

2016 YEAR IN REVIEW

Empowering Lives, One Patient at a Time





Houston ophthalmologist Aaron M. Miller, MD, diagnosed 4-year-old Callie Efurd with Marfan syndrome. He was the first to spot the signs of the disease, which, if left undetected and untreated, could have put her at high risk of sudden death. Read more about our patient-stories campaign on page 21.

The mission of the American Academy of Ophthalmology is to protect sight and empower lives by serving as an advocate for patients and the public, leading ophthalmic education, and advancing the profession of ophthalmology.

The Academy's 32,000 members have a singular passion to help patients lead full and healthy lives. And each year, Academy physician leaders, countless volunteers and staff work hard to provide the tools, resources and advocacy you need to serve your patients with the highest quality of care.

In these pages, take a closer look at what the Academy's community of members achieved in 2016, our latest educational innovations and all the ways we support our practices and our patients.

Dear Colleagues,

About one in every 20,000 Americans is an ophthalmologist.

This fact conveys both a remarkable privilege and a responsibility. We receive the trust of the other 19.999 to preserve their best possible vision. We are responsible to provide the best possible care and advocate for our patients' needs. And it is up to the Academy to support and enhance those activities.

Bill Rich's letter and the following articles delineate many of the Academy initiatives related to education, advocacy and quality eye care which address that responsibility.

I'd like to emphasize a few things:

First, while representing only about 2.5% of American physicians, our Academy undertakes a unique leadership role on innovative issues. Take the ONE® Network, for example. About ten years ago, driven by then-CEO Dunbar Hoskins and with the full support of the Board of Trustees and staff, the Academy led an effort to build what was then the most ambitious and forward-thinking web presence of any specialty in medicine. The result today is not simply a 'virtual library of ophthalmology' but one which increasingly uses new simulation technologies (thanks to a grant from Academy member Stan Truhlsen and his wife. Dottie). personalized learning systems, and about 15,000 pages of content with nearly 1,500 embedded videos. Subspecialty 'centers' in glaucoma, ophthalmic pathology, oculoplastics and pediatric ophthalmology have been developed or are under development to focus content. Most significant, the ONE Network is now used by nearly half the ophthalmologists on the planet as a vital part of their education and as a patient-specific care resource. We receive many letters from the U.S. and abroad that basically say, "The ONE Network changed the way I

managed this patient."



The IRIS Registry in a little over three years has grown to be the biggest specialty-specific clinical data registry in the world. About 90% of American ophthalmologists use it for quality improvement, generating new scientific knowledge and complying with physician payment requirements. The millions of dollars invested in IRIS are yielding hundreds of millions of dollars in avoided penalties and successful bonus submissions by thousands of our colleagues. A big investment, but a much bigger return for our members. Ophthalmology leads the way in big data.

We all went to medical school to be the best and we'll embrace tools that help us stay that way.

We are also not reticent to take positions on subjects important to our profession. Each of those positions are developed transparently—based generally on the input of hundreds of members—and keeping the patient at the center of the decision. Whether they are positions having to do with federal advocacy, genetic testing, new patient-facing technology or compounded medications, we do so primarily guided by principles—not economics.

None of this would be possible without the leadership and support of the nearly 900 Academy members—from all over the globe—who serve on editorial boards, committees, and task forces. This is supported by a professional culture of engagement in the activities of the profession—something that is not universal in medical societies. This is why members support the Foundation—our charitable and innovation fund. It's why hundreds

come to the Mid-Year Forum each year—to learn about health policy and socioeconomics and to advocate on Capitol Hill. It's why more than 30 million unique patients are enrolled in the IRIS Registry—because we all went to medical school to be the best and we'll embrace tools that help us stay that way.

In 2016, Bill Rich was the perfect president for the times—a long and distinguished history of organizational leadership, a keen understanding of health policy and the economics of practice, a champion for quality of care initiatives, and a passion for individual patient care. He led a Board of Trustees balanced by geography, academia versus private practice and comprehensive versus subspecialty. While it could benefit



from even more diversity, it has made great strides. Many times I've wished that each Academy member could spend some time in the Board room and fully understand the complexity of the issues, the talents in the room and the gravitas of the discussion and decision-making process.

There is no question that 2017 will pose its own set of challenges and opportunities. Hopefully, it will be a time to simplify the regulations that impose an unreasonable burden without improving care. Hopefully, it will be a time of unparalleled

scientific discoveries and new technologies that benefit patients. Regardless, we will do our best to advance the profession, serve its members and their patients, and represent the principles that guide us all.

Thank you,

Davi H. Pala us

David W. Parke II, MD Chief Executive Officer American Academy of Ophthalmology

We will
do our best
to advance
the profession,
serve its members
and their patients,
and represent
the principles
that guide us all.

Dear Fellow Physicians,

The opportunity to serve as the 2016 Academy president was the highlight of my 40-year professional career. And what a year it was—from the proposed Medicare Access and CHIP Reauthorization Act in April to the tumultuous November presidential election. Let's take a snapshot of just a few of the accomplishments that you'll read about in the following pages.

Federal Affairs

The Academy had a remarkable year that included scaling back a dramatic 34 percent cut in certain glaucoma and retinal detachment payments. Another key accomplishment was our halting of the misguided Part B Drug Demonstration that would have underpaid many of our retina surgeons. In addition, we were able to get the Centers for Medicare & Medicaid Services to drop the

onerous G code requirement and limit a mandated data collection initiative on postoperative visits related to global surgical payments.

The Academy also joined medicine's successful year-long effort to build flexibility into the first year of Medicare's new physician payment system. This helped ensure that no ophthalmologist will receive a financial penalty in 2019. Finally, as a result of a major campaign to educate Congress on the benefits of clinical data registries, the Academy helped prohibit data blocking by EHR vendors.

State Affairs

The Academy partnered with ophthalmic state and subspecialty societies as well as state medical societies to derail state legislative proposals that posed a threat to patient safety and surgical standards. With member support of the Surgical Scope Fund, the Academy and its state

partners won victories in Alaska, California, Delaware, Illinois, Iowa, Massachusetts, Pennsylvania and Puerto Rico.

The Academy also remains committed to assisting states in the introduction and enactment of proactive patient initiatives. For example, with our help, early refills of prescription eyedrops was enacted in Arizona, Colorado, Louisiana, Missouri and West Virginia.

We owe our thanks to the dedication of those Academy members who took the time out of their busy schedules to ensure that our message of high-quality patient care was heard loud and clear in state capitols throughout the country.

Education

Clinical education has been and will always be a major focus of the Academy. Under the leadership of Secretary for Clinical Education Louis B. Cantor, MD, and more



than 400 volunteer physicians, the Academy continued implementation of its strategic vision. Among the highlights are:

- A new journal, *Ophthalmology*[®] *Retina*, launched in January 2017;
- The Accreditation Council for Continuing Medical Education awarded the Academy with its highest award for excellence, Accreditation with Commendation, for the fifth time;

The opportunity to serve as the 2016 Academy president was the highlight of my 40-year professional career.

- The Ophthalmic News and Education (ONE®) Network continues to be the envy of clinical medicine — especially with the formation of the David E.I. Pyott Glaucoma Education Center: and
- The Academy's EyeWiki® achieved more than 6 million page views during the year.

This only touches on a few of the innumerable accomplishments of the clinical education secretariat.

IRIS Registry

The IRIS Registry® (Intelligent Research in Sight) is now the world's largest clinical data registry, with more than 32 million patients and 119 million records. Since its launch in 2015, more than 14,000 U.S. Academy members have joined the IRIS Registry to meet the demands of quality reporting under Medicare. With the passage of MACRA, Medicare is increasing its focus on value-based care. Our registry enables Academy members to succeed under this environment.

The IRIS Registry is also now supporting clinical research to inform clinical knowledge and support scientific discoveries.

Annual Meeting

AAO 2016 was widely attended and favorably viewed by more than 25,000 physicians, health professionals and industry representatives. I had the opportunity to address our colleagues at the opening session, using the occasion to reflect back on our profession's biggest accomplishments over the last 40 years:

- A 70 percent decrease in blindness from diabetic eye disease:
- Unimaginable innovations in cataract surgery—from inpatient intracapsular and outpatient extracapsular surgeries to smallincision phacoemulsification and foldable intraocular lenses:



- A 50 percent decrease in the incidence of blindness from glaucoma over the past 15 years; and
- A 90 percent decrease in shortterm blindness from exudative macular degeneration.

What was the key to this incredible improvement in ophthalmic outcomes that predated quality measurement and value-based care? The time-proven formula of great science, clinical education and professional communication.

We as a profession continue to deliver on the Academy's promise to our patients to protect sight and empower lives.

Sincerely,

Willia & Rialton

William L. Rich III, MD, FACS
President
American Academy
of Ophthalmology

We as a profession continue to deliver on the Academy's promise to our patients to protect sight and empower lives.

2016 Board of Trustees



WILLIAM L. RICH III, MD, FACS President



CYNTHIA ANN BRADFORD, MD President-Elect



RUSSELL N. VAN GELDER, MD, PHD Past President



GEORGE B. BARTLEY, MD Editor, Ophthalmology



DANIEL J. BRICELAND, MD Senior Secretary for Advocacy



LOUIS B. CANTOR, MD Senior Secretary for Clinical Education



MICHAEL F. CHIANG, MD Trustee-at-Large



JAN-TJEERD H.N. DE FABER, MD International Trustee-at-Large



JANE C. EDMOND, MD Trustee-at-Large



PAUL B. GINSBURG, PHD Public Trustee



LYNN K. GORDON, MD, PHD Vice Chair, The Council





MATHEW W. MACCUMBER, MD, PHD Chair, The Council



CYNTHIA MATTOX, MD, FACS Trustee-at-Large



CHRISTIE L. MORSE, MD FAAO Advisory Board



THOMAS A. OETTING, MD Trustee-at-Large



MILDRED M.G. OLIVIER, MD Trustee-at-Large



DAVID W. PARKE II. MD Chief Executive Officer



ANDREW M. PRINCE, MD Trustee-at-Large



JONATHAN B. RUBENSTEIN, MD Secretary for Annual Meeting



HUMPHREY J.F. TAYLOR Public Trustee



ROBERT E. WIGGINS JR., MD, MHA Senior Secretary for Ophthalmic Practice



LIHTEH WU, MD International Trustee-at-Large

Advancing Patient Care 1 Million Visits at a Time

The Academy's quality of care initiative reached a significant milestone in 2016. Our IRIS® Registry (Intelligent Research in Sight)—the nation's first EHR-based comprehensive eye disease and condition registry—is now the world's largest clinical database. And its reach continues to grow, providing ophthalmologists with clinical benchmarks and practice patterns on more than 32 million U.S. patients and 119 million patient visits as of Dec. 31, 2016.

Since the beginning of 2014, ophthalmologists using the IRIS Registry have submitted data on millions of patients with common eye diseases, including open-angle glaucoma, cataracts, age-related

macular degeneration and diabetic retinopathy. These electronic records allow for data collation in a fraction of the time it would have taken 10 years ago.

Approximately 14,000 physicians now use this data to assess their quality of care and ease compliance with Medicare reporting requirements. For the 2014 reporting year, ophthalmologists avoided more than \$24 million in penalties by using the IRIS Registry to participate in the Centers for Medicare and Medicaid Services' Physician Quality Reporting System.

As CMS transitions to its new physician payment system in 2017, the Academy will evolve the IRIS Registry's reporting functions to meet the agency's requirements.

Expanding the power of data science

IRIS Registry users span all practice types, from solo practitioners to large institutions, including 15 academic teaching hospitals. The registry's influence continues to expand rapidly. Alongside other sources of data, the Centers for Disease Control and Prevention is now evaluating use of the IRIS Registry to establish a new eye health surveillance system that would provide population estimates of vision loss, eye diseases, eye health disparities and barriers and facilitators to care.

Read more:

 The Prevalence of Myopic Choroidal Neovascularization in the United States: Analysis of the IRIS® Data Registry and NHANES (Ophthalmology)



Database registry manager Andy Khuong demonstrates the IRIS Registry's innovative analytics module. Guests at the AAO 2016 event, "Using the IRIS Registry: Access, Analyze, Act," learned how to get valuable clinical insights into their patient populations.

Creating Superior Educational Programs and Resources

The Academy continues to expand our educational offerings to support your ongoing efforts to enhance the care you provide. In 2016, we created numerous resources to broaden our range of live courses, interactive tools, surgical videos and other media.

Academy CME program earns highest ranking

One of our most significant accomplishments is the Accreditation Council for Continuing Medical Education granting the Academy's CME program its highest ranking—Accreditation with Commendation—for the fifth time. The ACCME reserves this ranking for programs that go above and beyond physicians' learning needs to help them provide better patient care.

"The ACCME through this process recognizes that the Academy is a leader in professional education for the benefit of patients and the public," said Louis B. Cantor, MD, Academy senior secretary for clinical education.

Showcasing the latest advances

Thanks to funding from the Academy Foundation, the Academy's Ophthalmic News and Education (ONE®) Network has evolved into the world's leading online resource for ophthalmic education. The ONE Network comprises thousands of clinical videos, podcasts, images, interactive cases and courses. It also includes access to 10 leading journals, the latest news, practice guidelines and maintenance-of-certification resources.

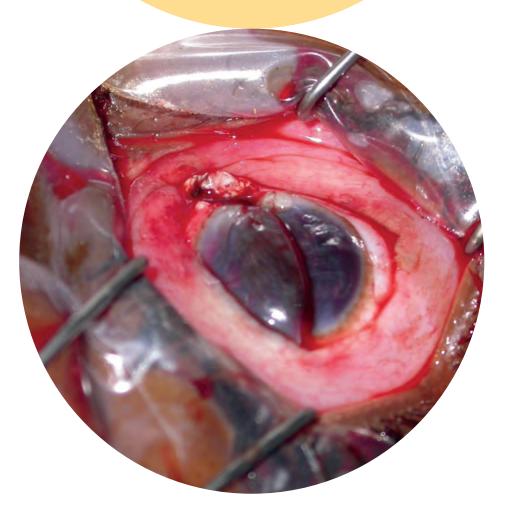
With just a few clicks, a seasoned U.S. ophthalmologist preparing for a laser trabeculoplasty or a resident in Mumbai learning the details of visual field tests can hone their skills and help their patients see the vibrancy of the world around us.

In 2016, The ONE Network added major new, innovative resources, such as the The Knights Templar Eye Foundation Pediatric Ophthalmology Education Center. Other recent additions include a pathology atlas for resident education, the Oculofacial Plastic Surgery Education Center and a media library boasting more than 2,000 surgical videos, presentations and interviews.

Keeping you up to date with timely, live instruction

We expanded our live offerings with a new clinical webinar series that helps ophthalmologists improve patient outcomes. These interactive seminars include presentations from well-known ophthalmic leaders and provide a chance for participants to earn CME credit, interact with other attendees and take online polls. Topics include:

- New techniques for performing emergency anterior segment surgery;
- Treatment and management of critical ocular trauma;
- How Ebola and Zika viruses affect the eyes;
- Morbidity and mortality in cataract surgery; and
- Pediatric neuro-ophthalmology.



The Academy's new clinical webinars offer more opportunities for live instruction outside the annual meeting. We record all sessions for viewing later. Above: "Damage Control, Essential Actions in the Initial Management of Ocular Trauma" helps ophthalmologists successfully handle these intense situations.

Expanding Journal Publishing Opportunities for Retina Specialists

In response to the growing volume and quality of retina research, the Academy announced a new scientific journal for 2017— Ophthalmology® Retina. With the increased exposure to retina-specific manuscripts, ophthalmologists will be better able to stay on top of the latest advances in medical drug treatment, surgery, technology and science.

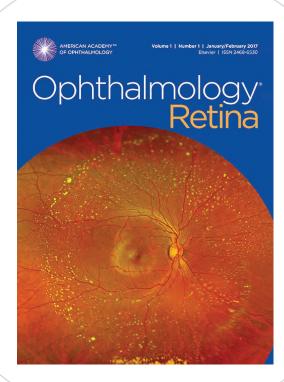
This new print and online publication extends *Ophthalmology**, one of the most-read clinical publications in the medical specialty. *Ophthalmology* has an impact factor of 6.75—the highest among clinical journals in the field. *Ophthalmology Retina* will benefit from the same experienced staff, editorial board and expedient

review and publication process. The journal will publish bimonthly in 2017 and monthly starting in 2018.

"Ophthalmology receives and publishes more manuscripts on retina-related topics than any other subspecialty," said George B. Bartley, MD, editor-in-chief of Ophthalmology. "In recent years, the retina subspecialty has made astonishing advances in medical drug treatment, surgery, technology and science. It was clear that we needed to provide retina researchers with more opportunities to get these exciting studies published as soon as possible."

The Academy appointed Andrew P. Schachat, MD, as editor-inchief for the new publication. Dr. Schachat previously served as Ophthalmology's editor-in-chief from 2003 to 2012. Since concluding his tenure, he has continued to serve as a senior editor for the publication, overseeing retinarelated manuscripts.

The new publication debuted with the <u>January/February 2017 issue</u>.



Highlights from the inaugural issue include "Evolution of Geographic Atrophy in Participants Treated With Ranibizumab for Neovascular Age-Related Macular Degeneration" by Emily Y. Chew, MD, and "Laser Photocoagulation for Peripheral Retinal Capillary Hemangioblastoma in von Hippel-Lindau Disease," by Alain Gaudric, MD.

Providing AAO 2016 Attendees Access to Game-Changing Research, Techniques and Technologies

The Academy's annual meeting continues evolving to stay at the forefront of global ophthalmic meetings. More than 25,000 ophthalmologists, health professionals and industry experts convened in Chicago to attend AAO 2016, the Academy's 120th annual meeting. That attendance included an all-time record of 8,062 physicians attending Subspecialty Day. Attendees from around the world engaged with colleagues, honed their surgical skills and reviewed the latest technology on the exhibition floor, gaining knowledge and insight to improve patient care. Attendees were also able to earn up to 33 CME credits. including all eight of their required self-assessment hours.

Douglas D. Koch, MD, delivered the **Jackson Memorial Lecture**, "Hiding

in Plain Sight: The Enigmatic Cornea and IOL Calculations." Dr. Koch discussed the ongoing difficulties in capturing the corneal optical data required to optimize IOL selection. The professor and Allen, Mosbacher and Law chair of the Baylor College of Medicine ophthalmology department then looked at the latest advances to overcome these challenges.

A popular new session this year, "Spotlight on Ophthalmic Manifestations of Systemic Diseases: What You Need to Know," crossed specialties and highlighted innovative concepts in the diagnosis and management of ocular manifestations of systemic disease. This year's Cataract Spotlight session, "Spotlight on Cataract: Complicated Phaco Cases—My Top 5 Pearls," continued its run as one of the most popular meeting

events. Speakers offered their pearls on difficult phacoemulsification cases, derived from hard-won clinical experience. Attendees used response pads to express their own opinions and interact with the international panel.

The Academy offered the free **AAO 2016 Virtual Meeting** to bring the conference to those who were not able to attend in person. This year, we streamed 20 hours of educational content for live remote access. More than 1,300 people from 110 countries accessed AAO 2016 and Subspecialty Day presentations.

Top 5 Highly-Rated Spotlights and Symposia at AAO 2016:

- Michael F. Marmor, MD, Lecture in Ophthalmology and the Arts
- Spotlight on Cataract:
 Complicated Phaco Cases —
 My Top 5 Pearls
- 3. The Great Debate: Neuro-Ophthalmology
- 4. Grand Rounds: Cases and Experts From Across the Nation
- C. Stephen and Frances
 Foster Lecture on Uveitis and Immunology



Francesca Casadio, PhD, A.W. Mellon senior conservation scientist with the Art Institute of Chicago, presented the 2016 Michael F. Marmor, MD Lecture in Ophthalmology and the Arts. Her presentation, "The Alchemy of Color in 19th Century Art," received the highest overall rating at AAO 2016.

Creating Opportunities to Further Our Profession at Home and Abroad

The world is a better place when all communities have access to high-quality eye care. The Academy invests in patients and our profession two-fold: By attracting underrepresented U.S. medical students to ophthalmology, and by providing Academy resources to students and practicing ophthalmologists in developing countries.

New this year, the Minority
Ophthalmology Mentoring
Program and its inaugural Student
Engagement Day launched at
AAO 2016. A collaboration with
the Association of University
Professors of Ophthalmology,
this pilot program is designed to
attract underrepresented medical
students to ophthalmology to
more accurately reflect the patient
population. As part of the program,
the Academy matched 18 students
with ophthalmologists who will
mentor them for the coming

years, helping them prepare to be competitive when applying for the residency match.

The Academy conducts activities in an effort to decrease worldwide blindness alongside the greater global ophthalmology community. Through its **Global Outreach** programs, the Academy supplies colleagues in developing nations who have limited educational resources. This Academy Foundation-supported collaboration works to ensure that patients throughout the world have access to quality eye care.

For example, the Academy partners with international ophthalmic societies to provide access to the ONE

Network. Last year, the Academy granted ONE Network access to 35,901 ophthalmologists in 61 developing countries, allowing them to use the most current news and the latest clinical education resources.

Each year, the Academy also provides hundreds of educational materials to ophthalmology residency programs in developing countries. In 2016, the Education **Distribution Project** provided more than 100 full sets of the 13-volume Basic and Clinical Science Course. The project sent an additional 125 sets to these programs in partnership with the International Council of Ophthalmology. AAO 2016 attendees from developing countries also took home a total of 400 bags of books and DVDs through the project.

And through the Host an Ophthalmologist Program and Rotary Club Host Project, the Academy helps ophthalmologists attend the Academy's annual meeting. These opportunities provide invaluable educational, professional and networking experiences. Last year, the programs brought a total of 41 ophthalmologists to AAO 2016, where they learned new skills and techniques to share with colleagues upon their return home.



engagement day at AAO 2016. They learned about the many subspecialty areas from which to choose in ophthalmology and about the diseases that most affect minority populations.

Enabling Physicians to Make an Impact Around the World

At AAO 2016, the Academy launched the Global Directory of Training Opportunities. This is a new resource for ophthalmologists seeking training opportunities outside their countries. It provides basic information and links to fellowships, observerships and externships from around the world, including Europe, Latin America, Africa, the Asia Pacific, the Middle East and North America.

Ophthalmology (GO) Guide continues to serve as a valuable resource for ophthalmologists working in underserved areas and developing countries. Now in the third year in the online ONE Network, the Academy expanded the reach of this effort, resulting in more ophthalmologists using the quide than ever before.

The Academy's Global

The GO Guide includes several online CME courses for physicians who want to work overseas. including the new course, "Starting in Global Ophthalmology: Mentorship, Funding and the Work-Home Balance." In this roundtable discussion, veterans of global ophthalmology share tips about working in developing countries and underserved areas. from finding mentors to securing funding sources. They candidly share the challenges of balancing home life with work when traveling abroad and discuss how to handle disappointment when reality does not match expectations.

Another popular feature is a new video, "Zika Virus and the Eye," by Camila V. Ventura, MD, of the Altino Ventura Foundation in Recife, Brazil. In this presentation, she describes in detail how to detect ocular abnormalities in infants with microcephaly and presumable intrauterus Zika virus infection.

The GO Guide also hosts the winning videos from each of the Academy's global video contests. These contests are an accessible way for international members to contribute to the ONE Network.

Read more:

 A New Tool: The Global Ophthalmology Guide (EyeNet® Magazine)



Camila V. Ventura, MD, examines a baby with microcephaly in Recife, Brazil. Her video, "Zika Virus and the Eye," is included the GO Guide, a valuable resource for ophthalmologists practicing or planning to practice in developing countries.

Advocating for Our Patients Through Better Government Policies

In 2016, ophthalmology experienced an unparalleled year successfully advocating for our patients and profession. Whether by steering federal policies that ensure access to quality care, or derailing state initiatives that put patient safety at risk, the Academy stood tall on behalf of those who rely on our care.

Our efforts were led by the Academy's community of ophthalmologists, whose collective advocacy in Washington, D.C., and across the nation deliver victory after victory. Your efforts protected our patients by ensuring they have access to the highest quality of care. They helped remove the administrative barriers that stand in the way of the critical, one-on-one relationship that patients and the physicians need.

FEDERAL HIGHLIGHTS

Preserving fair Medicare reimbursements for glaucoma and retinal detachments

We scaled back substantial cuts to retina and glaucoma reimbursements in the 2016 Medicare fee schedule. Our strategy: Convince the Centers for Medicare & Medicaid Services that the methodology it used failed to consider the entire picture of patient care. The Academy waged an aggressive, multi-pronged campaign to overturn this payment methodology, using legislative, regulatory and legal approaches. Throughout this effort, we stressed that CMS consider all factors including intensity and time—when it sets reimbursement rates. CMS failed to do that when it cut glaucoma and retina reimbursements.

Easing burdens for reporting electronic health record usage

Federal policies that require physicians to report on their meaningful use of electronic health records remain cumbersome and distract physicians from patient care. The Academy partnered with other medical specialty societies to lighten the burdens of these policies. For instance, convincing CMS to shorten the reporting period for the meaningful use program, the Academy helped ensure that ophthalmologists and other physicians can focus on what they do best—care for their patients by avoiding penalty-causing administrative burdens.

The Academy also led the winning effort that resulted in a blanket exception from the 2015 program. This effort, spurred by CMS' late, irresponsible policy issuance, protected nearly all of the nation's health care providers from penalties in 2017 for their reporting.



Rep. Dave Loebsack (D-lowa), left, meets with Academy Advocacy Ambassador Philip I. Niles, MD, MBA, during Mid-Year Forum 2016's Congressional Advocacy Day. This inperson advocacy allows attendees to directly interface with federal lawmakers on behalf of ophthalmology's patients, discussing topics such as fair Medicare physician reimbursements, relief from administrative burdens, and preserving access to sight-saving compounded drugs.

FEDERAL HIGHLIGHTS CONT.

Positioning subspecialists for fairer cost assessment under Medicare quality programs

Medicare is shifting to a valuebased system for paying physicians for patient care. This program includes measuring and comparing physicians' resource use. In anticipation of this shift. the Academy successfully secured special, voluntary designations known as taxonomy codes—that will help ensure CMS measures oculoplastic, retina, glaucoma and uveitis subspecialists against their own set of practitioners. When these designations go into effect, they may help ophthalmic subspecialists stand out among their peers in other areas of eye care.

The Academy continues to seek similar opportunities for other ophthalmic subspecialties, including neuro-ophthalmology, pediatrics and cornea.

Protecting ophthalmology from intrusive national global surgery data collection effort

Months of objections by the Academy and our partners representing other medical specialties led to CMS drastically scaling back its plan to collect global surgery postoperative visit data.

The agency's proposed approach to this data collection mandate would have added as many as 10 new codes to each patient bill nationwide—which was too broad and inconsistent with what Congress intended when it forced CMS to halt a planned unbundling of global payments for surgical services in 2015.

In the process of impacting this policy, the Academy helped ease the burden on ophthalmologists by convincing CMS that it should reduce the number of ophthalmology procedures impacted from 240 to 33.

The agency also agreed to limit its collection efforts to just nine states while changing the coding process. These changes mean most ophthalmology practices will find relief.

STATE HIGHLIGHTS

Preserving surgery by surgeons nationwide

The Academy's community of ophthalmologists waged successful battles in seven states and territories to protect patient safety and keep ophthalmic surgery in the hands of surgeons. Our colleagues in Alaska, California, Delaware, Iowa, Illinois, Massachusetts and Puerto Rico turned back significant optometric challenges, in which lawmakers were asked by optometry to add laser, scalpel and injection privileges to optometrists' scope of practice.

Giving our patients access to early prescription eyedrop refills

Five states joined the Academy's ongoing, national effort to ensure that our patients have access to the prescription eye drop medication on which they rely. By adopting early prescription refill policies for medicated eye drops, lawmakers are ensuring that patients in Arizona, Colorado, Louisiana, West Virginia and Missouri will no longer risk running out of their necessary, sight-saving medications because of inadvertent spillage or waste.



The Academy's 2016 "Surgery by Surgeons" campaign, underwritten by the Surgical Scope Fund, supported the successful efforts of state ophthalmic societies and medical associations to derail dangerous optometric surgical scope-expansion bills.

Winning Advocacy Victories Through Member Investments

The resources needed to advocate for our patients are made possible through member support for OPHTHPAC® and the Surgical Scope Fund. In Washington, D.C., and throughout the 50 states, financial contributions are among the ways that Academy members are amplifying our profession's voice for lawmakers to hear.

These investments serve to activate staff and monetary resources that can ensure that our lawmakers are well-educated on how their decisions affect our ability to provide quality eye care.

In 2016, both funds experienced unparalleled success, winning relief from administrative and regulatory burdens and staving off challenges by those who do not place a premium on patient safety.

OPHTHPAC

(FEDERAL ADVOCACY)

<u>OPHTHPAC</u>®, the Academy's political action committee, helped build the relationships with Congress that

enabled us to advance our position on many of ophthalmology's federal issues. Because of OPHTHPAC, we were able to call upon our many friends in Congress in our time of need.

In 2016, the relationships that OPHTHPAC helps maintain were instrumental in compelling 100 members in the U.S. House of Representatives and Senate to join our fight to have the Centers for Medicare & Medicaid Services revisit its recent decision to cut retina and glaucoma fees.

When the Academy fought back against CMS' ill-conceived Medicare Part B drug pricing proposal, which would have inadvertently barred our patients from sight-saving drugs, Congress again came to our aid, proving that long-lasting relationships make a difference in developing sound federal health care policy.

Without **OPHTHPAC investments**, the Academy does not have:

· Important leverage to fight bad

policy when we need it;

- The ability to take action when Congress forces unfair legislation upon our physicians and ultimately, our patients; and
- The opportunity to elect and re-elect those who will give ophthalmology the strong support our profession needs.

SURGICAL SCOPE FUND

(STATE-FOCUSED ADVOCACY)

In each state, the <u>Surgical Scope</u>
<u>Fund</u> ensures that physicians on
the frontline of our fight to preserve
patient safety have access to staff
and monetary resources that make a
difference.

In 2016, the Surgical Scope Fund won every battle in which it was activated, enabling our colleagues in six states to defeat state legislative surgical-scope proposals that would have placed our patients at risk, including Alaska, California, Delaware, Illinois, Iowa and Puerto Rico.

Your contribution to the Surgical Scope Fund is confidential, and effectively strengthens ophthalmology's position when the next challenge to patient safety arises.



The Academy honored Surgical Scope Fund donors at a reception during Mid-Year Forum 2016. Kenneth P. Cheng, MD, Chairman of the Surgical Fund Committee, also recognized past Chairman Thomas A. Graul, MD, at the event. Thanks to donor support, the Academy can provide a louder voice in fighting for our patients' rights to safe ophthalmic surgery by qualified practitioners.

Strengthening National Advocacy Profile With Record Member Engagement

Shaping public policy

The Academy's annual Mid-Year Forum in Washington, D.C., brings together our members and other ophthalmic leaders to learn about legislative and regulatory issues facing the profession. We also meet with federal lawmakers to help shape public policy.

Session topics in 2016 included Medicare physician-payment programs; how the Academy's IRIS Registry can benefit your practice; and the challenges regarding public disclosure of physician-specific performance and payment data.

A record 164 Academy advocacy ambassadors attended the second annual L.E.A.P. (Leadership, Engagement, Advocacy, Practice Management) Forward session during Mid-Year Forum 2016. This program educated membersin-training on the importance of

advocating for their profession and actively participating in state and subspecialty societies. Leslie A. Tobe, MD, a 2016 program participant, said, "I found it addressed real issues of advocacy, leadership and practice management, which are things we don't get access to in residency training." The Indiana University School of Medicine sponsored Dr. Tobe.

The Academy also honored five members of Congress for their efforts to advance the quality of eye care. We presented the <u>Visionary</u>

<u>Award</u> to Sen. Bill Cassidy, MD, R-La., and Reps. Phil Roe, MD, R-Tenn.; Paul Tonko, D-N.Y.; Raul Ruiz, MD, D-Calif.; and Ami Bera, MD, D-Calif.

Engaging one-on-one with elected officials

At the Mid-Year Forum 2016

Congressional Advocacy Day, a

record 421 ophthalmologists met on Capitol Hill with legislators and their staff to present the concerns and positions of our profession.

- 2016 Medicare fee cuts for glaucoma and retina surgical codes: After our meetings, several members of Congress joined the Academy's campaign to ask CMS to re-evaluate the flawed methodology used when determining cuts to surgical codes earlier in the year. The immediate impact was a \$14 million annual improvement in scheduled payments for ophthalmology.
- Proposed Part B drug demo:
 Ophthalmologists expressed strong concerns about the impact of CMS' Medicare Part B drug demonstration proposal, which would change how the agency reimburses you for drugs you administer in your offices. After our meetings, more than 300 members of Congress told CMS they opposed the plan. CMS' decision in December to not proceed with this proposal was a direct result of our bipartisan advocacy effort.



Academy president William L. Rich III, MD, presents the Academy's Visionary Award to Sen. Bill Cassidy, MD, R-La., for his long-standing support for ophthalmology and our patients.

Contributing to Our Profession's Success

Academy members, corporations and friends were instrumental in driving a successful year of fundraising to support our educational, quality-of-care and service programs. In 2016, the Academy Foundation raised \$4.2 million in support of key programs including the Ophthalmic News and Education (ONE®) Network, global outreach programs, the EyeCare America® program and the Museum of Vision®.

The ONE Network campaign

The Academy Foundation reached its fundraising goal of \$10 million to complete the second major phase of ONE Network development. This will expand global access to the ONE Network, ensuring more ophthalmologists have the educational tools they need to provide outstanding patient care.

David E.I. Pyott Glaucoma Education Center

The David E.I. Pyott Foundation pledged \$2 million to the Academy Foundation to create a ONE Network center that will help speed online medical training in glaucoma treatment. This new resource, launching at the end of 2017, will give ophthalmologists a peer network to discuss and manage challenging cases, and an extensive searchable online library of clinical support materials and patient education resources. Mr. Pyott is the former chairman of the board and CEO of Allergan. This endowment represents the largest contribution ever given to the Academy from a single individual.

The Dr. Stanley and Dorothy Truhlsen Simulation Education Initiative Endowment Fund

Longtime Academy leader Stanley M. Truhlsen, MD, and his wife, Dorothy, pledged \$500,000 to create an unrivaled online educational resource on the ONE Network. This endowment fund will provide the latest simulation and interactive learning technology to advance physician education, highlight new discoveries and transform patient care worldwide.

Orbital Gala 2016

The Foundation's 13th annual Orbital Gala was one of the most successful galas to date. It raised more than \$190,000 for Academy programs. More than 400 guests enjoyed a silent auction, dinner and dancing at Chicago's Field Museum. This year's gala honored former EyeNet Magazine Chief Medical Editor Richard P. Mills, MD, MPH, for his more than three decades of exceptional service to the Academy.

The foundation salutes every donor

who supported the Academy and its mission to deliver state-of-the-art ophthalmic education and services. Learn more about the many convenient ways to give and make a gift today.



Orbital Gala 2016 guests Sonny D. Goel, MD; Ravi D. Goel, MD; Joseph T. Nezgoda, MD, MBA; Swati Goel, MD; Sidney K. Gicheru, MD; and Tomas A. Moreno, MD, enjoyed the exhibits, dinner and dancing at Chicago's renowned Field Museum.

Making a Difference in the Lives of Underserved Patients Nationwide

During 2016, many members of the Academy's community of ophthalmologists dedicated time from their busy schedules to come to the aid of those in need. Through the Academy's **EyeCare America*** program, more than 8,000 medically underserved seniors and those at risk received sight-saving services.

The program is one of the largest public service programs in American medicine. In just over 30 years, volunteer ophthalmologists have helped more than 1.8 million people nationwide avoid blindness and severe visual impairment.

EyeCare America volunteer ophthalmologists provide either a glaucoma exam and/ or a comprehensive eye exam, often at no out-of-pocket cost. This dedication to giving back to communities gives qualifying older Americans a chance at a better quality of life. Nearly 6,000 dedicated volunteers support this effort.

These volunteers fuel this success—and EyeCare America needs additional volunteers each and every year. Hear what your colleagues have to say and learn how easy it is to volunteer in our new EyeCare America video. "We always think of a mission trip as leaving the country," says Ann A. Warn, MD, MBA, "but there's plenty to do right in your own country."

"In a very busy specialty, volunteering for EyeCare America is a great way to stop and reconnect with one of the most rewarding aspects of practicing medicine," said Megha Agrawal, MD, "which is making a difference in the lives of those who may not otherwise get the help they need."

And the impact is clear—the program receives countless notes from grateful patients throughout the year. Mr. Webb, from California, wrote, "This is an excellent program and may have saved me from going blind—I can't thank you enough!"

"Don't hesitate to become an EyeCare America volunteer," said Robert Taylor, MD, "because the Academy makes it about the easiest way to offer your volunteer efforts to the public."



Megha Agrawal, MD, talks about her rewarding experience in the EyeCare America program. Volunteering requires only a small time commitment, but offers generous rewards. Sign up at aao.org/eyecareamerica.

Teaching Practices to Run More Efficiently and Profitably

Running a practice in today's dynamic healthcare environment has never been more challenging. You are being asked to do more with less in today's shifting regulatory landscape. To help practices thrive in the new era of value-based eye care, the American Academy of Ophthalmic Executives, the Academy's practice management affiliate, continues to develop products and services to help you succeed. In 2016, AAOE launched a line of lean tools that help ophthalmology practices:

- Improve practice efficiency:
- Increase profitability;
- · Improve quality of care; and
- Improve patient satisfaction.

The first of its kind in ophthalmology, this lean-management program has something to offer every practice, regardless of size or subspecialty. In addition to free online resources,

AAOE's first offering of tools and services makes it easy to implement lean principles.

- Going Lean: Reduce Costs, Increase Profitability and Improve Patient Satisfaction
- This 60-minute introductory webinar covers how lean thinking can improve patient satisfaction scores, alleviate physician and staff stress and reduce operational costs. Participants also learn how to increase revenue by developing strategies for new Medicare physician payment programs.
- Mastering the Art of Lean
 Ophthalmic Practice

 This four-hour workshop from
 AAO 2016 gave attendees
 practical, usable lean skills they could immediately apply to their practices.

Interest in the webinar and workshop has been robust, with more than 300 physicians and practices participating.

The Academy's new 60-minute eLearning coding courses help physicians and administrators master ophthalmic coding anytime, anywhere. Developed by the Academy's coding experts with lean management principles in mind, these interactive online courses offer flexibility and convenience—users connect from the comfort of their home or office and learn accurate coding and documentation at their own pace. Three courses are available in the Academy store:

- Complete Guide to Documenting and Coding Cataract Surgery
- Eye Visit Code Documentation Guidelines
- <u>Testing Services Documentation</u>
 Requirements

Each eLearning course offers 1

AMA PRA Category 1 Credit™ and a certificate of completion for JCAHPO Category "B" credit.



At AAO 2016, the course "Mastering the Art of Lean Ophthalmic Practice" offered instruction on how to create the greatest value with the least amount of waste. Attendees learned about essential lean core concepts and design principles, plus how to create a powerful tool to analyze a practice's current system and identify ways to improve practice flow and patient experience.

Telling the Story of Our Impact Through the Voices of Our Patients

The Academy launched a significant effort in 2016 to more powerfully demonstrate the value of medical and surgical eye care to members of the public. Our new patient story initiative is a monthly series of feature stories that highlight a patient and the life-changing care they received from Academymember ophthalmologists. The program seeks to elevate the profession of ophthalmology to the public and encourage people to make their eye health a priority.

One of our <u>video stories</u> features Stephanie Beaver Alder, who had herpes keratitis. At age 5, and again at 11, Richard L. Abbott, MD, performed corneal transplants that transformed her quality of life. "Your hands and someone who decided to be an organ donor are how I am able to see and experience the world the way I do," she said. "My life has been changed in every way. Not just my vision, but everything. I just feel so grateful."

Each month, our <u>EyeSmart* website</u> for the public and our social media channels feature a new patient story. <u>Submit your story for consideration</u>.

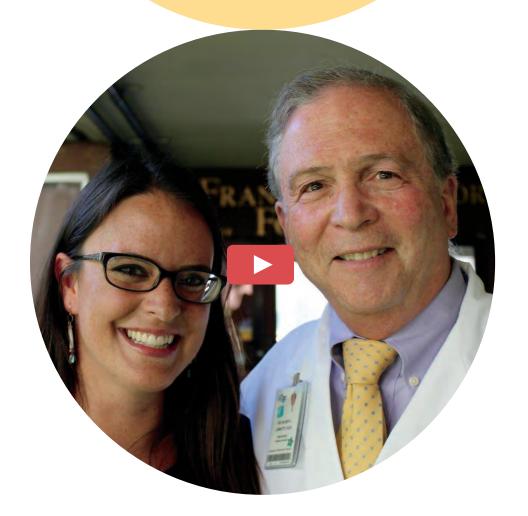
Engaging the public through digital and social media

We also renewed our call to the public about the importance of regular eye exams beginning at age 40. With the launch of an animated video, "Eye Exams:

Detecting the Signs We Can't See," we take a creative and entertaining approach in explaining how an ophthalmologist can spot early signs of disease that we can't on our own. Through the power of Facebook and Twitter, the campaign has reached nearly half a million people. Be sure to take a look and share with your patients in your marketing efforts.

Leading the eye health conversation

The Academy reaches millions of people around the world through its proactive media outreach efforts. This exposure, combined with promotion of the Academy's **EyeSmart** website, increases ophthalmology's presence in the public eye. Each story increases awareness and understanding about the value eye physicians and surgeons bring to society. Academy spokespeople were quoted in more than 10.000 media stories in 2016. Highlights include: "Don't wait until you're older to fight getting old" (Rebecca J. Taylor, MD; Washington Post), "Parents opt for unapproved treatments instead of glasses for their children" (Thomas L. Steinemann, MD; CNN) and "After a Long Day at the Computer Do You Have a Medical Problem?" (Michael X. Repka, MD; NPR).



Richard L. Abbott, MD, performed two corneal transplants on Stephanie Beaver Alder. As a child, she was in special reading programs because her teachers mistakenly thought she had learning disabilities. After the transplants, she developed a love for reading and became the first person in her family to earn a college degree.

Honoring Outstanding Individuals for Contributions to Our Profession

During AAO 2016, <u>the Academy</u> <u>honored many of our colleagues</u> for distinguished service, outstanding humanitarian service, excellence in resident education and more.

Paul S. Bernstein, MD, PhD, and Benjamin W. Roberts, MD, received the 2016 Outstanding Humanitarian Service Award for their charitable

The Laureate is the Academy's highest honor, recognizing ophthalmologists who have made exceptional scientific contributions toward preventing blindness and restoring sight worldwide.

2016 - Matthew D. Davis, MD

2015 - Bruce E. Spivey, MD

2014 - Jerry A. Shields, MD

2013 - Daniel M. Albert, MD, MHS

2012 - Stephen J. Ryan, MD

2011 - Alfred Sommer, MD, MHS

contributions to ophthalmology. Both performed community service above and beyond the typical duties of an ophthalmologist.

Paula Anne Newman-Casey, MD,

received the 2016 **Artemis Award** for her dedication to serving the needs of the poor and underserved in metro Detroit. Dr. Newman-Casey spearheaded an initiative while in residency, which continues today, to provide free ophthalmic care to patients in the area.

Jean E. Ramsey, MD, MPH, received the 2016 EnergEYES Award. The award honors an ophthalmologist whose exemplary leadership and mentorship energizes young ophthalmologists and motivates them to get involved.

Donald J. Cinotti, MD, received the 2016 Outstanding Advocate Award for his tireless advocacy-related efforts at both the state and federal levels to build relationships with legislators in support of ophthalmology.

Van Charles Lansingh, MD, received the 2016 International Blindness Prevention Award for his efforts to restore sight worldwide.

Steven J. Gedde, MD, received the 2016 Straatsma Award for excellence in resident education.

Vanderbilt Eye Institute and its leadership, Paul Sternberg Jr., MD, and Janice C. Law, MD, received the Commitment to Advocacy Award. This award recognizes a residency training department for outstanding support of the Academy's Advocacy Ambassador Program.



presented the 2016 Laureate Recognition Award to Matthew D. Davis, MD. We recognized Dr. Davis at the AAO 2016 opening session for his seminal contributions to ophthalmology. During his career, he established gold standards for conducting clinical studies that have had a major public health impact on blindness in the United States and around the world.

Preserving Our Rich Ophthalmic Heritage

The Academy's <u>Museum of Vision</u> is the largest publicly accessible collection of ophthalmic history in the United States.

With the support of the Academy Foundation, the museum's collection of 38,000 artifacts helps to inspire an appreciation of vision science, the profession and important contributions made toward preventing vision loss. In 2016 alone, more than 110,000 people visited the museum's website.

The museum's newest exhibit, *History of Ophthalmology in the Asia Pacific*, explores and celebrates the roots of ophthalmology found in the Asia Pacific—a heritage largely unknown in the West. The exhibit traces historical evidence from ancient times through the 18th

century to highlight ophthalmology in four countries linked by the famous Silk Road: India, China, Japan and Sri Lanka.

The 2016 history symposium, "Giants in Asia-Pacific Ophthalmology," featured speakers from China, Japan, South Korea and Australia. The AAO 2016 session covered ancient practitioners, early modern legends, great discoveries and innovations.

The Museum of Vision also published a new online exhibit, "Their Eyes to the Sky," which looks at the history of flight and ophthalmology; a one-of-a-kind oral history of Milo Herbert Fritz, MD; and a new quiz for kids, "Discover Your Eye Q!"

Additionally, the museum received two notable donations in 2016:

- A SVS Apex excimer laser, manufactured by Summit Technology in 1995. This instrument received the first FDA approval for performing laserassisted eye surgery.
- A Kelman phacoemulsifieraspirator, manufactured by Cavitron between 1971 and 1974. Charles D. Kelman, MD, developed this machine, which George M. Haik Sr., MD, later purchased. In pristine condition, this piece joins the museum just in time to celebrate the 50th anniversary of the phaco procedure.



Academy staff and professors at San Francisco State University worked together to translate this 17th-century Chinese manuscript for the AAO 2016 exhibit, *History of Ophthalmology in the Asia Pacific*. The book describes acupuncture techniques and curing eye diseases by balancing the five elements: metal, wood, water, earth and fire.

Supporting You On the Path to Success

Members of the Academy are a community of 32,000 ophthalmologists from around the world who are passionate about protecting vision and fighting preventable blindness. The Academy seeks to provide our members with the highest quality ophthalmic education and the necessary resources to stay current on the latest research, manage a profitable practice and, most importantly, provide the best care for our patients.

Connecting you with top talent

The Academy's Ophthalmology
Job Center continues to grow in
popularity, connecting practices
with the most qualified and talented
ophthalmologists and ophthalmic
professionals in the United States. In
2016 alone, close to 600 employers
posted almost 1,700 jobs on the
website—reaching an audience of
nearly 1,300 job seekers.

Enriching your network

Academy members enjoy special networking privileges, with access to a valuable network of contacts. Connect and collaborate in the members-only <u>Academy Forum</u> and promote your practice through <u>Find</u> an <u>Ophthalmologist</u>. Meet new friends and reconnect with old ones at the Academy's annual meeting, where 25,000 physicians, health professionals and industry representatives convene.

Helping you conquer your challenges with leading practice resources

Academy members can practice more effectively with complimentary access to the full text of *Ophthalmology* and ten other world-class journals, as well as our <u>Preferred Practice Pattern®</u> guidelines. Plus, U.S. members enjoy exclusive participation in the IRIS Registry , an indispensable tool in satisfying quality reporting requirements.

Protecting the interests of our patients

As a member, you can play an active role in influencing health care policy decisions. We provide the resources you need to engage with elected officials and policy makers, whether in Washington, D.C., your state or

local districts. This collective effort with your colleagues helps preserve access to the sight-saving care our patients deserve.

Giving you the latest in world-class research and professional news

In November, the Academy announced the appointment of <u>Stephen D. McLeod, MD</u>, as editor-in-chief of the Academy's flagship <u>Ophthalmology</u> journal. "Ophthalmology has evolved to become the dominant forum for dissemination of the very best evidence we have today for clinical practice," said Dr. McLeod. The journal published 296 research articles in 2016, maintaining a 15% acceptance rate, and has an Impact Factor of 6.75.

The award-winning <u>EyeNet</u>°

<u>Magazine</u> continues to serve as the premier source of credible clinical information and news for ophthalmologists. This year, <u>EyeNet</u> published a new <u>supplement on</u> <u>electronic health records</u> and a <u>young ophthalmologist supplement.</u>

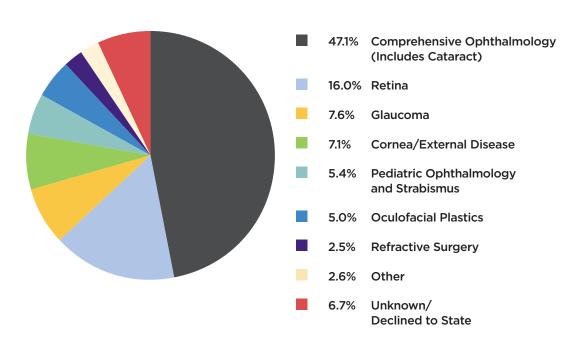


Erfan Khadem, MD, and Benjamin D. Siatuu, MBBS, enjoy moments of camaraderie in the International Lounge between sessions at AAO 2016.

Academy Membership At a Glance

By Subspecialty

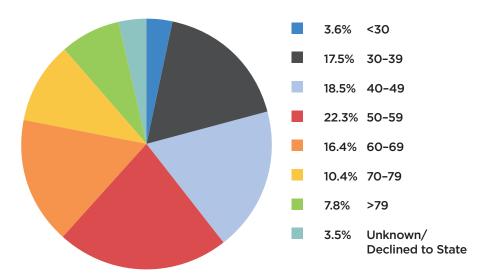
(U.S. Members)



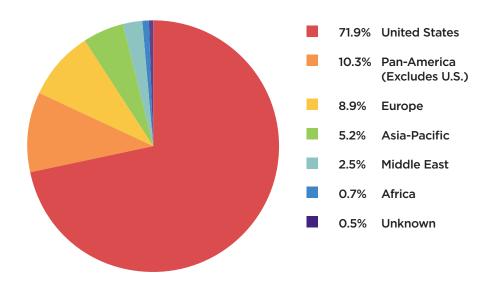
Voluntary information provided by members who are practicing ophthalmologists.

Does not include members-in-training or retired members.

By Age



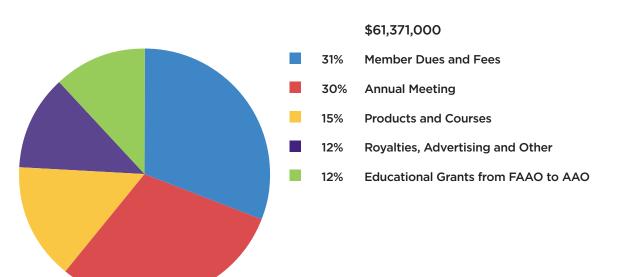
By Region



Academy Actuals for Fiscal Year Ending 2016

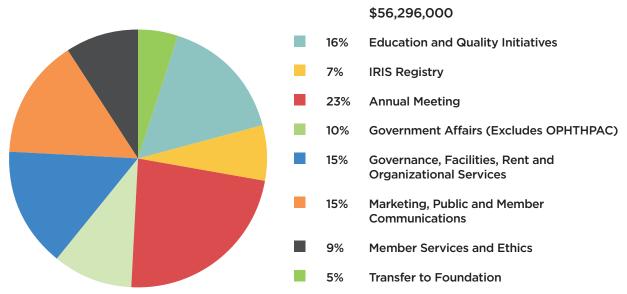
FYE 2016 Revenue—Academy Only*

Major categories of revenue have remained relatively stable.

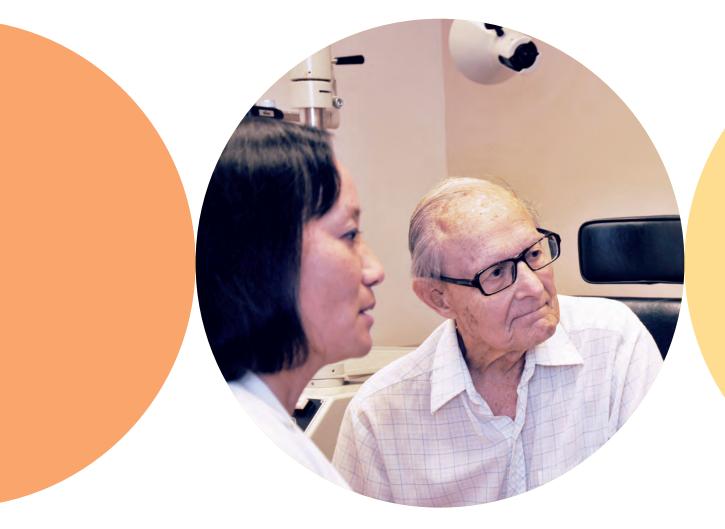


FYE 2016 Expenses—Academy Only*

Top expense categories are education-related.



^{*}Revenue and expenses presented exclude OPHTHPAC and ASI activity.



American Academy of Ophthalmology 655 Beach Street San Francisco, CA 94109-1336 +1 415.561.8500 aao.org

Michele C. Lim, MD, performed glaucoma shunt surgery on Ernest Tschannen, saving his deteriorating vision. Read more about our patient stories campaign on page 21.

PHOTO: University of California Regents.