WOLFE: World Ophthalmology Leaders Forum in Education
A Forum at the American Academy of Ophthalmology's Annual Meeting

Global Optometry: Changing and Challenging
Non-Physician Providers – Lessons Learned Around the World

2011 Report/Orlando, FL

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WOLFE: An Introduction

In 2011, ophthalmologists in the United States were stunned by swift legislative action in the state of Kentucky, where optometrists were successful at expanding their scope of practice to include certain types of surgery. This development followed a half-century of steadily increasing optometric scope expansion in the U.S., from administering diagnostic drops in the 1960s and systemic medications in the 1980s, to performing extraocular surgery in the 2000s.

Scope-of-practice issues, however, are not limited to the United States. Ophthalmology leaders from around the world are reporting that expanding optometric scope of practice is now – or will soon be – a concern in their countries.

To discuss this controversial topic, ophthalmic leaders gathered on October 24 at the 2011 American Academy of Ophthalmology (AAO) Annual Meeting for the seventh annual World Ophthalmology Leaders Forum in Education (WOLFE). Leaders from nine countries provided updates about the impact of optometric practice on patients and physicians in their respective countries at this forum, titled *Global Optometry: Changing and Challenging, Non-Physician Providers – Lessons Learned Around the World*.

Organized by the AAO beginning in 2005, WOLFE brings together global leaders to discuss trends in ophthalmic education. This provides an unparalleled opportunity to exchange ideas and expertise in an open, collaborative and stimulating environment with the goal of improving ophthalmic education worldwide.

To open the 2011 session, the program chairperson and AAO Secretary for Global Alliances, Ronald E. Smith, MD, welcomed attendees and introduced AAO President Richard L. Abbott, MD, who framed the pivotal questions of the day:

Given 285 million visually impaired individuals worldwide, exacerbated by a rapidly growing and aging population, what is the best way to provide quality eye care for the greatest number of people?

With unique training and expertise in medical and surgical management, ophthalmologists are clearly qualified to diagnose, manage and treat all aspects of eye diseases and disorders. So what should be their response to optometrists, who seek to expand their scope of practice but do not have nearly the same level of education or training?

There are no easy answers, suggested Dr. Abbott, but the fact that participants from all corners of the world had come together to discuss the challenges they face and offer practical ideas on how to proceed was a significant beginning to finding global solutions.

Executive Summary

Models of eye care, health care systems and distribution of eye health care providers all vary greatly around the globe. In total, there is an estimated shortage of 4.2 million health workers worldwide.[1] To help bridge the vision-care gap, optometrists are likely a part of the solution. But what is the best way for them to do this?

To discuss these issues, the WOLFE panelists looked at some of the commonalities and contrasts between several countries grappling with optometric scope of practice, which varies tremendously from country to country.

For example, optometry is illegal in Brazil, and in Japan, optometrists are virtually nonexistent. But in other countries, optometry is making greater inroads. In the U.S., recent legislative gains in the state of Kentucky have, among other things, allowed optometrists licensed in that state to perform surgery. And in Canada, optometrists' professed goal is to control the intake for patients, replacing ophthalmologists as the primary eye care provider. Elsewhere, the numbers of optometrists are quickly growing, due in part to the presence of U.S.-based schools of optometry in 34 countries worldwide.

Optometry has promoted an aggressive strategy and far-reaching agenda – up to and including prescribing medications and doing surgery. Optometrists are expert advocates, having been introduced to the skill in optometry school. In many countries, they excel at fundraising, lobbying government officials and shaping the media's message.

The lines between ophthalmology and optometry are becoming increasingly blurred from the public's point of view. This works to optometry's advantage. In a recent U.S. survey, 70 percent of respondents incorrectly believed an optometrist is a medical doctor.

Ophthalmology's response to these challenges differs from country to country. Many agree that the proverbial line needs to be drawn in the sand – a line based on training, experience and expertise. But this requires a step outside the medical paradigm: ophthalmologists may have to participate in activism, fundraising and education – even major public relations campaigns such as those recently conducted in Austria.

In some countries, such as the Netherlands, South Africa and Ghana – where eye care providers are in short supply – it means wisely utilizing optometric services with appropriate regulation and oversight that protect patients. In Canada, using the direct

[1] Global Health Workforce Alliance: "About the Alliance." http://www.who.int/workforcealliance/about/en/

approach with all key stakeholders has proven helpful in ensuring a voice and giving a face to ophthalmology. In Australia, collaborative care agreements between ophthalmology and optometry have created an integrated approach, rather than separate treatment silos.

However ophthalmologists choose to proceed, all agree that the process should be based on what's best for the patient – driven by principles, backed by data, and shaped by pragmatism that fully considers each country's unique circumstances.

David W. Parke II, MD
AAO Chief Executive Officer

Michael W. Brennan, MD
Session Moderator

Pan American Region

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The Kentucky Derby
Daniel J. Briceland, MD
Secretary for State Affairs, American Academy of Ophthalmology

Who Manages Glaucoma?
Andrew Stewart Budning, MD, CM, MSc. FRCS(C)
Chair of Committee on Provincial Affairs, Canadian Ophthalmological Society

World Champions
Marcos P. Ávila, MD, PhD
Past President of Brazilian Council of Ophthalmology and Brazilian Society of Retina and Vitreous

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The Kentucky Derby

In 1998, Oklahoma became the first state in the United States to enact legislation allowing optometrists to perform certain laser surgeries. Under provisions of a bill passed in 2004, they can also perform some scalpel surgeries. Despite many similar challenges, no other state had been this successful until Kentucky optometrists passed the Better Access to Quality Eye Care Act on February 24, 2011.

Optometrists in Kentucky executed a well-orchestrated, three-part plan that included making large contributions to politicians, establishing close relationships with key legislators and working to influence the media in favor of optometry.

Faster than the speed of light
As described by Daniel J. Briceland, MD, the AAO's Secretary for State Affairs, the outcome was astounding. Kentucky's optometrists helped usher the passage of state legislation in just six business days.

As a result, Kentucky optometrists can now perform:

- Laser with exceptions
- Scalpel procedures with exceptions
- All routes of administration, including injections, of pharmaceutical agents, except Schedules I and II
- Anesthesia, except general anesthesia

Furthermore, creating a kind of "fox-guarding-the-henhouse" scenario, the Kentucky Board of Optometric Examiners also gained full oversight of optometric training requirements for laser surgery, added Dr. Briceland. Ophthalmologists remain skeptical about the level of medical training optometrists will receive. The 2011 requirements for

surgical education are 32 hours of didactic lectures. Hands-on surgical experience is not required, except laser training on just one human eye.

What went wrong?
Why the big loss for ophthalmology in Kentucky, especially when more than 25 states have faced and rejected optometric surgical initiatives over the past 12 years? After all, ophthalmologists in Kentucky had worked to ensure all medical associations opposed the "Quality Eye Care Act." Ophthalmologists hired lobbyists, talked to politicians, and successfully educated the media and public.

It was simply too little, too late. Optometry had secured *advance* political support and had outspent ophthalmology 10 to one.

A key lesson here, said Dr. Briceland, is to become engaged politically, making friends with politicians *before* it's a crisis. This means getting comfortable with non-MD tasks – supporting key politicians running for election, showing up when decisions are being made and educating the public about the meaning of quality eye care. Together, in teams with physician groups and medical schools, this can ensure the voice of medicine gets heard loud and clear.

Who Manages Glaucoma?

Andrew Stewart Budning, MD, Dr. Briceland's counterpart in Canada, continued the discussion, highlighting glaucoma management as an example of the challenges facing the Canadian Ophthalmological Society.

Optometrists have recently made several attempts to advance their ability to treat glaucoma. In Saskatchewan and British Columbia (B.C.), optometrists are seeking the right to diagnose and treat *all* forms of glaucoma. In fact, the B.C. College of Optometry has unilaterally stated that optometrists have this capability.

In Alberta, even though ophthalmologists have fended off attempts by optometrists to include laser and minor surgeries within their scope of practice, optometrists are allowed to co-manage glaucoma. Quebec has legislation indicating referral is mandatory for any disease of moderate acuity, but optometrists are allowed to treat diseases of low acuity.

Threats and opportunities
Outnumbering ophthalmologists six to one in Canada, optometrists aim to control the intake for patients. To date, they have made progress with bigger donations to and better relations with government officials, an important point since the Canadian government is the insurer of the population, thus having final say in most medical matters.

What ophthalmologists can do
The current approach of ophthalmology has been to work directly with optometry, ensuring involvement in any scope-of-practice changes in order to promote patient safety and accessibility.

To that end, the Eye Health Council of Ontario (EHCO) formed in 2010. It is made up of five members each from ophthalmology and optometry, one to two representatives from each college, and one representative from the Ministry of Health (MOH).

Meeting quarterly, the Council seeks to enhance working relationships, minimize duplication of services, develop "when-to-refer" flow-charts and discuss the needs of the community, such as ways to enhance delivery of high-quality, cost-effective care, especially in areas lacking services. It has provided an opportunity to discuss patient care, research, medical integration and the system as a whole, when and if significant changes to OD scope of practice occur.

Involvement of the MOH is a critical step in moving legislators toward an understanding of any risks and costs associated with changes and away from decision-making based solely upon campaign contributions. In September, for example, an EHCO meeting on glaucoma found that optometric involvement in pediatrics was unnecessary at this time.

Having discussions with legislators at least four to six times a year is critical, said Dr. Budning. Without direct involvement, the default is donations.

World Champions
Brazil has seen a 60 percent growth in the number of ophthalmologists in just the last decade, making it the country with the third highest concentration of ophthalmologists in the world – one for about every 11,000 people. With this growth – and through education, social projects, and advocacy – the Brazilian Council of Ophthalmology has moved closer to its goal of improving access to quality eye care, said Marcos P. Ávila, MD, PhD.

These are some of the Council's accomplishments:

Education
The Council has 14 affiliated subspecialty societies and offers 63 residency programs, issuing board certification for ophthalmology after stringent exams. Each year, about 6,000 individuals participate in the Ophthalmology Brazilian Congress.

Social projects
Spearheaded by the Brazilian Council of Ophthalmology, more than 159 million Brazilians have benefited from blindness prevention and eradication projects involving both federal and state governments. Through the federal public health system, 8.7

million people visit ophthalmologists each year, nearly free of charge. And this work doesn't go unnoticed, Dr. Avila observed. Politicians regularly attend camps where ophthalmologists are providing low-cost or free screenings and glasses.

Advocacy

In addition to negotiating better fees from health insurance plans – for example, cataract surgery fees that are comparable with those in the U.S. – the Council has taken a firm stand against optometry in Brazil. This has been facilitated by a strong presence in the Brazilian Medical Association and influence within the National Regulatory Agency (ANS).

In Brazil, opticians can sell glasses, but cannot prescribe. Ophthalmologists can prescribe, but cannot sell glasses. Existing laws (1934/1938) prohibit the practice of optometry altogether. Although more were available in the past, only one university currently offers an optometry degree. These restrictions on optometry in Brazil are due in large part to ophthalmology's informed discussions with policymakers and legislators.

Challenges ahead

At the regional level, ophthalmologists act to ensure enforcement of laws that prohibit the practice of optometry. They also hold forums every two years to educate legislators about the best course of action for achieving quality eye care.

At the national level, ophthalmologists work with legislators to find alternatives to federal bills aimed at legalizing the practice of optometry. They engage federal authorities in eye-care campaigns and make visible the social role of Brazilian ophthalmology. A recent major mobilization involved bringing 2,500 ophthalmologists to Brasilia, where they dressed in white coats and formed a giant eye on the lawn of the capitol, an impressive image that could be seen from the offices above. They also spent several days discussing health care. These efforts paid off, said Dr. Ávila. The new President signed a contract whereby Brazilian ophthalmologists will provide eye care for 34 million poor people in the next 2.5 years.

European Region

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The British Are Coming

Monica T.P. Odenthal, MD, PhD
President, Advocacy Committee, Dutch Ophthalmological Society

Media Power

Carl. G. Glittenberg, MD
Public relations representative of the Austrian Ophthalmological Association

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The British Are Coming

Despite being a small country with a high standard of living, the Netherlands has some eye-care delivery challenges that are similar to those in Canada and the U.S., said Monica T.P. Odenthal, MD, PhD.

The Dutch have only 580 (475 full-time) ophthalmologists for 16 million people. This poses an obvious challenge, given that a Dutch study predicts a 230 percent increased demand for ophthalmological treatment by the year 2020 due to the aging of the population and new treatment options.

Budget increases for this increased care are limited to 2.5 percent per year (plus inflation) for doctors' fees and for hospital costs, meaning that ophthalmology *needs* optometry to help address these growing eye-care needs, said Dr. Odenthal. Sure enough, optometrists are starting to appear, ready to meet the demand. In 2000, optometrists were nonexistent here; today, they number 760.

A need – but not neediness

Although optometry's services are needed, ophthalmology does not welcome a fight for patients and wants to preserve quality care. The goal is to limit optometrists' actions to the tasks for which they are adequately trained such as screening and prescribing of glasses , not independent treatment or surgery. Although independent consultations by optometry are desirable, Dr. Odenthal added, the ideal is for them to be done in a doctor's office, with the possibility of immediate supervision.

Refraction used to be free for clients buying glasses. But now optometrists, the majority of whom work in optical shops, want to charge a fee for care, including screening for diabetic retinopathy and possibly even glaucoma.

The problem

In hospitals or private practices, there is not currently a special tariff for optometrists who are employed there, which means eye doctors must check patients before anything can be charged. Not only does this require double work – ophthalmologists

checking patients who've already been seen by optometrists – but also physicians' fees that are over budget must be paid back and fees will decrease in the following year.

Getting strategic

Today, ophthalmologists are using a Dutch Vision document they crafted for strategic purposes to negotiate with optometrists, insurance companies, and the Ministry of Health. The document describes an "ideal situation." Ophthalmologists, unlike the optometrists, do not like the idea of central education and licensing for optometrists to perform controlled visits and treatment, but want to educate and certify the optometrists in the hospitals and practices. They are working toward a cost-component fee for optometrists to increase the volume in eye care without increasing doctors' fees, which must be paid back when they exceed budget limitations.

However, according to Dr. Odenthal, insurance companies and the Ministry of Health appear to favor optometry, which seems cheaper than "expensive" medical specialists. Creating trust, cooperation, and mutual understanding with all the stakeholders is essential for moving forward, said Dr. Odenthal.

Media Power

In Austria, the situation differs slightly from that of other countries, said Carl. G. Glittenberg, MD. Here, a central concern lies with opticians, who can prescribe expensive glasses and provide all other care for free, including exams and tests. This allows them to make the argument to government officials that they are offering a free service, but will refer as needed, which means "everybody wins."

Graduating with a medical degree of science, optometrists are difficult for patients to differentiate from ophthalmologists, especially given the overlap in tests and technology in both types of practice.

Until fairly recently, many ophthalmologists in Austria found little fault with any of this. However, ophthalmologists' role as central eye care providers was being compromised, said Dr. Glittenberg. Therefore, ophthalmologists themselves needed a wake-up call, not just the legislators.

Winning over the doctors

In an attempt to put a spotlight on this problem and protect the profession's role, the Austrian Ophthalmological Society launched a dual-purpose public awareness campaign targeted at doctors as well as the general public.

With funding from pharmaceutical companies and involvement by insurance companies and the government, the Association's initial 2008 campaign focused on Age-Related Macular Degeneration (AMD). It used a shocking image of eyeballs in an ashtray and the tagline, "Smokers throw away their eyesight."

The next two years, this was followed by glaucoma and diabetes campaigns, both of which focused on the importance of being screened by a physician for disease. The message of the glaucoma campaign was this: "If you don't get your eyes checked for glaucoma, you're gambling with your eyes." The diabetes campaign promoted this message: "Eyes are your most valued possession. Don't throw them away by not getting your eyes checked for signs of diabetes." The campaigns were quite effective, with widespread coverage in radio, newspapers and posters throughout Vienna.

By the time the pharmaceutical companies stopped financing these campaigns, the hearts and minds of ophthalmologists were being won over. This led to new funding from Association members dedicated for public relations efforts – a first in the Association's history. Contributions increased by about 400 percent.

Doctors in the driver's seat

To drive the point home and convince doctors of the need to regain their leading role in eye care, the Association had their lobbying company call nearly all ophthalmologists in the country and ask, "How long will it take to be seen for my chronic eye disease?" The resulting message was clear: With wait times of up to six months, there was little doubt about compromising quality care by losing patients to optometrists, with whom it was possible to walk right in for an appointment.

Other work by the Austrian Ophthalmological Association has included National Days of Eyes, involving health ministers, famous local personalities, and panel discussions. Currently, a national television campaign educates viewers about the importance of seeing a doctor who has the necessary education and training to identify the risk for many life-threatening diseases, such as diabetes.

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Middle Eastern and African Region

Unlimited Education
Kgaogelo E. Legodi, MD
Vice President of the Ophthalmology Society of South Africa (OSSA)

Educational Limits
James A. Clarke, MBChB
Medical Director of Crystal Eye Clinic and Medical Laboratory Services in Accra, Ghana

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Unlimited Education

In South Africa, there are about 370 ophthalmologists and 3,125 optometrists – 90 percent of whom are in private practice. Given a dearth of healthcare services for the poor and in light of the states' proposal to expand access, Kgaogelo E. Legodi, MD, posed several questions.

Playing devil's advocate, he asks a question to optometrists, "Are you simply hungry, or are you regretting that you are an optometrist?" He goes on to ask ophthalmologists, "Are we simply greedy or protecting our turf? We hear what optometrists are doing – lobbying and forming friendships. But what are we as ophthalmologists doing? Why aren't we also lobbying and forming friendships?"

Expansion of optometric scope of practice in South Africa could have adverse economic effects and increase risks to patients, said Dr. Legodi. At the same time, it would not meet the need for accessible eye healthcare for the population at large.

Dr. Legodi maintains that it would not be helpful or cost-effective if patients were treated incorrectly and ophthalmologists had to deal with complications at more cost per patient. "The control and supervision for the less experienced optometrist who may have to be situated in the remote areas of the country may prove to be difficult," Dr. Legodi said. "The greatest issue is quality as opposed to quantity. We all want to cover the number of people who need eye care services but we need to be very careful about the quality of care that will be given to those people."

For this reason, he met with South Africa's Minister of Health. At the end of a long discussion, Dr. Legodi brought up the scope-of-practice topic, explaining the impact it would have on patients. The health minister then vowed to look more closely at the expansion of optometric scope of practice in a serious way.

Dr. Legodi concluded by challenging colleagues not to "run after" the optometrists, but to set independent goals.

Educational Limits

With a population of 23 million, Ghana has 55 ophthalmologists (1 per 418,000 people) and more than 200 optometrists, a number that quadrupled from 2006 to 2010. Initially using optical centers to sell glasses, optometry has evolved beyond this limited scope. It has met legal obstacles after setting up eye care centers, where optometrists dispense drugs, including steroids. Unscrupulous practices by "optometrists" have even prompted the Ghana Optometrists Association (GOA) to seek action on a draft of an optometry bill, which would empower it to regulate the practice of optometry.[2]

Dr. James A. Clarke, MBChB, noted that efforts to avoid a value-added tax (VAT) have affected the way eye care services are provided. The VAT service in Ghana is a system whereby nearly all goods and services attract a 12.5% tax plus 2.5% National Health Insurance Levy, for a total of a 15% tax. Sales of glasses by optometrists attract this tax because it is considered a business. Realizing that medical services are exempted from this tax, Dr. Clarke said, some optometrists have converted their businesses into eye care services and decided to add the dispensing of drugs to their responsibilities.

Choosing how to respond is a dilemma for ophthalmologists, said Dr. Clarke. On a personal level, they are optometrists' co-workers and friends. On an official level, this relationship tends to be more antagonistic. A lack of optometric regulation exacerbates these differences. There are both a need for policies to regulate optometric activities, as well as a need to integrate optometric services into the healthcare system, said Dr. Clarke.

If well regulated, optometric services could be particularly indispensable in remote areas, providing frontline contact for eye care, including:

- Screening for glaucoma and cataracts
- Taking care of refractive errors
- Educating patients
- Referring to clinics

[2] Ghana News Agency: "Over 20% of optometrists are quack-Eye specialists." http://www.modernghana.com/news/30714/1/over-20-of-optometrists-are-quack-eye-specialists.html

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Asia Pacific Region

Down Under but Not Down and Out
Iain A. Dunlop, MBBS
Past President of the Royal Australian and New Zealand College of Ophthalmologists (RANZCO)

Disaster Prevention
Tetsuro Oshika, MD, PhD
Executive Director of the Japanese Ophthalmological Society

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Down Under but Not Down and Out

Australia's experience with optometry falls somewhere in between that of the U.S. and Canada, said Iain A. Dunlop, MBBS.

In 2009, the Pharmaceutical Benefits Scheme (PBS) was opened to optometry. Through this scheme, Australia provides subsidized medications to patients via pharmacies. In addition, Australia offers universal health insurance to cover all citizens, which has kept costs down over the last 20 years.

Optometric prescribing rights
Federal-based access to PBS-subsidized drugs has made them financially affordable for patients. However, optometric prescribing rights vary from state to state, ranging from none to 100 percent. A domino effect of state-by-state negotiations has ensued, said Dr. Dunlop.

Arguments about optometric prescribing rights in regional and remote areas are couched in terms of access and affordability, he said. To patients, there is little logic or justice in paying more for medications prescribed by optometrists. And patient safety or practitioner competence is not part of the picture as these are assumed, given states' decisions to allow prescribing.

Collaborative care agreements
Most states do, however, require collaborative care agreements between ophthalmologists and optometrists to manage eye disease. For example, glaucoma drugs require collaborative agreements; optometrists have no laser therapy or incisional surgery rights.

In general, optometrists screen and monitor and ophthalmologists diagnose and manage. This integrated approach avoids individual treatment silos and reduces the therapeutic educational density and rigor required of optometrists.

Lessons learned
What are the lessons learned by Australian ophthalmologists in the recent past? This is how Dr. Dunlop summed it up:

- Legislators make decisions regarding optometry on social and financial, rather than on medical, grounds; aren't concerned with relative medical risks; and don't understand the difference between ophthalmology and optometry.
- It is necessary for ophthalmologists to step outside the medical paradigm to discuss these issues.
- Optometrists have somewhat insidiously assumed the role of primary eye care practitioners, promulgating a clear message of therapeutic competence, training, and experience.
- An integrated team approach prevents individual treatment silos.
- Collaborative care agreements provide a template for other paramedical prescribing.

Disaster Prevention

Asian countries have large myopic populations. Can 14,000 ophthalmologists in Japan cover the needs of 127 million people – 20 million of whom are contact lens users and 17 million others who need eyeglass prescriptions each year?

In Japan, optometrists don't fill this void because few exist, said Tetsuro Oshika, MD, PhD. However, there are many opticians. The Japan Optician Association was founded in 1955 and vocational schools for opticians have been around since 1968. Opticians make and supply eyeglasses and contact lenses for vision correction.

Although the Association began certifying opticians in 2001, at present, this is not a government-approved license. The Japan Optician Association has been aggressively lobbying the government to officially approve this qualification, with the hope of upgrading it to optometrist. One argument is this: "There are optometrists in all developed countries except Japan."

The Japanese Ophthalmological Society has been strongly advising against such a move, said Dr. Oshika. They argue that ophthalmologists and orthoptists work well together to protect the health of peoples' eyes in Japan. Orthoptists, who evaluate and nonsurgically treat visual disorders caused by eye muscle imbalances under the supervision of ophthalmologists, number about 5,000 in Japan.

It's of interest to note that the few optometrists that currently exist in Japan studied and were certified in other countries.

About WOLFE

Organized by the American Academy of Ophthalmology (AAO), the World Ophthalmology Leaders Forum in Education (WOLFE) is a collaborative effort among ophthalmic leaders to improve and advance ophthalmic education globally. WOLFE participants are leaders from ophthalmic societies and academic centers worldwide.

WOLFE participants gather annually during the AAO's Annual Meeting to discuss the challenges and issues in ophthalmic education. The Forum provides the opportunity for open communication and the exchange of knowledge, information and expertise.

Presenters in the 2011 *Global Optometry Forum* included:

- Daniel J. Briceland, MD
- Andrew Stewart Budning, MD
- Marcos P. Ávila, MD, PhD
- Monica T.P. Odenthal, MD, PhD
- Carl G. Glittenberg, MD
- Kgaogelo E. Legodi, MD
- James A. Clarke, MBChB
- Iain A. Dunlop, MBBS
- Tetsuro Oshika, MD, PhD

Previous WOLFE topics are:

- *Global Quality of Care* (2010)
- *Teaching Surgical Skills to Trainees Today and Tomorrow* (2009)
- *Principles and Practices of Resident Education Around the World* (2008)
- *Guidelines for Developing Guidelines: Consensus versus Clinical Trials: Where Is the Future?* (2007)
- *Continuing Professional Development (CPD) Programs Around the World: What Is Needed? What Is Available?* (2006)
- *Attaining Clinical Knowledge and Skills in a Global Environment* (2005)