Natalie Afshari, MD, FACS
Ocular Microbiology & Immunology Group
Leadership Development Program XIV, Class of 2012
Project Abstract

Title of Project: Developing an International Ocular Microbiology Registry

Purpose: To develop an ocular microbiology registry for studying the trends of ocular infections over time in different regions, and to study organism resistance and sensitivities to antimicrobial agents, and to alert ophthalmologists of regional breakout of infections.

Methods: In collaboration with the American Academy of Ophthalmology registry efforts, a specific ocular microbiology registry is designed to assess ocular infections and relevant patient outcome. The data reported will include location of reporting MD (city, state), time (month), as well as ocular location of infection (lid, cornea, conjunctiva, vitreous), the type of organism, and the sensitivity to antimicrobial agents from the culture as well as the final outcome. A link between electronic health records and the registry will be established.

Results: This is an ongoing project. The significant limitation is the reporting practice differences by different providers and regions. The link to the electronic health records will diminish some of these reporting variations.

Conclusion: The results of this registry will help to know the regional differences in ocular infections, as well as sensitivities to antimicrobial agents. It will also alert ophthalmologists on outbreaks of microbial organisms.

Ronald A. Braswell, MD
Mississippi Academy of Eye Physicians and Surgeons
Leadership Development Program XIV, Class of 2012
Project Abstract

Title of Project: An Effective Communication Plan to Promote State Society Membership and Public Awareness by the Mississippi Academy of Eye Physicians and Surgeons

Methods: As the Mississippi Academy of Eye Physicians and Surgeons is a fledging organization, a strategy for an effective communication plan was initiated. Various state societies were contacted to identify best practices. These include the Georgia Society of Ophthalmology, the Alabama Academy of Ophthalmology, and the Texas Ophthalmological Association. Additional assistance was obtained from web design specialists as well.

Results: A new logo for the state society that could be easily transposed to the various communication media was formed. Additionally, the MAEPS website was made to be made more interactive. An inaugural newsletter has been submitted and will be interactive with hyperlinks and dropbox access to articles. It is anticipated that the electronic newsletter will be published quarterly. This includes links to educational material, CME, and the Society's Facebook page.

It is planned as an additional benefit to paid members of the society to have premium CME complete with individual tracking. The MAEPS Facebook page will contain articles and information that will be of benefit to the public and will allow the society to be the leaders of patient education for eyecare in the state.

Finally, news alerts will be sent to members via texts or email regarding various important events as they occur.

Conclusions: The MAEPS communication plan was developed to promote member awareness and to allow better access to the general public regarding factual information as to eyecare in the state of Mississippi. This has been an integrated approach via logo development, electronic newsletter and alerts, and linking to social media commonly used by the general public.

Susan K. Burden, MD
North Carolina Society of Eye Physicians and Surgeons
Leadership Development Program XIV, Class of 2012
Project Abstract

Title of Project: Educating the Public: Aligning Online Content with AAO/NCSEPS Goals

Purpose: 1) To assess what online information is available to patients regarding definitions of ophthalmology vs. optometry; 2) To evaluate how difficult it is to find this information; 3) To use common search terms for eye disease in order to see what web sites are frequently cited, specifically to assess how often AAO or related websites are cited, versus optometry sponsored sites; 4) To explore how high quality information could better be disseminated to an inquisitive public; 5) To specifically direct health care consumers and legislators in North Carolina to accurate, relevant information online.

Methods: 1) Google web searches were conducted to see where interested consumers would be directed if asking variations of the question, "What is the difference between optometry and ophthalmology?"; 2) Google web searches were conducted using common eye terms (such as "red eye" and "macular degeneration") to see how high AAO and related sites (Eye Smart, Eye Care America, etc.) were on the results list; 3) State eye society websites were assessed to see if they had links to AAO, EyeSmart, and/or definition of ophthalmology vs. optometry.

Results: While many state eye society websites explain the difference between ophthalmology and optometry, these definitions do not appear to be tagged in a "searchable" way. 42 out of 51 states (plus Puerto Rico) have web pages according to the AAO website. Of these 42 websites, only 33 have links back to the AAO page. 26 of the 42 had links to EyeSmart. 25 of the 42 had some definition of ophthalmology vs. optometry, a link to the AAO web video, or a link to "The Three O's". Typically, this information was buried in the FAQs section and not easily found by Google Search. For common eye term searches, optometry-friendly sites frequently are on the first page of results, while AAO sites are typically on the second, third, or fourth page of results. While EyeSmart is not always high on the search list, other reputable sources of information, such as the NIH or NEI frequently are within the top three results.

Conclusions: A plethora of high quality information exists on the internet, but to the casual searcher, this information is often difficult to discover. State eye society websites should be encouraged to "tag" their information in a way that elevates the AAO and EyeSmart on search results. This may require strategic guidance from the national AAO. In regards to the North Carolina Society of Eye Physicians and Surgeons website, we have direct links to the AAO website, EyeSmart, and definitions of ophthalmology vs. optometry, although theses links are text and not photo banners. Interestingly, photo banners may be more difficult for Google Search to accurately identify for content, but are more visual pleasing for patients.

AAO LDP Project 2012

Educating the Public: Aligning Online Content with AAO/NCSEPS Goals

Susan K. Burden, MD
President Elect
North Carolina Society of Eye Physicians and Surgeons
Assistant Professor of Ophthalmology
Wake Forest University

Purpose:
1) To simulate "real life" web searches that patients might make (and synonyms)
Category of search:
a) The difference between ophthalmology and optometry
1) "What is the difference between an ophthalmologist and an optometrist"
2) "What is the difference between an optometrist and an ophthalmologist"
3) "Ophthalmology vs optometry"
4) "Optometry vs ophthalmology"
5) "Eye doctor"
6) "Optometrist vs ophthalmologist vs optician"
b) Basic Eye Symptoms/Eye information questions
1) "Eye info"
2) "Eye diseases"
3) "My eye hurts"
4) "I can't see"
5)"My eye is red"
c) Specific Eye Diagnoses
1) "Cataract"
2) "Cataract implants"
3) "Blepharitis"
4) "Chalazion"
5) "Macular degeneration"
6) "Dry macular degeneration"
7) "Wet macular degeneration"
8) "Glaucoma"
9) "Angle closure glaucoma"
10) "Optic neuropathy
11) "Corneal transplant"
2) To analyze the search results
a) To assess how high AAO or partner sites rank on the search list
b) To assess how high optometry or partner sites rank on the search list
c) To assess the overall quality of information provided by search results

d) To identify "shadow sites" that are providing patient information with unknown sponsorship

3) If AAO and/or partner sites did not rank highly,

    a) To assess if the content was not available, or

    b) To assess if the content was not adequately "tagged"

    c) To assess if competing sites with large web "footprint" outcompeted AAO

4) Strategies for improving AAO search results:

    a) If content was not available, to suggest content that could be added to AAO or partner sites

    b) If content is not adequately "tagged", to re-tag it

    c) To link more websites (i.e. State eye society websites) to AAO and EyeSmart, to increase their point value status

5) To apply these techniques and findings specifically for the North Carolina Society of Eye Physicians and Surgeons

    a) To increase prominence of links to AAO and EyeSmart

    b) Ultimately to add a link for educating state legislators about topics of concern to AAO/NCSEPS

Methods:

1) Google Search was used for all searches (65-70% of all web searches are conducted with Google or a Google powered search program)
2) The first four pages of search findings were included in analysis (on the assumption that most patients would not look much beyond the second page, let alone past the fourth page of results)
3) Entries were counted, with the first entry labeled as "1"
4) AAO and associated websites: AAO.org, geteyesmart.org, eyecareamerica.org
5) Optometry associated websites: AOA.org, any search results that linked to an optometry-based website (individual practice or optometry sponsored propaganda)
6) The first three results were picked out as the most likely to be chosen by a browsing patient and recorded in the findings table
7) Frequently cited websites from all searches were listed and evaluated
8) "Shadow sites" of unknown sponsorship were identified

Results:

1) AAO (or partner) content exists for most web searches
2) AAO content frequently does not come up highly on the search list
3) AOA content frequently does come up on the first page of web searches
4) Patients who are specifically looking for information on ophthalmology vs optometry will find information, but it may be difficult to understand.
    a. The American Board of Optometry YouTube video that "medicalizes" the training and practice of optometry, emphasizing subspecialty training and research still is one of the top search results.
    b. The "Know Your O's" campaign is frequently sited on State Eye Society pages, but does not come up easily on web searches. This content may need to be re-tagged.

5) Web prominence of EyeSmart could be greater
6) Many reputable sites have high profiles with excellent patient information (i.e. NIH, NEI, Wikipedia)
7) 42 of 51 State Eye Societies have web pages listed on the AAO website
8) 33 of 42 state eye society web sites link to the AAO webpage
9) 26 of 42 state eye society web sites have a working link to EyeSmart
10) 25 of 42 state eye society web pages have some description of ophthalmology vs. optometry training. This is not standardized and may not be very searchable (often hidden under the cryptic link, "Know Your O's")

Discussion and Future Goals:
1) AAO and EyeSmart may be able to elevate their search results with minimal effort
    a. All State eye societies should be encouraged to have working, easily accessible links to the AAO and Eye Smart
    b. More pages may have AAO links that I could not access without being a Member. These links should be openly available
    c. While personalized text about the difference between ophthalmology and optometry may speak to local patients, it is less searchable in this format
    d. Consider having a link to a page on the AAO website that all State eye society web pages could point to
    e. The tag phrase, "Know Your O's" is catchy, but it is not a good search term
2) A reasonable goal would be to have the AAO and EyeSmart search results return above AOA
3) AAO and EyeSmart should not attempt to compete with groups with greater resources and web footprints (NIH, NEI, Wikipedia, WebMD, yahoo.answers)
4) State Eye Societies should be encouraged to "personalize" the AAO video on the role of optometry, for use with legislature presentations
    a. The current version of the video appears local to the Northeast or Midwest
    b. The cartoons of optician/optometrist/ophthalmologist are of a Caucasian man who becomes older (Wiser?) to represent the ophthalmologist
    c. These style factors may make the video objectionable to legislators, particularly in the South
5) In regards to the North Carolina Society of Eye Physicians and Surgeons, I will propose at our next board meeting that we update our current website
    a. To make it more visually appealing to patients
    b. To add a section specifically for legislators who may need information on topics of interest

Web Searches: Common Search Phrases, Search Results (AAO vs. Optometry Friendly Sites), and Top Sites

Search Term	Rank Order: AAO	Page Number	Rank Order: Optom Friendly	Page Number	Optom Friendly Site	Top Three	Interesting Facts
"What is the difference between an optometrist and an ophthalmologist"	26	3	7	1	urbanoptiques.com	1) WebMD.com 2) usaeyes.org/lasik/faq/ 3) medicinenet.com	aapos is fifth 2 youtube videos on page 2 (1 brief, accurate definitions, loaded by "BC Doctors of Optometry" Second is 7 minutes, entirely about optometry, from American Board of Optometry EyeSmart has a page, not in top 4 pages of results
"What is the difference between an ophthalmologist and optometrist?"	24	3	7	1	urbanoptiques.com	1) WebMD.com 2) usaeyes.org/lasik/faq/ 3) aapos.org	aapos is third
"Ophthalmologist vs optometrist"	N/A	N/A	2	1	optiboard.com	1) medicinenet.com 2) optiboard.com 3) urbanoptiques.com	Real sites: 1) diffen.com/difference/Ophthalmology_vs_Optometry 2) optometristvsophthalmologist.com 3) opthamologistvsoptometrist.org (Notice misspelling!)
"Optometrist vs ophthalmologist"	N/A	N/A	2	1	urbanoptiques.com	1) medicinenet.com 2) urbanoptiques.com 3) everydayhealth.com	
"Optometrist vs ophthalmologist vs optician"	N/A	N/A	2	1	urbanoptiques.com	1) readinstyle.com 2) urbanoptiques.com 3) medicinenet.com	

Keyword					Top 3 results	Notes
"ophthalmology vs optometry"	N/A	N/A	2	1	urbanoptiques.com	1) medicinenet.com/ script/main/art.asp?articlekey =22559 2) urbanoptiques.com 3) eyecareprofessions.com	
"Optometry vs ophthalmology"	N/A	N/A	2	1	urbanoptiques.com	1) medicinenet.com/ script/main/art.asp?articlekey =22559 2) urbanoptiques.com 3) optiboard.com/forums	
"Eye Diseases"	4	1	N/A	N/A	N/A	1) nlm.nih.gov/ medlineplus/ eyediseases.html 2) en.wikipedia.org/wiki /Eye_disease 3) allaboutvision.com	
"Eye Info"	15	2	12	1	eyeinfo.com.au	1) visionauthorities.com 2) mydryeyes.com 3) twitter.com/EyeInfo	
"Eye Doctor"	36	3	2*	1	winston-eye.com	1) en.wikipedia.org/wiki/ Eye_care_professional 2) winston-eye.com 3) eyecarecenter.com	2-9 are local "eye doctors" (Winston Salem, NC)
"My eye hurts"	N/A	N/A	N/A	N/A	N/A	1) answers.yahoo.com 2) emedicinehealth.com 3) yelp.com	Dominated by informative/ edutainment sites, individual postings

Term						Top sites	Notes
"I can't see"	N/A	N/A	N/A	N/A	N/A	1) icantseebuticanimagine.com 2) dfan.org/visual.html 3) youtube.com (BeeGees)	Dominated by pop culture (Bee Gees, Rolling Stones, James Horner, Tori Amos)
"My eye is red"	N/A	N/A	N/A	N/A	N/A	1) vision.about.com 2) answers.yahoo.com 3) www.ask.com	Dominated by informative/ edutainment sites, individual postings
"Cataract"	8	1	10	1	aoa.org	1) ncvi.nlm.nih.gov 2) en.wikipedia.org/wiki/cataract 3) nei.nih.gov/health/cataract	
"Cataract implants"	4	1	N/A	N/A	N/A	1) tecnisiol.com 2) seewithlasik.com/.../cataract-surgery-multifocal-lens-implant.html 3) en.wikipedia.org/wiki/Intraocular_lens	Dominated by cataract surgeons, LASIK surgeons, IOL manufacturers (no obvious optom sites)
"Glaucoma"	15	2	12	1	aoa.org	1) glaucoma.org 2) discoveryeye.org 3) ncbi.nlm.nih.gov	
"Angle closure glaucoma"	19	2	18	2	aoa.org	1) glaucoma.org 2) ncbi.nlm.nih.gov 3)emedicinehelath.com	
"Blepharitis"	9	1	7	1	aoa.org	1) thestudies.org 2) ncbi.nlm.nih.gov 3) en.wikipedia.org/wiki/blepharitis	

"Chalazion"	9	1	6	1	aoa.org	1) ncbi.nlm.nih.gov 2) en.wikipedia.org/wiki/chalazion 3) emedicinehealth.com/chalazion	geteyesmart.org
"Optic neuropathy"	6*, 30	1,3	28	3	optometricretinasociety.c	1) ncbi.nlm.nih.gov 2) en.wikipedia.org/wiki/optic_neuropathy 3) en.wikipedia.org/wiki/Anterior_ischemic_optic_neuropathy	nanosweb.org, eyewiki.aao.org
"Cornea transplant"	7*, 16*	1,2	N/A	N/A	N/A	1) mayoclinic.com/health/cornea-transplant 2)en.wikipedia/org/wiki/Corneal-transplantation 3) allaboutvision.com/conditions/cornea-transplant.html	eyecareamerica, geteyesmart.org
"Macular degeneration"	21	2	22	2	aoa.org	1) livingwithamd.com 2) ahaf.org 3) en.wikipedia.org/wiki/Macular_degeneration	geteyesmart.org
"Dry macular degeneration"	22	2	N/A	N/A	N/A	1) mayoclinic.com/health/macular-degeneration 2) macular.org/dry.html 3) en.wikipedia.org/wiki/Macular_degeneration	geteyesmart.org
"Wet macular degeneration"	31	3	N/A	N/A	N/A	1) livingwithamd.com 2) blindness.org 3) mayoclinic.com/health/wet-macular-degeneration/DS01086	geteyesmart.org

Description: This table lists the search terms I entered in Google (in the far left column). I chose Google because approximately 65 to 70% of all web searches are conducted via Google or a different search app that is powered by Google. I chose the search terms as simple, common terms that a

patient might enter when looking for information "from scratch."The second column is how far down the list the AAO or EyeSmart (or affiliated organization) website was listed in the search results. The third column lists what page of the search results contained the AAO or associated link. I only examined the first four pages of search results. (Realistically, a patient searching would probably only look at links on the first or second page.) The fourth column is how far down the list an optometry friendly website was on the search results. The fifth column is what page the optometry website was on the search. The sixth column is the optometry friendly site I am referencing. The seventh column is the top three listed search results (for interest). The final column provides any interesting, additional information. For example, "I can't see" brings up many pop culture references, but no links to eye disease information.

Results: In most cases, optometry friendly websites were higher in the list than ophthalmology sites, although large, "neutral" sites such as the NIH, NEI, or wikipedia often headed the list.

Geoffrey G. Emerson, MD, PhD
American Society of Retina Specialists
Leadership Development Program XIV, Class of 2012
Project Abstract

Title of Project: Retina Advocacy by Retina Patients

Purpose: While the number of retina specialists in the US and in each state is relatively small, the number of patients with retinal disease is quite large. Also, retina patients can be very vocal and persuasive to a legislator or other public figure, as we learned in 2010 when the AAO and the ASRS asked patients to write letters to their Medicare provider when payment for Avastin was temporarily denied. Our goal is to harness the numbers and interest of our patient population and help them to advocate for the benefit of retinal care.

Methods: CapWiz is an internet-based program that sends letters to state and federal legislators. Many ophthalmologists are familiar with CapWiz because the AAO uses this program to generate letters from ophthalmologists to our legislators about issues important to us, such as (most recently) the SGR fix. For the present study, patients in a retina clinic were asked to use CapWiz to send letters to their legislator urging continued funding for the NIH and NEI in fiscal year 2013. The letter was written by 2 AAO/ASRS members, reviewed by the AAO Federal Advocacy staff, and made ready for CapWiz. As patients checked in for their retina appointments, they were offered a printed copy of the letter to sign. The front desk staff collected the letters from patients and entered their information into CapWiz, so that CapWiz could send letters to legislators (determined based on patient address) on behalf of the patient. A copy of the signed letter from the patient was filed in case of any future audit.

Results: During the 4 day pilot study, 48 patients in the retina clinic waiting room were approached and asked to participate. Forty-four patients agreed, and 141 letters were sent on their behalf to a total of 4 senators and 8 representatives from Minnesota and Wisconsin. Patients enjoyed the exercise, and were appreciative that their doctors were helping to advocate on behalf of eye research. Sending the letters added some work and time for the front desk staff (approximately 1 min per patient), but there was little cost.

Conclusion: CapWiz is an easy and efficient way for patients to participate in advocacy while they are in a retina clinic waiting room. This is an excellent way for ophthalmologists to garner patient interest and activism in case of a future crisis, such as decreased funding or access to care.

Sidney Gicheru, MD
Texas Ophthalmological Association
Leadership Development Program XIV, Class of 2012
Project Abstract

Title of Project: Online Survey of Electronic Health Records Adoption by Members of the Texas Ophthalmological Association.

Purpose: To survey Texas Ophthalmological Association (TOA) members regarding the adoption of Electronic Health Records (EHR) and Meaningful Use (MU).

Methods: An online, computerized survey was designed to capture information from members of the TOA (799 members). The study was sent via email to the TOA members 447 (36 excluded). A letter with a survey link was mailed to the 272 members (44 excluded) for whom the TOA did not have email addresses.

Results: Data was collected from 98 respondents. The response rate was higher for email respondents (20%) than Mail respondents (4%). It was determined that 62.2% of respondents had adopted EHR in their practices and 37.8% had not.

Of the EHR non-Adopters, 20% planned to implement EHR in 1 year or less, 14% in 1-2 years and 23% had no plans to implement EHR. The most common reasons cited for EHR non-adoption were hassle factor(80%), propensity to slow down a practice (80%) and cost (57%). 39% of non-Adopters stated they would implement EHR immediately if the Centers for Medicare and Medicaid Services increased the MU incentive bonus by an amount more than $30,000 and 53% stated the bonus amount did not matter. The EHR Adopters exhibited great variability in their choice of EHR software, hardware and data input methods. The top 3 EHR programs were NextGen (23%), Mediflow (18%) and EpicCare (7%). 40% of respondents had only used EHR for less than 12 months. 73% of EHR Adopters recommended their HER program to other Ophthalmologists. 67% of Adopters reported EHR increased their practices costs. Only 25% received their 2011 MU Incentive bonus, but 84% had attested or planned to attest for the 2012 bonus.

Attitudes towards the commonly cited advantages and disadvantages of EHR differed between EHR non-Adopters and Adopters: Only 14% of non-Adopters agreed that EHR reduces medical errors (vs. 40% of Adopters). 8% of non-Adopters agreed that EHR improves the security of Health records (compared to 43% of Adopters). 11% of non-Adopters agreed EHR improves coordination of care (vs. 52% of Adopters). None of the non-Adopters felt EHR reduces Healthcare costs (compared to 14% of Adopters). The only commonly advertised EHR advantage with congruence was the question of whether EHR reduces unnecessary tests (6% for non-Adopters vs. 7% for Adopters). In terms of EHR disadvantages, 77% of non-Adopters felt EHR would decrease their productivity (compared with 41% of Adopters).

Sidney K. Gicheru, MD
*Project: Online Survey of Electronic Health Records Adoption by Members of the Texas
               Ophthalmological Association.*

Most respondents were neutral regarding their satisfaction with assistance received from the TOA (61%) and American Academy of Ophthalmology (51%) for EHR adoption. 17% were somewhat or extremely dissatisfied with the American Academy of Ophthalmology (AAO) and 16% with the TOA.

Conclusions: The majority of TOA members have adopted EHR in their practices and are satisfied with their choice of EHR. Meaningful Use participation is anticipated to increase in 2012. EHR non-Adopters had more negative attitudes about the advantages and disadvantages of EHR that were not borne out by the experiences of the EHR Adopters. The TOA and AAO should focus attention on educating EHR non-adopters on these preconceived notions. A common complaint among EHR Adopters was the difficulty creating EHR templates and this should be an area of future attention.

The study also found that online, computerized surveys such as Survey Monkey® are a quick and efficacious way to poll Ophthalmologists on hot button topics such as EHR adoption. For success, Ophthalmological Associations must have access to email addresses of the majority of their members.

Neeru Gupta, MD, PhD, MBA
Association for Research in Vision and Ophthalmology
Leadership Development Program XIV, Class of 2012
Project Abstract

Title of Project: Human Eye Tissue Biobank for Research into Blinding Disease

Background: Discoveries in tissue with human eye disease are critical to understanding disease and to developing new treatments to prevent blindness. However, the declining availability and increasing cost for human eye tissue are major barriers for this type of translational research. Scientists eager to study diseases such as diabetic retinopathy, glaucoma, or macular degeneration are faced with a situation in which the tissue is either unavailable, or prohibitive in cost.

Purpose: To develop an eye disease tissue resource for any scientist devoted to the study of eye diseases in a cost-effective and integrated structure that promotes availability at low cost.

Methods: In partnership with the Ophthalmic Pathology Laboratory, a survey of local researchers and medical community revealed an unmet need for human eye tissue for research. The largest demand was for sections from disease cases and age-matched controls. A computer specialist was hired to develop an Access database for the purposes of entering diseased eye tissues and age-matched controls, for characteristics including eye disease, cause of death, co-morbid conditions, and time to fixation. A business plan was discussed in partnership with the Li Ka Shing Knowledge Institute at St. Michael's Hospital, and the hospital pathology services toward a cost-effective and not-for-profit initiative.

Results: All stakeholders are actively engaged and in agreement to pursue a not-for-profit business model at St. Michael's Hospital. Regulatory, ethical, biosafety and quality assurance issues are being addressed, as are standard operating procedures for the preparation and sectioning of approximately 5,000 eye specimens available for research and collected by the Ophthalmic Pathology Laboratory, University of Toronto. A platform for the database has been established, and an internet based interface between researchers and the research enterprise is planned to facilitate tissue dissemination. A business plan is underway in partnership with the research administration at the Li Ka Shing Knowledge Institute of St. Michael's Hospital.

Conclusion: A resource of diseased eye tissue is actively being harnessed using a not-for-profit business model that is cost-effective, self-sustaining, and in partnership with key stakeholders. This research model will remove existing barriers to the study human eye disease, and accelerate scientific breakthroughs relevant to patients with blinding disease.

Don O. Kikkawa, MD
American Society of Ophthalmic Plastic and Reconstructive Surgery
Leadership Development Program XIV, Class of 2012
Project Abstract

Title of Project: Analysis of Oculofacial CME Trends

Purpose: To analyze the CME evaluations of the annual American Society of Ophthalmic Plastic and Reconstructive Surgery (ASOPRS) Fall Scientific Symposium. This information may assist the organization and program committee with planning and implementing the content of future scientific meetings.

Methods: The post meeting CME surveys from the annual ASOPRS Fall Scientific Meetings from 2006 to 2011 were analyzed. Survey data was examined in the content areas of: aesthetic, eyelid, orbit, lacrimal, anophthalmic socket and coding. Also examined were responses to practice barriers, incorporation of meeting content to practice, and desirability of future topics covered.

Results: The most common barriers to implementation of new technology are equipment costs and lack of mentorship for newer procedures. Incorporation of meeting content to practice could be enhanced by providing more hands-on courses. The scientific nature of presentations with more statistical analysis and outcome-based measures needs greater emphasis. Desirability of future content was mainly focused on more cosmetic and coding topics, followed by eyelid and orbit. There was the least interest in anophthalmic socket.

Conclusions: The annual ASOPRS Fall Scientific Symposium is an important event for US based oculofacial surgeons. Changing trends in medicine, and oculofacial practice in particular, create a demand for content that meets the needs for attendees and shifting medical practices. Cost issues, both with implementing newer technology and reimbursement from practice, are of great concern to attendees. Aesthetic surgery and coding, followed by eyelid and orbital surgery, represent the highest areas of interest for future meetings, whereas anophthalmic socket surgery received less emphasis. These findings may help in planning future ASOPRS scientific symposia.

Alan E. Kimura, MD
Colorado Society of Eye Physicians & Surgeons
Leadership Development Program XIV, Class of 2012
Project Abstract

Title of Project: Physician Participation in State-Level Instruments of Power in Healthcare:
Or, "Is There a Doctor in the House?"

Purpose: More often than not, the answer to the question of whether there is a Doctor "in the house", is "No." Physician representation and advocacy on behalf of both the profession and our patients is vitally important to continue to fulfill the Social Contract between The State and the profession of Medicine. Elliott Krause describes a triad of three powerful stakeholders in society: The State, The Guilds, and Capitalists (Krause, 1999). Knowledge of the instruments of power wielded by the State that impact the Guild of Medicine is worthwhile obtaining. Inattention to policy and politics leaves other powerful stakeholders free to determine our destiny.

Methods: Direct experience in a purpose-built legislative arm of the Colorado Medical Society directly influencing the course of healthcare at the State-level over the past year are reviewed. The Council on Legislation is a committee of the Colorado Medical Society, representing the county medical societies, and special interest groups within the House of Medicine, tasked with reviewing all healthcare-related legislation moving through the General Assembly while it is in session from January to May.

Results: The administrative staff of the Council on Legislation distributes copies of the bills submitted in both the Senate and House of the General Assembly of the State of Colorado several days in advance of the meeting, held every other week on Wednesday evening from 6:00 to 8:30pm. The arcane language of legislative bills often requires considerable effort to understand, though probably equally opaque to a layperson reviewing medical records. Following a formal parliamentary –style discussion, including solicitation of opinions from our professional lobbyists, the physicians vote upon a motion ranking our level of support or opposition on a linear Likert scale, to a given piece of legislation. This decision, in turn, directs the expenditure of finite lobbying resources to the task. The physician input includes a broad range of input from the House of Medicine, from primary care to specialists, as well as special interest groups. Reconnecting with the rest of the House of Medicine on this Council provides multiple opportunities to engage in that most essential element of politics—reciprocity. Unity on issues common to the House of Medicine at the local level, as well as finding support on areas of special interest, may engender reciprocity on issues, such as scope of practice battles concerning optometry, when they arise periodically in the General Assembly. Most interesting is the input of the lobbyists who can apprise the group of the political winds blowing through the General Assembly, which we must be sensitive to lest we take positions that have no chance of winning, or create political enemies, or are best approached with a change of legislative leadership based on term limits, or overall political trends of the session, such as the public's view towards incumbency, fiscal austerity, the role of government, fairness, or justice. The merits of a particular piece of legislation notwithstanding are but one aspect influencing the chances for passage. Bills may undergo significant modification along the way, even morphing into language that ironically requires withdrawal by the original sponsor.

Alan E. Kimura, MD
Project: Physician Participation in State-Level Instruments of Power in Healthcare:
Or, "Is There a Doctor in the House?"

Bills may be assigned by the Speaker of the House or President of the Senate to committees known by current political makeup to go to die and never see a floor vote. Stakeholder opposition may suddenly appear at the eleventh hour, at the end of the legislative session, forcing a rapid riposte to this late attack. "Compromises, negotiations, trades and deals [are] necessary, not scandalous. They are the principal form of currency in… every democratic legislative assembly on the planet." (McDonough, 2011)

Conclusions: A vast ecosystem containing elements of State power executed via the legislative branch, and the executive branch via agency regulations, interacts with elements of Guild power. However, these niches are largely opaque to the vast majority of practitioners, despite their profound importance over their professional lives, as well as of their patients. Even when illuminated, participation on these and other less technical spaces of Guild power interfacing with the State, remains the habitat of but a few. However, the efforts by a small subset of physician leaders serving on the Council can exert strong effects upon legislation affecting the profession and the entire state's population. While not a guarantee of prevailing on every issue of interest to medicine, or the public's interest, the Council on Legislation is a worthy example of how physician oversight and advocacy can exert influence upon the political process to affect policy affecting the profession and the health of the entire population.

Mark R. Melson, MD
Tennessee Academy of Ophthalmology
Leadership Development Program XIV, Class of 2012
Project Abstract

Title of Project: Membership Trends and Reasons for Non-membership in TNAO

Purpose: To investigate recent trends in membership in the Tennessee Academy of Ophthalmology (TNAO) and to survey current non-members of TNAO on factors that influenced them not to join their state ophthalmic society

Methods: Membership data from the TNAO was obtained for the past 15 years including membership totals and types of members (university members vs. non-university members). The list of ophthalmologists registered in TN by the Board of Medical Examiners (BOME) was obtained and this list was compared to current membership rolls to ascertain non-members. A written, computerized survey was designed to capture information on demographics, practice type, specialty type, length of practice, employment of optometrists in practice and factors affecting decisions not to join TNAO. For those MDs on whom we could not obtain email addresses, we obtained fax numbers and the survey was faxed, both with a link to the web form and as a printed copy that could be faxed back to us.

Results: As of July 2011, approximately 450 ophthalmologists were registered with the TN BOME. Only 174 (39%) of these were members of TNAO. Since 1995, membership per year averaged 160 with only minimal variation in total membership from year to year. Since 2005, the proportion of university-based members has risen from 4% to 25%. We obtained email addresses for 49 non-members and fax numbers for 9 more. To date, we have received only 5 responses, despite reminder emails being sent. Of the respondents, 20% had been in practice for 6-10 years and the other 80% had been in practice for 30 years or more. 60% were in ophthalmology-only group practices, 20% were in multispecialty practices and 20% were university affiliated. 75% were comprehensive ophthalmologists and 20% were glaucoma specialists. Only 20% of practices employed optometrists. All were AAO members. 100% cited cost as a factor in decision not to join TNA while 25% reported that they saw no value in the TNAO regardless of cost and 25% felt membership could hurt optometric referrals. None felt membership was worth more than $500/year.

Conclusions: The membership composition of the TNAO has become more heavily weighted toward university members who are covered by umbrella dues. Private ophthalmologists now make up a smaller proportion of TNAO membership and cost appears to be an important factor. Additional efforts to obtain non-member contact information is underway and we hope to obtain more data regarding these decisions in the coming months.

Tatyana Milman, MD
American Association of Ophthalmic Oncologists and Pathologists
Leadership Development Program XIV, Class of 2012
Project Abstract

Title of Project: Interactive Web-Based Ophthalmic Pathology Curriculum in Resident Education

Purpose: There is currently a shortage of ophthalmic pathologists in ophthalmology residency training. This difficulty can be potentially overcome by creation of web-based ophthalmic pathology educational modules, featuring virtual slides and interactive live instruction with an expert.

Methods:
i.   The web-based ophthalmic pathology curriculum covering the entire spectrum of the required ophthalmic pathology topics was created to include the following: 1) Web-based recorded lectures, 2) Digital color Atlas and Text, 3) virtual slides in clinical-pathologic correlation format, 4) Self-assessment slides and questions, 5) Real-time web-based slide and specimen grossing seminars

ii. The web-based curriculum has been uploaded on a dedicated server

iii. The advertisement for this curriculum for the US and Non-US residencies has been developed

Results: Four residency programs are currently enrolled in the web-based ophthalmic pathology curriculum. After a problem free test period of 3-6 months, the curriculum will be offered to a wider range of US and non-US ophthalmology residencies.

Conclusions: There appears to be the need for a web-based ophthalmic pathology education in ophthalmology residency programs. It is our hope that our educational modules will fill the existing void in ophthalmic pathology education and will pave the role for future improvements in this field.

Daniel Neely, MD
Association for Pediatric Ophthalmology and Strabismus
Leadership Development Program XIV, Class of 2012
Project Abstract

Title of Project: AAPOS Vision Screening Kit

Purpose: To develop and manufacture an official vision screening kit for the American Association for Pediatric Ophthalmology and Strabismus (AAPOS).

Methods: In consultation with Good-Lite vision products company, a pediatric-specific vision screening kit was designed and manufactured. The kit is inexpensive, easy and fast to use and it complies with current AAPOS vision screening criteria, including optotype style, crowding, and pass/fail criteria. The kit also utilizes several specially chosen occlusion systems to allow for accurate monocular acuity testing. Additionally, the AAPOS Vision Screening Kit includes a School Nurse Vision Screening Tutorial DVD produced by Kathy Lee, M.D. This DVD was the product of her AAO LDP project, sponsored by AAPOS in 2010.

Results: The AAPOS Vision Screening Kit became commercially available in June of 2012, when it was placed on display and offered for sale at the National Association of School Nurses convention. Negotiations are underway to offer the AAPOS Vision Screening kit through the both the AAO and the American Academy of Pediatrics product catalogues. It is currently available directly from Good-Lite https://www.good-lite.com/Details.cfm?ProdID=739 or via a link from the AAPOS website homepage http://www.aapos.org

Conclusion: The AAPOS Vision Screening Kit is now a commercially available product for school nurses, volunteer groups and primary care physicians. The American Association for Pediatric Ophthalmology and Strabismus has plans to make a minimum of 100 free kits available each year to school systems in need.

Millicent Palmer, MD
Nebraska Academy of Eye Physicians and Surgeons
Leadership Development Program XIV, Class of 2012
Project Abstract

Title of Project: The Development of an Ocular Telehealth Program to Serve Rural Nebraska – A Feasibility Study

Purpose: The development of an ocular telehealth or teleophthalmology initiative within the well-established Nebraska Statewide Telehealth Network (NSTN) has been proposed. The development of this project has been strongly endorsed by the leadership of the NSTN and the University of Nebraska Department of Ophthalmology. Background research on developments in telehealth through the American Telemedicine Association (ATA) and mentorship by leaders in telehealth has provided direction for this project. Given the significant scope of this project, a process for determining its viability and establishing a framework for its development and implementation is necessary; therefore, a feasibility study has been designed. This study also aims to: engage and educate the membership of the Nebraska Academy of Eye Physicians and Surgeons (NAEPS) about the role of telehealth in supporting quality eye care in areas of Eye MD workforce shortages for primary and subspecialty care; decrease professional isolation of existing rural ophthalmologists; promote a professional environment that may help to attract the young ophthalmologist to practice in rural NE; and to foster favorable collaborations between ophthalmologists and optometrists. An application to the Innovation in State Society Membership Grant Program, by the American Academy of Ophthalmology, Ophthalmic Society Relations Department has been submitted for support of this study.

Methods: Proposed tasks necessary to complete this feasibility study include:
- Membership to the American Telemedicine Association and network with colleagues of the Ocular Telehealth and Telehealth Business and Financial SIG – Jan 2012- present
- An electronic survey tool for NAEPS members has been developed to distribute to members prior to our fall scientific meeting, October 2012. This will document types of ophthalmology practices, locations of primary and satellite offices, patient volume, subspecialists, use of electronic health records, on-call activity, use of hospital emergency rooms and interest in serving on a task force or an interdisciplinary advisory panel for the NE teleophthalmology project
- Determine geographic distribution of optometrists in the state
- Explore resources offered by the Great Plains Telehealth Resource and Assistance Center
- Membership to the Center for Telehealth and e-Law (CTeL) to stay abreast of legal and regulatory issues
- Formation of an interdisciplinary advisory panel to include
- Market and financial analysis
- Meetings with stakeholders
- Attend the ATA annual meeting, May 2013 – seminars, review technology, ATA certification courses
- Study and travel to other successful ocular telehealth programs

Millicent Palmer, MD

Project: The Development of an Ocular Telehealth Program to Serve Rural Nebraska – A Feasibility Study

Results: Consultations with colleagues experienced with the field of teleophthalmology, leadership of the Nebraska Statewide Telehealth Network and review of resources has led to the development of a thoughtful process to provide a foundation for analyzing, understanding and resolving the issues that will be important in the design of a teleopthalmology program to support the needs and demands for quality eye care in rural Nebraska.

Conclusions: This study will facilitate the development of a solid business or project plan for grant funding to successfully implement and sustain the program.

Jeff H. Pettey, MD
Utah Ophthalmology Society
Leadership Development Program XIV, Class of 2012
Project Abstract

Title of Project: Engaging Young Ophthalmologists in the Utah Ophthalmology Society

Purpose: To engage and foster involvement of Young Ophthalmologists (ophthalmology trainees or ophthalmologists in their first five years of practice) in the Utah Ophthalmology Society (UOS) through establishing UOS presence in social media; establishing an advocacy curriculum for resident trainees at the University of Utah; and hosting Utah's Health and Human Services Committee meeting at the University of Utah department of ophthalmology, The Moran Eye Center.

Methods: Social media types were evaluated to find the most appropriate venue for engaging ophthalmologists in training and in their first years of practice. Twitter was chosen as the most suitable social media venue to engage this demographic. The UOS Twitter feed was presented to the general body and launched at the 2012 UOS Annual Meeting. The training curriculum at the University of Utah Ophthalmology Residency was evaluated and an advocacy curriculum was established. Lecture and small group discussions introduced residents to advocacy issues facing their profession. Residents were surveyed to assess whether the advocacy curriculum had an effect on future advocacy involvement. The residents also participated in hosting the Utah Health and Human Services Committee meeting held at the Moran Eye Center. Committee Members were educated on ophthalmology's role in health care, community outreach, and finally in training differences between the various eye care professionals. Ophthalmology trainees led members on a tour of the training facility and viewed live surgery performed by trainees.

Results: 45% of the Young Ophthalmologist members of UOS follow the UOS twitter feed. UOS has sent over 40 tweets concerning advocacy, patient care, and UOS matters to its followers. 100% of residents who took part in the advocacy curriculum said they were more likely to be politically active and become members of their state society as a result of the new advocacy curriculum. Eight members of the Utah Health and Human Services Committee attended their interim committee meeting at the Moran Eye Center. Members were educated about ophthalmology and viewed live surgery.

Conclusions: The UOS has a stronger link to Young Ophthalmologists via social media. Residents were overwhelmingly more likely to be involved in their state society and be politically active as a result of the new advocacy curriculum. Members of the Utah State Legislatures Health and Human Services Committee better understand who Ophthalmologists are and their role in health care. The role of ophthalmology and UOS are better understood in our state legislature.

Nathan M. Radcliffe, MD
American Glaucoma Society
Leadership Development Program XIV, Class of 2012
Project Abstract

Title of Project: A Survey of Conflict of Interest (COI) Policies for Medical and Surgical Subspecialty Societies

Purpose: For a subspecialty society, the identification and management of both real and perceived COI within is paramount to that organization's ability to maintain a trustworthy relationship with its members and with patients. As there may be a variety of potential strategies for managing COI, this survey was conducted to assess the current methods for COI management among medical and surgical subspecialty societies.

Methods: The websites of subspecialty societies were evaluated for the presence of COI and financial disclosure policies. Included societies were subspecialties branching out from internal medicine (e.g., oncology), surgery (e.g., vascular surgery), or medical/surgical subspecialties (e.g., pediatric otolaryngology). COI policies were evaluated for content, including how COI was defined, whether the policy applied to meeting presenters or also to members of the society's leadership, how those COIs could be resolved (by disclosure only or whether action might be taken) and finally whether penalties existed for violation of the policies.

Results: Written COI policies from 24 subspecialty societies were identified. Policies were stated to apply to society officers in 85% of cases, scientific program planners in 91.7%, program presenters in 95.8% and authors of preferred practice patters or other society literature in 83.3% of cases. The COI policy requested the disclosure of financial information from the society member in all cases and specifically requested the inclusion of disclosures of industry income for family members in 58.3% of cases. Only 12.5% of policies used specific language to solicit the disclosure of COIs that may be solely perceived. One third of societies placed a lower limit on the amount of money that required disclosure (with the rest not mentioning a dollar amount), and this value ranged from $100 to $10,000 (mean $5,390). Online COI systems were employed by 20% of societies, with 29.2% requesting annual disclosure and 62.5% requesting disclosure any time a change occurred or just prior to the relevant activity. Less than one half of programs indicated that relevant COIs should be reported verbally prior to the event (41.7%) or on a slide during the presentation (45.8%). A significant number of societies (37.5%) included language that suggested that in some cases individuals who are conflicted are discouraged to serve in that area for the society. Two-thirds of societies indicated that a panel reviews the COI disclosures and that speakers could be asked to change their presentations or step down from the activity if a significant COI was found to exist. About half (54.2%) of policies specifically indicated that individuals who did not fill out COI disclosure form would not be allowed to participate in the event. Other features of COI policies that were found in less that 10% of policies included language that members should accept no gifts from industry, that post-hoc notification would be sent to program audience members if a COI violation occurred, that industry members could not coauthor a presentation, or that in some cases exceptions to the COI policies can be made.

Nathan M. Radcliffe, MD
Project: A Survey of Conflict of Interest (COI) Policies for Medical and Surgical Subspecialty Societies

Conclusions: There was significant variability for COI policies among medical and surgical subspecialty societies. COI policies vary with respect to what constitutes a COI, how the COI should be disclosed, and how violations should be handled.

William "Chip" Richardson
Kentucky Academy of Eye Physicians and Surgeons
Leadership Development Program XIV, Class of 2012
Project Abstract

Title of Project: Going Rogue: Can one person be effective in turning political tides? An analysis of the barriers and strategies used.

Purpose: To evaluate how much impact one politically active ophthalmologist, relieved of any ties to optometry, can have on the political system of his state and elsewhere in one year. Outline the roadblocks and their causes. Define alternative strategies for activism. Test the hypothesis that co-mangement, referral patterns, and business relationships with optometry have a negative impact on an individual's ability to become politically active against optometric expansion of scope.

Methods: An outline was generated of diverse political battles that affect patient safety, including individual State legislative races and expansion of scope battles in 2011-2012. Three main battles were chosen based on the probability that one person could make an impact. A common web reference and reference material packet was developed for politicians. Lobbying was accomplished through personal donations, patient education, fund raising, direct lobbying of legislators, and organization of activist physicians. Alternative lobbying methods were explored. A metric was developed for each battle that determined success or failure after an endpoint was identified. Physicians aiding the investigator were inventoried (segregated into *"publicly"* involved or "*participating*") and expressed as a proportion of their region's practicing ophthalmologists. Physicians aiding optometry were similarly categorized. A random phone poll of ophthalmologists was conducted exploring the primary hypothesis. A list of factors leading to success or failure was then developed and solutions explored.

Results: The result in two expansion-of-scope battles was failure.   This was based on optometric expansion legislation becoming or remaining law, un-amended. In the reference battles, 3.4% (KY) to 17% (USVI, small sample) of a region's ophthalmologists became *publicly* involved during optometric expansion of scope conflicts, including the investigator. 11% (KY) to 33% (USVI) of ophthalmologists were *participating.* The majority of ophthalmologists involved in *public and participating* advocacy were solo practitioners or in University-based settings. In KY, optometry outspent Ophthalmology by 11-fold ($608,000 to $55,900) over 48 months. Optometry networked well with their representatives, using their advantage in physical distribution. These were enormous hurdles in the effort to promote patient safety. The results of the hypothesis are still pending. The result of the third battle is pending. Full analysis with exploration of potential solutions will be made after the general elections in November 2012.

Prin Rojanapongpun, MD
Asia Pacific Academy of Ophthalmology/Royal College of Ophthalmologists of Tailand
Leadership Development Program XIV, Class of 2012
Project Abstract

Title of Project: Asia Pacific Academy of Ophthalmology (APAO) – Royal College of Ophthalmologists of Thailand (RCOPT) Leadership Development Program

Purpose: To increase awareness and share the benefits of Leadership Development Program (LDP) among APAO LDP class and RCOPT LDP participants, to recruit potential leaders from RCOPT members, and to promote the importance of LDP in the APAO council.

Methods: A proposal to host the APAO mid-term LDP by the RCOPT in Bangkok, Thailand was presented to the RCOPT board to get support of the program. Communications were made with APAO LDP leaders and APAO president. The mid-term LDP was then announced and approved by the APAO council in Busan, South Korea. The importance of LDP was discussed and led to APAO partial budget support. A report was made to the RCOPT board to realize the importance and benefits of LDP to reach the consensus to fully support the mid-term LDP program. The program was co-organized by APAO LDP committee and RCOPT LDP committee with the assistance of AAO LDP faculties. A promotion of LDP was made by RCOPT for local participant at general and institutional level. The selection process of RCOPT LDP class was undertaken. The international APAO LDP class was made through APAO central secretariat office in Hong Kong, China. RCOPT organizer handled all meeting logistics.

Results: The mid-term LDP class was held on 27-29 September 2012 in Bangkok, Thailand. The participants were 10 APAO LDP 2012 class from 10 countries in APAO region, 10 invited RCOPT LDP class, 10 observers from RCOPT ophthalmology training programs and institutes, and 12 faculties. The program covered communication skill, presentation, meeting management, teamwork, leadership model, volunteering, professional society and organization with focus on APAO, culture and organization diversity, multi-tasking and working with industry. Very rich social programs were also included with the generous support from RCOPT. Detailed feedbacks from participants were analyzed. There was unanimously favorable, with all participants finding the program relevant and valuable, and would recommend the program to others. Many participants expressed how they can benefit their respective organization from the knowledge and skill they have learned for the program. Reports will be made at the APAO council meeting, RCOPT board meeting and AAO LDP class. A written report on APAO LDP will be published in APAO journal.

Conclusions: The mid-term LDP could be organized effectively and meet the objectives of sharing the benefits to the APAO LDP class as well as local RCOPT participants. The success of the program leads to full awareness of the LDP development and recognition from APAO council and APAO LDP participants. This could be more generalized to their respective organizations. The program also assists in identifying the new potential leaders for RCOPT. The favorable experience and feedbacks may contribute to the improvement of the APAO LDP. A stronger APAO and AAO LDP network is also formed from the program.

Eric Thomas, MD
South Dakota Academy of Ophthalmology
Leadership Development Program XIV, Class of 2012
Project Abstract

Title of Project: Comparison of Rural Coverage between Ophthalmology and Optometry Practices in South Dakota.

Purpose: To compare geographical coverage areas within South Dakota between Ophthalmology and Optometric practices to address "access to care" arguments when dealing with Optometric expanding scope of practice issues.

Methods: Information was gathered on geographical locations where ophthalmologists and optometrists see patients for care within South Dakota. The information was gathered through a combination of obtaining data directly from practice websites, state society websites and personal contact with practice managers. The data was then plotted directly onto a overlay map of South Dakota for easier viewing.

Results: After reviewing the data obtained it was determined that geographical coverage of the state of South Dakota is very similar between the two fields of ophthalmology and optometry. There is good representation by both fields throughout the state with a few underserved areas with low population base. South Dakota's population has equal accessibility to optometric and ophthalmic offices, hence, increased "access to care" is not an effective argument for expansion of optometric scope of practice within South Dakota.

Conclusions: These maps will be available to all SDAO members for educational purposes and to be used as a refutation of "access to care" arguments. They are readily available in digital format but may easily be printed on poster board for presentation purposes if needed.

Anthony J. Viti, MD
Virginia Society of Eye Physicians and Surgeons
Leadership Development Program XIV, Class of 2012
Project Abstract

Title of Project: An App for the Virginia Society Eye Physicians and Surgeons

Purpose: The computer age continues to evolve and the devices that are used are now mobile (i.e.: tablets, smart phones, etc.). The way information is stored is also changing because of the cloud. Physicians are increasing their use of mobile devices, especially the younger generation of physicians. State Societies need to keep up with these changes.

Method: An app will be developed for the Virginia Society of Eye Physicians and Surgeons. The criteria for the app are that it will be:

a) Web based
b) Easily updated
c) Video and link capable
d) Have both a public section and a members only section
e) Fit within the Society's budget.

The app must fulfill all criteria.

Results: Once the Board of Directors and the President approve the app you can download it.

Conclusion: Technology and mobile devices are now an integral part of medicine. The cloud is a way to deliver and retrieve information for both physicians and patients. Young physicians are better trained and more engaged in technology. The Virginia Society of Eye Physicians and Surgeons has developed this app to disseminate information in a timely and convenient fashion. This will increase participation among state members, especially younger ophthalmologists. and give greater public awareness of the Society. In the future, there may be avenues of revenue generation with advertising and such to make up for the shortfall that Societies now face due to federal guidelines involving pharmaceutical companies.