growth of residency education is lagging behind the achievements in professional education within community clinical programs. Too few of the clinical sites, programs and affiliations of the schools and colleges have been developed into optometric residency programs which meet current accreditation standards.

Building new optometric residency programs in the community and in affiliation with other health care institutions brings immediate benefits to the profession, to optometric education and to the public which they serve. Further delay in designing a national strategic plan for residency education will risk losing new private and public funding mechanisms being developed for the restructuring of the United States health care system. Barriers to residency development do exist. However, with committed leadership by each school and college of optometry, the profession can build a financially well-balanced and nationally distributed network of community-based clinical residency programs. ■

## **REQUEST FOR PROGRAMS**

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# Clinical Remediation Program In a Multidisciplinary Health Care Setting

Walter Potaznick, O.D.

## Introduction

**H**istorically, the New England College of Optometry (NEWENCO) has utilized the clinical rotations situated in the Boston area for the remediation of at risk senior optometry clinicians.<sup>1</sup> Both the neighborhood health centers as primary, outpatient care sites, and the VA hospitals, as secondary, inpatient care sites, are multidisciplinary in their approach to

health care.<sup>2</sup> My dual affiliation as a faculty member of NEWENCO assigned to the South Boston Community Health Center (SBCHC) has given me the opportunity to develop this clinical remedial program over the last five years. It has been felt that these sites have offered a unique set of conditions that maximize the potential for successful remediation of a weak clinician.<sup>2</sup> These conditions will be discussed later.

A number of conditions may contribute to an optometry student requiring clinical remediation during his or her final year. Factors contributing to this situation include:

1. Some students do not possess the clinical maturity to make the transition from a relatively sheltered primary clinical site, also known as an "internal clinic placement," to the complex and time conscious environment of the multidisciplinary clinic placements;
2. Increasing demands on the biomedical science aspects of the curriculum will require significant additional student study time. This may lead to less study and practice time of basic and advanced clinical skills;
3. As students progress through their professional curriculum, the potential for intrapersonal and interpersonal

problems increases, with increasing financial and family pressures impeding and diverting their energies from the priorities of their educational goals.

The reasons why students need clinical remediation so late in their academic careers are many and could be the focus of another article. I will focus this paper on the successful remediation of these students.

## Student Evaluation

The student evaluation format utilized at the SBCHC is consistent with the Problem Oriented Evaluation Matrix (POEM) clinical goals and objectives utilized throughout the NEWENCO clinical system.<sup>3</sup> Four areas are evaluated: technical skills, knowledge base, analysis skills and professionalism. It is important that both the student and preceptor utilize this well-defined format as a basis for identification of remedial areas and for monitoring their performance over the course of the remediation program.

## Mechanism of Placement

Once a student is identified as in need of remediation, a placement decision is made by concurrence and recommendation of the director of external clinics, the current preceptor and the future preceptor who will be responsible for the remediation program. Input from the student is considered when more than one possible remedial site is identified.

The remediation program will usually last a full three-month quarter, unless a shorter period of time is indicated by the nature of the weaknesses and other factors relative to the student's academic needs.

In a typical three-month rotation at SBCHC, a clinician will experience 200 to 250 patient encounters, from infants a few weeks old to patients in their '90s. The diversity of patient presentation is typical of most outpatient health care settings ranging from routine eyecare to a full complement of ocular, systemic and mental health pathologies.

The students are immersed in an environment that emphasizes the problem oriented approach to patient care and the Subjective, Objective, Assessment Plan (SOAP) format of record keeping. They are exposed to other departments involved in clinical education. At SBCHC, every patient care service is now involved in clinical education on a full or part-time basis, with planned and random interactions between the participants of these programs. These interactions take the

## Abstract

*The primary eye care clinic in a multidisciplinary setting, often referred to as an "external clinic rotation," offers a unique combination of health care provision, practice management modeling and teaching of optometry clinicians. It is also an ideal site to provide a remedial clinical program for weak, but not failing, senior optometry students.*

*The author presents a paradigm for working with these weaker clinicians in multidisciplinary health care settings. Specifically, the author examines effective modes of evaluation and remediation of clinical techniques, knowledge base, analysis skills and professionalism. Student exercises, reference texts, preceptor and peer participation are presented, as well as goals and outcome measures of success of this type of program.*

**Key Words:** Multidisciplinary health care, clinical remediation

*Dr. Potaznick is an associate professor of optometry at the New England College of Optometry and the eye care director at the South Boston Community Health Center. This article was based on a paper he delivered at the education section of the 1992 American Academy of Optometry meeting.*

form of weekly clinical conferences, frequent interdepartmental referrals and interdepartmental "house call" consultations.

A preceptor/clinician ratio of 1:4 allows close supervision of weaker students while allowing increased patient care responsibility as it is earned. It also allows the preceptor to guide and monitor the progress of the other assigned students without jeopardizing the quality of their education.

## Guidelines for Remedial Programs

The guidelines listed in Table 1 are consistent with most clinical remediation programs. The remedial student must take an active role in the development of goals and timelines. Full participation of all available student support systems is a must. The remediating preceptor becomes the team leader in coordinating clinical scheduling with offsite remedial assignments and in the design, completion and review of assignments and feedback sessions with the remedial student. He or She is also responsible for reporting of progress or lack thereof, to the appropriate school administrators.

Feedback takes many forms. Ideally, informal feedback should be offered after every patient encounter. In the context of a busy clinic, time should also be set aside for daily conversation between the preceptor and the remedial student. Written evaluations and lengthy discussions should occur at approximately two-week intervals or after every 40 patients. Based on the student's progress, assignments should be discussed, with revisions or new assignments agreed upon. New learning issues should be identified and goals set for their accomplishment.

The substitution of clinic time for library, tutoring, counseling or skills development time is crucial. While the global experience gained by patient encounters is important, so is the structured environment offered by the other student support services offered by the academic institution. As will be discussed later the student MUST structure his or her time to render the remediation program the ultimate priority for this time in their academic career.

## Description of POEM based skills

The areas of technical skills, knowledge base, analysis skills and professionalism

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**TABLE 1**

### Guidelines of Clinical Remediation Programs

- Weaknesses identified and discussed with student
  - Program goals and participant responsibilities clearly outlined and discussed
  - External support systems in place and active (tutoring, library, student counseling, etc.)
  - Reduction in clinic time to enable library time, tutoring, and counseling
  - Frequent progress discussions
  - Objective reassessment and updated goal setting as needed
  - Positive feedback where appropriate
- 

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**TABLE 2**

### Recommended Texts for Remedial Programs

- Carlson N et al. Clinical Procedures for Ocular Examination. Norwalk, Conn: Appleton & Lange, 1990.
  - Fingeret M, Casser L, Woodcome T. Atlas of Primary Eyecare Procedures. Norwalk, Conn: Appleton & Lange, 1990.
  - Barresi BJ. Ocular Assessment. Boston: Butterworths, 1984.
  - Amos J. Diagnosis and Management in Vision Care. Boston: Butterworths, 1987.
  - Rosner J, Rosner J. Pediatric Optometry. 2nd Ed. Boston: Butterworths, 1990.
  - Van Heuven WAJ, Zwaan, Editors. Decision Making in Ophthalmology. Philadelphia: B.C. Decker (Mosby), 1992.
- 

will each be discussed. Specific tools and typical resources that have been found useful will be presented. We have identified our favorite texts and references to which we consistently send our students. Presented in Table 2 are the texts that have been utilized with our remedial students.

## Technical Skills

The technical skills aspect of clinical care is self-explanatory. While remedial students are usually weak performing certain advanced tests or techniques, this should not be a global issue at this point in their education. Direct observation and preceptor repetition are necessary to determine areas of weakness and the nature of remediation necessary.

Direct observation or video taping is an ideal place to utilize clinical fellows or residents, and/or classmates of the remedial student who are showing potential as future residents or fellows. This requires a careful evaluation of sensitivities, but I have found that when a good match is possible, the outcome

for both the remedial clinician and classmate has been most rewarding.

The text by Carlson et al, is a very useful, quick, and complete reference for students remediating their technical skills. The Atlas by Fingeret, Casser and Woodcome covers the many advanced techniques utilized in a therapeutic, primary care setting (Table 2).

It is clear that many of the remedial students who have entered their fourth year have learned, and then quickly forgotten, much of the basic clinical knowledge necessary for application to primary care optometry. Assignment goals early in the remedial program must clearly demonstrate the student's ability to relearn this knowledge and to be able to apply this knowledge to hypothetical or real clinical situations.

This is another opportunity to utilize classmates, residents, or fellows as tutors and drillmasters. The student is ultimately responsible for the learning of this essential knowledge. This hurdle MUST be overcome if there is to be a successful outcome to the remedial program.



## Analysis Skills

The transition from data gatherer to clinician and ultimately to care provider occurs at different times for different students. However, it is typically delayed for a remedial student. The student must ultimately understand the concepts of problem oriented patient care, the SOAP format and Problem Based Learning techniques. I utilize formats based on Werner's worksheets approach to clinical reasoning<sup>4</sup> and on Scheiman's discussions on Problem Based Learning (PBL)<sup>5-7</sup> among others<sup>8</sup>. If scheduling permits, the student is enrolled in my Problem Based Learning elective offered at NEWENCO. Chart review utilizing a formal quality assurance format and group case review and case presentations are integral parts of the rotation for all clinicians assigned to South Boston. This is another area of peer feedback and support for the remedial student in a relatively non-threatening environment.

Each of the texts listed in Table 2, has a different but effective approach to teaching clinical thinking. Unfortunately, Barresi's text is out of print and not readily available. It is very effective especially in the neuro-optometric areas of diagnosis. Amos's text is symptom and case oriented and has been found useful by all of the students who have gone through the remedial program at S. Boston. Rosner's approach to clinical thinking goes well beyond his title of Pediatric Optometry. I usually have the students postpone the learning and perception chapters to help budget their busy schedule. The book by Van Heuven and Zwaan is the newest in Mosby's "Decision Making in ..." series which is built around decision trees or flow diagrams for each of the presenting signs and symptoms. Each in the series uses a minimum of text, charts and pictures to supplement its primary goal of visualizing problem solving. It is an excellent first, but not final, text in the clinician's evaluation of a given patient presentation.<sup>9</sup>

## Professionalism

The student's acceptance of his or her remedial situation is essential for the inception of any remediation program. This acceptance allows a self-evaluation and reordering of the student's own priorities. The effects of intrapersonal problems such as financial, personal or family concerns must be minimized and may warrant professional counseling and, in extreme cases, postpone-

ment of completion of his or her academic or clinical program. High verbal and high energy students must be taught how to harness these uncontrolled expressions of sincerity and zeal and redirect them to more productive outcomes.

Students with interpersonal problems such as unprofessional behavior, substance abuse, personality disorders or multiple conflicts with multiple preceptors and administrators are probably the most difficult to remediate. According to Hendren, this is also the group most likely to bring litigation against a school of higher education for unfair treatment. They are also very resistant to the recommendation of professional counseling or therapy.<sup>10</sup>

I have found many of the remedial students lacking in organizational or academic survival skills. Helping the student rethink priorities and carefully budget activities during study, practice and clinical time may help. Professional counseling may be necessary to help students deal with the stresses of graduate academic life often additionally stressed by family and other personal obligations. Of course, these students must be committed to their own success. This must be demonstrated by their actions as well as their words.

## Feedback Mechanisms

The importance of positive feedback cannot be underestimated in the overall outlook and progress of a remedial program. Improvements will be incrementally small, but must be identified and discussed with the remedial student. A positive, non-judgemental approach to the identification of continued weak areas is also essential for maintaining an appropriate student-preceptor rapport. The building of the student's self-confidence levels, often destroyed by previous negative evaluations, will fuel the student's efforts to strive for the best possible performance.

## Outcome Monitors

Many of the outcome monitors are the same for remedial students and non-remedial clinicians. Informal evaluations of charts and case presentations occur daily. Monitoring of patients' unplanned (problem) return visits and outcomes of referrals give some indication of quality of care and patient satisfaction. Biweekly assessment utilizing the clinical standard POEM format will show general, as well as specific trends, continued weaknesses,

and progress. Improved performance on written exams such as Clinical Sections of the National Boards will give some indication of improvement. If deemed necessary, formal clinical proficiencies of those specific clinical skills initially identified as substandard should be given by non-involved external preceptors. Both technical and analysis skills should be monitored at future primary, secondary, and tertiary care settings, each with its own increasing demands, as defined by the POEM format and its unique patient profiles.

The final and perhaps ultimate outcome measure is the student's performance on state and regional licensing clinical exams. This is often difficult information to gather except by direct voluntary reporting by the participating students.

The program at South Boston has had 13 participants in the last five years. Eleven have gone on to graduation. One was dismissed from the O.D. program. One is currently in the remedial program. Most have successfully achieved state licensing but not all participants have reported results.

## Conclusion

An effort has been made to present a paradigm for clinical remediation. These should be utilized with the understanding that each remedial situation is unique and requires individualized attention and design directed towards the needs of the remedial student and the clinical setting utilized. ■

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# IN REVIEW

## Primary Care of the

**Glaucomas**, Thomas L. Lewis and Murray Fingeret, Appleton and Lange, Connecticut, 1993, 410 pages, \$85.00.

*Primary Care of the Glaucomas* was written by the authors as a text for the practicing clinician. To this end, the authors have compiled an excellent text which will come to be known as the quintessential optometric source on glaucoma.

Section 1 covers the basic understanding of glaucoma, including classification of the glaucomas, epidemiology of the disease, anatomy and physiology of the ocular structures involved with the glaucoma process, as well as the pathophysiology of open angle glaucoma.

Section 2 is concerned with diagnosing glaucoma, discussing the procedures involved with the workup of a patient, as well as how to interpret the results.

Section 3 discusses treatment and management of glaucoma. This format leads to one of the great strengths of this book. Most of the chapters were written by contributing authors in their areas of expertise. Although separate texts are available on each of the chapter's subjects, the whole is clearly greater than the sum of the parts. Each subject is addressed succinctly and logically with the handy summary paragraph at the end of each topic. A unique aspect of this textbook is a chapter of nine case reports on the management of real glaucoma patients. Included is an interpretation of visual field studies with respect to optic nerve evaluations.

Criticisms on content are few and minimal enough to seem trivial. For example, very little is mentioned about some of the adjunctive tests such as tonography. Although of minimal clinical importance today, these types of tests should be mentioned from an historical perspective on glaucoma management. The authors

wanted this to serve as a "silent colleague in the exam room to guide in the diagnosis, management and treatment of the glaucoma patients." My fear is that the authors have done their job so well they make the management of glaucoma seem too easy. An inexperienced practitioner might use this book as a cookbook on glaucoma treatment.

### Guest Reviewer:

Dr. Ken Landesman  
State College of Optometry  
State University of New York

## Environmental Vision: Interactions of the Eye, Vision and the Environment

Donald G. Pitts and Robert N. Kleinstein, Butterworth-Heinemann, 1993, 422 pages including index and appendices, hardbound and illustrated, \$85.00

*Environmental Vision* fills a deep void in optometric literature. While the topics covered in this book are presented in almost every optometric curriculum, there has not been one consolidated text available for use in the classroom until now. This book will also serve as a handy reference for the practicing optometrists who wants to provide optimum care for his/her patients. Material is presented in the book on occupational optometry, hazards to the eye and vision, especially radiation hazards, and methods of ocular protection. The book describes the application of basic environmental vision principles to topics such as vision and video displays, driver's vision, contact lens use in industry, lasers in industry and protection by sunglasses.

The book is divided into four sections. Section I discusses the role of the optometrist in occupational optometry, and it describes the information needed and approaches an optometrist can use to become involved in occupa-

tional optometry. Section II covers the basic science of radiation and ocular and visual effects of radiation including the science of illuminating engineering. Section III presents methods used to provide ocular protection to all hazards. Specific topics of sunglasses, video displays, and vision and driving are also covered in this section. Section IV examines special considerations of welding, ocular hazards present in the dentist's office, ocular hazards of tanning salons, ocular hazards of diagnostic ophthalmic devices, and the effects of alcohol, marijuana and systemic drugs on vision.

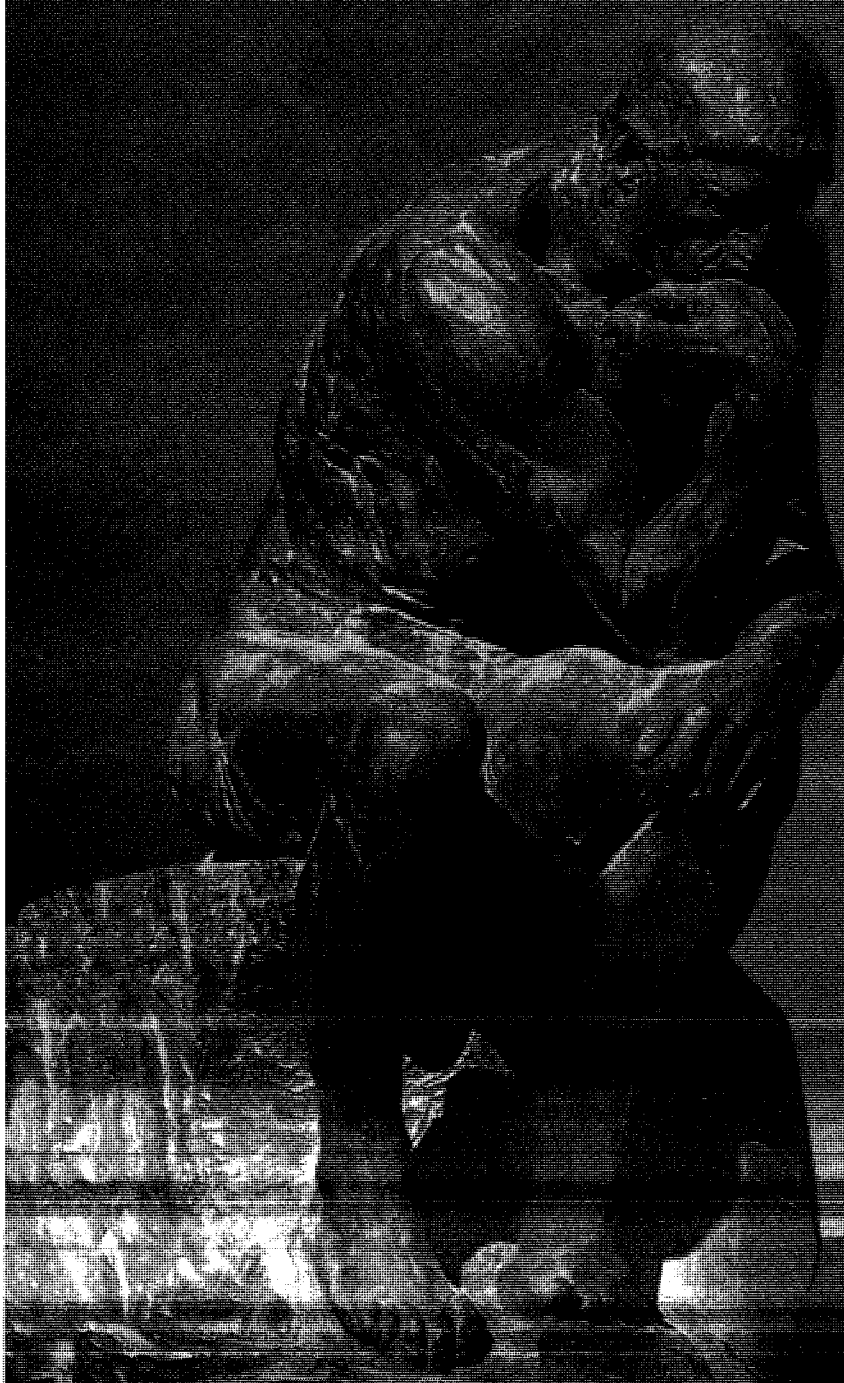
By the definition of the title "Environmental Vision," the topics included can be very extensive. But the chapter dealing with clinical uses of lasers seems out of place. The materials covered in this chapter would be better in a book on management of ocular diseases. The pages would be better filled with an analysis and description of selected occupational and recreational visual tasks similar to the approach used and published by Clark Holmes and Vision-Ease many years ago.

This book is must reading for optometry students if only because it creates an awareness of the environmental influences on visual function and ocular health. It teaches the student that the findings determined in a clinical setting need to be related to what the patient does occupationally and recreationally. It is also must reading for any primary care optometrist, because in addition to making the optometrist more aware of environmental interactions, the book also describes approaches the optometrist can use to interact with industry, and it conveys techniques that can be used to protect the vision of everyone.

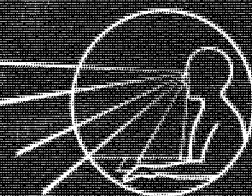
### Guest Reviewer:

Vincent King, O.D., Ph.D.  
Ferris State University  
College of Optometry

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