Title of Project: Work in Ophthalmic/Medical Practices for Visually Impaired (WOMP VI) Project: Empowering Independence in the Visually Impaired

Purpose: To create awareness regarding the importance of vision and to empower independence in visually impaired persons. This project will provide visually impaired persons a presence in the work force and the ability to generate their own income. Their presence in the work force will also serve other poorly sighted patients and their families as society does not have an appreciation for the contributions that visually impaired persons can make.

Methods: I presented a brief introduction to the North American Neuro-Ophthalmology Society (NANOS) members during the annual meeting. At that time, I introduced myself as their NANOS representative in the Class of 2016 AAO Leadership Development Program (LDP), and how the program will allow me the opportunity to pursue my passion to: (1) create awareness about vision in the community and (2) allow persons with vision impairments to share their own experiences and abilities to dispel myths about their limitations. Immediately following the annual meeting, I sent a Survey Monkey consisting of 7 questions to the 643 members of NANOS to identify physicians who may be willing to participate in the project. Upon completion of the survey, physicians who expressed desire or curiosity about employing a visually impaired person were contacted. The discussions further defined needs in their practice(s) and allowed us to select the best offices for the pilot study. The physicians will receive disability employment consultations to learn about hiring the right candidate for the job, job needs, and tax incentives. A local Lighthouse and/or Vocational Rehabilitation office has been contacted on the physician’s behalf to select possible visually impaired job candidates for a potential hire in their office/hospital facility.

Results: 12 physicians replied to the survey; however, not all participants responded to all survey questions. Eight physicians had practices located within an academic university center, 3 had hospital-based clinic practices, and one had a private office with 4 or less physicians. Nine practices had 20 or more employees and 2 had 5 to 10 employees. Two neuro-ophthalmologists who had clinical practices within an academic university center had in previous years successfully employed a disabled individual. More than 7/12 respondents reported that their staff would be willing to work with persons with visual limitations. Approximately 5/7 of respondents reported that important skills for any new hire was an ability to educate patients on procedures, provide discharge instructions and perform patient follow-up. One physician expressed a definite interest in hiring a visually impaired person. 2/7 of the respondents reported that they were interested in learning more about the hiring process of a visually impaired person at their facility. 4/7 respondents were uncertain if their office was suitable for a visually impaired employee. Of the 4 who were uncertain, one physician agreed to pursue the hiring process after learning more about the employment process. 2/12 were willing to work with persons with visual limitations and believed that it could positively impact their patients; however, they could not participate due to inability to hire new employees in their practice at the present time.
Marie D. Acierno, MD
Work in Ophthalmic/Medical Practices for Visually Impaired (WOMP VI) Project: Empowering Independence in the Visually Impaired

Conclusions: Visually impaired clients working in an ophthalmologist’s office should have a positive impact on the patients visiting the physician. The patients visiting a neuro-ophthalmologist may receive a first time diagnosis of acute or devastating chronic visual loss. These patients are fearful of how they will cope on a daily basis with a future visual impairment. At least 2 neuro-ophthalmologists from NANOS are defining their office/hospital practices’ needs and exploring the employment process for a visually impaired person. Once this is completed a local Lighthouse and/or Vocational Rehabilitation office will assist in finding the right candidate for the job and coach the visually impaired client at the onset of their employment. If given the opportunity, persons with vision impairments can function independently in the job force as it is important to dispel myths in our society about persons with limitations. As ophthalmologists, we can give visually impaired persons the opportunity to work in our offices and generate an income, as well as, have their work efforts directly serve our poorly sighted patients and their families. I firmly believe that our profession should begin to explore the many benefits both personally, professionally, and financially to hiring a person with a visual disability and determine if such a hire is a good fit for their practice needs. I can only hope that my passion to create awareness about persons with visual impairments in our community becomes contagious.
**Title of Project:** Basic and Clinical Sciences Series (BCSC) based webinars

**Purpose:** To develop a series of webinars for ophthalmology residents based on the content of the BCSC Retina and Vitreous book.

**Background:** ACGME requirements are that ophthalmology residents be educated in basic and clinical sciences through a structured and regularly-scheduled series of didactic sessions. This series must include a minimum of 360 hours during the 36-month education program, with 200 hours of this total taking place at the sponsoring institution.

Currently, the faculty of each ophthalmology residency program develops these didactic lectures based on the BCSC books. Each program’s residency director is responsible for overseeing the quality of these lectures. The pitfalls to this approach are lack of standardization of the quality of lectures between institutions, and variable resident attendance. The current generation of residents may prefer to access these didactic lectures at a time of their choosing. My goal is to create a webinar series, where each topic is covered by a recognized expert in the field, to facilitate high-quality, standardized and asynchronous didactic learning. This may allow for residents to spend face-to-face time with faculty discussing the content of the webinars, to reinforce learning by interactive methods.

**Methods:** Leaders at the AAO have been contacted and believe this is a worthwhile endeavor for the AAO to pursue in conjunction with the Macula Society. The AAO Education Chairs will be contacted to discuss feasibility as we would need the support of AAO for web space. The BCSC book will be divided into sections of a size suitable for a 10-minute webinar. Macula Society members will be asked to contribute a narrated PowerPoint presentation that can be made publicly available on the AAO website.

**Results:** We hope to see 5 PowerPoint presentations based on BCSC Section 12 (Retina and Vitreous) placed online by the first year. Awareness of the availability of this new educational tool will be through the AAO newsletters, and through specific mailings to residency program directors and AAO members in training. Measures of success will be the number of times and duration each presentation is watched, as well as a rating at the end of the webinar. The goal is for viewings to increase with time, as awareness increases. If this is successful, these webinars can be expanded to cover other sections of the BCSC.

**Conclusions:** Development of a webinar series based on the BCSC Retina and Vitreous book will ensure standardized and asynchronous learning for ophthalmology residents, and allow for more opportunity for residents to discuss these topics face-to-face with their institutional faculty.
Title of Project: WOMEN UP: Leadership Development Program for Women in Retina

Purpose: Survey retina specialists in the United States, Mexico and Latin America to better understand the current status of leadership in the field of retina and specifically for women in retina. It is evident that there are less women in leadership positions in the retina subspecialty. This survey will hopefully aid us in developing a more clear leadership path for women in retina.

Methods: A survey of 14 questions was sent to mostly surgical retina specialists in the United States, Mexico and Latin America including fellows in training. The survey was sent to the email address of the physicians.

Results: Of 1,116 retina specialists identified by email, 350 answered the survey as of August of 2016. 77% of the respondents are male and 23% are women. If we separate the results by gender, we get to compare how men and women understand leadership in retina. 24% of female respondents are 11-20 years out of practice. 23% are still in training, 19% have practice for less than 5 years and 14% have been in practice more than 20 years. The majority of the male respondents (38%) have been in practice more than 20 years. 23% of women practice outside the US and most practice in the NE, SE and MW of the US. 68% of women practice in academia and only 36% in are in private practice. In contrast, 57% of the male respondents work in private practice and 45% are in academia. 70% of women practice both medical and surgical retina compared to 76% of men. 58% of women considered a man as a career mentor, while 16% considered no one as a mentor. 85% of men considered a man a career mentor and 12% considered no one as a mentor. 42% of women are NOT involved in leadership, followed by 30% who are involved in local leadership (university, hospital), and 24% who have multiple leadership roles. As compared to men: 39% have multiple leadership roles, 35% local leadership roles, and 29% are not involved in any leadership role. Of the women NOT involved in leadership 61% feel there is no opportunity and 51% are too busy. Of the men, 52% are too busy and 40% feel there is no opportunity. Women see the barriers to leadership as: 54% no support (professionally), 48 % their gender, 38% their age, and 21% no support (personally). No man feels their gender is a barrier to leadership, 45% feel there is no support (professionally), 42% feel their age is a barrier, and 20% feel they have no support (personally). 52% of women feel the most important mentor in their career was a man and 25% believe it was both a man and a woman. 82 % of men said their most important mentor was a man while 15% said it was both a man and a woman. 53% of women feel there is no clear leadership path for them as compared to 40% of men. 57% of women believe leadership paths should be improved by identifying leadership paths and 55% of men agree with this.

Conclusions: Surprisingly there is no clear path to leadership for young retinal specialist. This is even more obvious from a gender disparity perspective for women retina specialist. This data strongly supports a better understanding of leadership development and the importance of structured pathways for young retina specialist to develop strong future leaders.
Title of Project: Determining the workforce need and designing the occupational profile for ophthalmic technicians in Ireland

Purpose: To investigate the need for, and the required skillset of, an ophthalmic technician for the Irish context, in order to produce an occupational profile to inform a new national ophthalmic technician training program in Ireland. The occupational profile is a pre-requisite for formal engagement with higher training authorities regarding the best fit for an academic or apprenticeship training model and selection of a relevant qualification based on the National Framework of Qualifications.

Methods: Two surveys were distributed to all national eye units in the form of Survey Monkey to determine 1) the workforce demand and 2) the skillset required for an ophthalmic technician as a new member of a multi-disciplinary team delivering eye care in acute and non-acute community eye care settings in Ireland.

Results:
1. The results of the survey generated a 90% response rate. Based on the results, a national workforce plan to meet predicted ophthalmic technician demand across multiple sites of eye care delivery - primary & tertiary care, screening & surveillance programs as well as private practice - for the period 2016 – 2026 and based on predicted eye care demands across the main specialty areas of pediatrics, glaucoma and medical retina, was produced. Based on this data, the short and long-term sustainability of an ophthalmic technician training program was reviewed, estimating the numbers to be trained per year, cost per year, as well as long-term sustainability of the program once a steady-state of graduate generation, following the initial fast-tracking period, would be reached.

2. Based on the results of the second survey (80 percent response rate), the relevant skillset required for the ophthalmic technician in the setting of eye care delivery in Ireland, was determined and refined. The information was used to generate a precise occupational profile for the ophthalmic technician. The occupational profile serves as the determinant of all subsequent curricular design in terms of content, delivery and assessment processes of the training program.

Conclusions: The creation of a workforce plan and an occupational profile are required steps in the implementation of a new national training program for ophthalmic technicians. Its completion will allow formal engagement with the relevant national higher educational and training bodies to take place with the aim of gaining approval for funding to develop the ophthalmic technicians’ training program as a 2-year training program using the apprenticeship model with the award, on graduation, of a level 5 qualification from the National Framework of Qualifications. The expectation is to complete the curricular content by December 2016 and to commence the selection process for the first cohort of trainees in July 2017.
Title of Project: Charity and Advocacy

Purpose: The Nevada Academy of Ophthalmology (NAO) has been in a state of disarray for several years. Originally my plan was to organize a charity event and have this dovetail into an advocacy event--to increase involvement of state society members through the mechanism of a charity event.

Methods: Use the AAO member database to obtain contact information for all State ophthalmologists and organize a combined charity/advocacy event. After learning that there are issues with the AAO releasing contact information to individual ophthalmologists, I changed directions to simply organize a State Society meeting after learning that we had not had such a meeting in three years. I enlisted the help of our interim state society president in this regard as well.

Results: We have organized the first meeting the NAO has had in three years! Speakers include Dr. Rovit (interim NAO president), Dr. Friedlander (former state Councilor and now a member of the American Academy of Ophthalmology’s Secretariat for State Affairs) and our state lobbyist, Jeanette Belz. This meeting is scheduled for September 10, 2016 in Las Vegas. We anticipate a healthy attendance.

Conclusions: The inability to access the AAO member database for contact information proved to be a bit of a challenge in terms of organizing the planned event. However, we have diligently gathered up our resources to create a State Society meeting, which we anticipate will jump start future advocacy by our ophthalmologists.
Title of Project:  NAEPS Resident Advocacy Mentorship Program (RAMP up advocacy!) and a National Advocacy Efforts Survey of State Societies and U. S. Residency Programs

Purpose: To improve resident exposure to advocacy efforts on a local and national level through introducing and formalizing a mentorship program utilizing our NAEPS executive committee members. The goal will be to universally engage our residents into advocacy in an attempt to educate and overcome barriers preventing their involvement in these important efforts.

Methods: Each executive committee member will select a resident for a 1-on-1 mentorship that will last throughout the three-year training program. 3-1 hour didactic lectures will be built into the residency education curriculum. Each of the 2 3-rd year residents will be invited to sit on the executive committee and both will attend the AAO MYF in April. Furthermore, surveys will be conducted of state societies, residency program directors, and residents in US ACGME accredited programs examining current efforts to improve advocacy in residency.

Results: The executive committee mentorship program is underway. Our didactic curriculum has been developed and delivery will begin winter 2016. Our executive committee has voted to invite all 3rd year residents to sit on the executive committee and each will be allowed time off to visit the MYF meeting in Washington DC. The cost of this travel will be covered by scholarship, one provided by NAEPS, one provided by the Department of Ophthalmology at UNMC. The national survey is in progress and results are pending.

Conclusion: Strengthening advocacy efforts by young ophthalmologists is of paramount importance to protect the future of ophthalmology and the safety of our patients. This program aims to increase advocacy through a combination of mentorship, education, and opportunity. We hope to promote awareness of different levels of advocacy, ultimately showcasing the importance of these efforts and how individual and collective effort can make a difference for our profession and our patients.
Title of Project: Educational content on ocular pain

Purpose: There is a knowledge gap regarding the approach to patients with dry eye symptoms and minimal ocular surface signs of disease. Certain symptoms in such individuals (dryness, discomfort, burning) may be better described as ocular pain. It is important for the ophthalmologist to feel comfortable assessing and treating ocular pain yet minimal educational content has been developed to specifically address pain in and around the eye.

Methods: Case development for the AAO educational website.

Results: In conjunctional with the American Academy of Ophthalmology e-content department, education content was developed on the topic of ocular pain using a case based format. Information discussed in the case included (1) clinical approach to a patient with ocular pain, (2) pathophysiology of pain and ocular pain, and (3) potential treatment implications.

Conclusion: A case based format can provide easy to use, important educational content on the evaluation and treatment of ocular pain.
Title of Project:  Keeping residents engaged in advocacy as they graduate and move on to the next step of their careers

Purpose: Over the past decade, the American Academy of Ophthalmology (AAO) has worked to engage resident physicians in advocacy efforts through state society and national efforts. When residents graduate, state societies do not know where they go. The work email that the Maryland Society of Eye Physicians and Surgeons (MSEPS) has on file and that AAO uses or the OKAP and other official business expires when residents graduate. However, residency programs know where their graduates are. In a time of transition of our management company, the Maryland Society for Eye Physicians and Surgeons discovered that our database of resident physicians was not being kept up to date and included people who graduated many years ago, moved out of state, or were never actually residents. State societies need to engage residents with content that makes membership relevant and helpful to them.

Methods: Working with other residency program directors in Maryland we updated the MSEPS database, creating a separate database for resident physicians including graduation year and permanent email. When we discovered graduating residents who were moving to other states, the leadership of those states was directly contacted to get and keep these graduates engaged and personally connected with their new state societies. We updated our database and will keep it separate from the general membership moving forward, making sure to note graduation year for each resident. This effort was universally welcomed by the graduating residents.

A special half day resident session was organized at our annual MSEPS meeting focusing on advocacy, especially emphasizing the benefits of the AAO Mid-Year Forum and our state advocacy day. We discussed why and how this matters to our patients and our practices. We also had guest speakers related to financial planning for residents, and contracts and finding a job.

Results: Residents universally enjoyed our half day session. Half of the residents in our state attended. University of Maryland and Sinai Hospital programs will continue to commit to sending all second year residents to MYF and Annapolis Advocacy Day.

We now have an up to date database of residents, we know their permanent emails, and we know where they are going upon graduation. We used this information to either keep them personally engaged in MSEPS and to highly value MSEPS membership as a resource for mentorship, networking, and guidance, or to get them personally engaged in other state societies when they move elsewhere.

Residents appreciated this connection to their state societies now and for the future. State societies were contacted with resident email information and they and the residents were appreciative and receptive. Leaders of the California Academy of Eye Physicians and Surgeons and OPHTHPAC suggested making this a nationwide program to keep our residents engaged as the graduate and move to new states. This benefits states in gaining young, engaged members, and benefits residents to offer connections and mentorship in their new states.
Title of Project: Improve Access to Eye Care in at Risk Elderly Population

Purpose: Improve access to eye care to an at risk elderly population which has a poor social support system

Methods: Work with a local agency which facilitates care of elderly patients who are trying to live independently but whom do not have a good social support network to advocate for their care. This population, which is attempting to live independently (outside of assisted living), has a high incidence of diabetes, cataracts, glaucoma, and refractive errors but may not access eye care due to a multitude of access barriers including economics, language, and educational issues.

Results: Partnered with organization who advocates for this population and provide better access to eye care. Construct group of physicians to work with patients to specifically improve their vision so that they may live more independently

Conclusions: Framework for increased eye consultations to this population constructed along with assistance with patient education materials and ride access. Specific monitoring of these patients to encourage follow-up along with identification of barriers to compliance with eye care. In future, hope of expand network of eye doctors accepting these patients into their practices.
Title of Project: Augmenting membership and involvement in small state societies.

Purpose: Ophthalmologist involvement at a state level has become a recurring theme in the leadership development program over the years. This resurging topic not only reveals the importance of local involvement by ophthalmologists but also the struggle to design and maintain a plan of action to keep us all engaged. Involvement should not only include membership in the form of paying dues but also active contribution to the preservation and betterment of our profession. Our goal is twofold: One, establish a protocol to increase the membership numbers in the Oklahoma Academy of Ophthalmology and two, get these members involved in advocacy for our profession.

Methods: Previous LDP projects were analyzed and tallied as they pertained to state society efforts regarding member recruitment and political advocacy. In essence there were many LDP alumni elected by their state society, and in that category nearly all focused on projects specifically benefitting said society or its interests. Only those pertaining to our two goals were considered.

Results: A total of 289 projects were identified since LDP’s inception in 1999. Sixty-seven percent (194) of those authors were representing their state society. Of those 194 LDP projects, 56% (65) pertained to membership recruitment, 56% (64) pertained to political advocacy, and 12% (14) pertained to both. Recurring themes included:

- Initiating state society annually meetings or improving the state’s society annual meeting to be more relevant, cost-efficient and enjoyable for the attendees
- Linking local ophthalmologists with their respective legislators
  - Inviting them to the operating room
  - Engaging legislators in local eye disease screenings
  - Designating specific community ophthalmologists or a committee to serve as liaisons to local lawmakers or agendas relevant to ophthalmology
  - Attempts to increase PAC donations
- Engaging young ophthalmologists
- Grass roots membership drives including the involvement of past presidents and retired ophthalmologists
- Improving state societies’ online presence via personalized, interactive websites, hosting online CME, engaging social media avenues, quick-links to local legislators, online advocacy tools and state society apps
- Initiating dialogue with the local OD community to work toward common goals
- Researching reasons for non-membership
- Increasing the perceived value of state society membership with the inclusion of affordable CME, discounted OMIC membership, coding seminars, representation in other state medical societies, etc.
- Reaching out to rural/remotely-located ophthalmologists
- Providing tools, e.g. for new ophthalmologists moving to the state as a means to get them to join the state society
- Concerted efforts against increased optometric scope of practice bills
Our state society has or will be implementing these tools. For example, members in our society are regularly inviting state senators and representatives to tour our clinics both private and associated with University. Grass roots efforts are in place to raise membership numbers. Website and social media improvements are underway. In our most recent state legislative session, HB 1163 was introduced by optometric supporters in attempt to simultaneously monopolize control of ocular telehealth innovations in Oklahoma and expand their scope of practice. The Oklahoma Academy of Ophthalmology promptly acted to combat the nebulous language of this bill. Our lobbyist and I promptly met with the author of HB 1163 which defined the practice of optometry as “the delivery of care by any means to a patient who is physically located in the state of Oklahoma” and effectively eliminated this problematic language from the bill. The Oklahoma Academy of Ophthalmology has also fortified relationships with other medical state societies: we have been approached by and will be implementing an Oklahoma State Medical Association “corner” in our quarterly newsletter. These relationships will hopefully augment our future rallying efforts if/when necessary to engage faulty legislations.

**Conclusions:** State society membership requires active recruitment, but it also requires enhancement and portrayal of value in the society. This serves as a compilation of all LDP state society projects concerned with membership and advocacy.
Title of Project: Young Ophthalmologist Mentoring Program for Illinois

Purpose: To create an interactive Advocacy mentoring curriculum designed specifically for Young Ophthalmologists (YOs) that was implemented in the Chicagoland area through the Illinois Society of Eye Physicians and Surgeons.

Methods: Using resources provided by the American Academy of Ophthalmology and the Illinois Society of Eye Physicians and Surgeons, an educational program was designed to promote Advocacy in Ophthalmology in Illinois among YOs and included the following:

1. YOs were mentored to participate in PAC events and fundraisers.
2. YOs were encouraged to donate to the Illinois state PAC (in any amount).
3. YOs were encouraged and supported to participate in the AAO’s Advocacy Ambassador Program.
4. YOs were selected to actively participate in the Illinois local Scope of Practice battle.
5. Efforts were made to increase the engagement of the YO representative on the State Society Board of Directors by the assignment of specific tasks.
6. A lecture series was created and will be integrated into the rotating resident lecture series for residents from all six major ophthalmology teaching institutions in the Chicagoland area.
7. An Advocacy curriculum was added to the website for the Illinois Society of Eye Physicians and Surgeons and is available to anyone who desires to use it. Other related topics can be created and implemented on the website in the future.

Results:

1. YOs have attended several PAC events and fundraisers since the inception of this program. Several more events are planned in the near future in which YOs will participate.
2. Illinois state PAC donations among YOs have increased as a result of these efforts.
3. A record number of applicants in Illinois applied for and attended the 2016 AAO Advocacy Ambassador Program. Twelve residents attended in total representing all six Chicagoland major teaching institutions. So much enthusiasm was generated that some ambassadors even paid their own way in order to participate. They expressed positive results, appreciation and energy. They were the main speakers during visits to legislators on the Hill. Most have presented their experience at grand rounds at their respective teaching institutions.
4. YOs participated (and are still participating) in the local Illinois Scope of Practice battle. Two residents were taken to our state capital (Springfield) for meetings with legislators. Several YOs turned in “slips of opposition” against scope expansion. Others helped to disseminate the chain of information about the scope battle through social media. In addition, YOs provided invaluable research data to support our negotiations in Springfield.
5. Increased YO involvement on the State Society Board of Directors has provided a unique and productive addition to the Society.
6. Each of the six major ophthalmology teaching institutions in the Chicagoland area have agreed to integrate a lecture on Advocacy into their resident lecture series.
Sohail J. Hasan MD, PhD
Young Ophthalmologist Mentoring Program for Illinois

7. An Advocacy curriculum was successfully added to the website for the Illinois Society of Eye Physicians and Surgeons. It includes topics and updates relating to and impacting ophthalmology in Illinois (such as the Scope of Practice battle) as well as a calendar with links to upcoming Advocacy events. It also provides links to the AAO website regarding Congressional Advocacy Day, how to host a fundraiser, how to become a better advocate and instructions on how to donate to the state PAC’s.

Conclusions: The addition of a specific mentoring program designed to teach and encourage Young Ophthalmologists about their own Advocacy priorities has benefited the Illinois Society of Eye Physicians and Surgeons, and all state societies by allowing Young Ophthalmologists to participate in this exciting and rewarding aspect of their career. YOs in Illinois are now reaching out to their local legislators through phone and email, they are attending local fundraisers, and donating to the Illinois State PAC and Illinois Surgical Scope Fund. With the encouragement of ISEPS, they are becoming leaders at the state level and thereby helping to shape the future of medicine in Illinois. They are making a difference!
Title of Project: Implementing Portable Telemedicine for Screening and Management of Retinopathy of Prematurity (ROP) in Mississippi: A Model for the Future

Purpose: To investigate the potential for a collaborative model between Neonatal Intensive Care Units (NICUs) and a portable telemedicine service in order to provide screening and management of infants at risk for ROP in Jackson, Mississippi. Further, to determine if a step by step model for implementation could be devised and transferred to other satellite sites in the state and to other states in need of a long term solution to the growing problem of ROP screening and management.

Background: Retinopathy of prematurity (ROP) is a potentially blinding eye disorder that primarily affects premature infants weighing 1250 grams or less and born before 31 weeks of gestation. ROP can lead to lifelong vision impairment and blindness, and a concerted effort between neonatologist and ophthalmologists has resulted in technology and treatment to increase the survival rates and decrease the vision loss of babies at risk. Unfortunately, this comes at a time when capable and willing ophthalmologists to perform screening exams are more and more difficult to find, while the protocol for level 3 NICU certification requires ROP screening and management. This is a problem for all involved that will only get more complicated and more difficult to solve without a better option for all in a coordinated fashion. The Telemedicine Approaches to Evaluating Acute-phase ROP (e-ROP) study confirmed that potentially severe ROP can be detected by sending retinal images taken in the NICU to an offsite image reading center as accurately as regular examinations by an ophthalmologist on site in the NICU. This approach combines more efficient diagnostic capability with greater access to patients and improved comparative medical documentation in a format which can relieve physician overload and offer a new paradigm for care in the future in Mississippi.

Methods: To assess the needs of our community and gather perspective on a coordinated care approach, discussions were held with the current pediatric ophthalmologist providing ROP screenings as well as the neonatologists covering the five hospital sites in the area. Next, interviews with potential imagers were conducted to determine abilities and interest. Then, discussions with ROP screening physicians in other cities throughout the state were held to determine interest in a satellite retinal imaging system to cover their hospitals now or in the future if the program is implemented. Finally, on site demonstrations were conducted with representatives of three different ROP retina imaging systems on a sample of neonate patients with the physicians and potential imagers present to capture and review the images for quality and effectiveness, as well as the neonatologists and NICU staff present to evaluate the process.

Results: The response from the screening ophthalmologists and the neonatologists was very positive in concept, and there was agreement that this could be an important issue to address, especially if subsequent screeners cannot be identified after the current screeners are retired or decide not to perform the screenings for any reason. The interest from the imaging system companies and the potential imagers was positive, and we were able to teach the imagers on site how to use the camera about as well as the company representatives present. The main limitation from our results was the quality of the images, especially in the temporal peripheral quadrant which is the most important area to assess. Compared to an exam with an indirect ophthalmoscope by an ophthalmologist, the images did not rate as
Joel H. Herring, MD  
*Implementing Portable Telemedicine for Screening and Management of Retinopathy of Prematurity (ROP) in Mississippi: A Model for the Future*

Effective for screening purposes. We are pending another possible on site visit from one company with a designated trainer we are told can capture superior images and better instruct the potential imagers with tips to help them achieve more success in capturing more useful images.

**Conclusion:** At this time, we do not have either the technology of image quality or the technical ability to capture images locally to establish an image screening service for the area or the state. We remain hopeful that with further training or perhaps another imaging system, the goal of implementing a portable telemedicine screening system for ROP will be possible in our community and our state. And, if successful, this may provide and promote a step by step model available to all ophthalmologists to be incorporated in other states facing the same issues both now and in the future.
Title of Project: Development of Non-English Ophthalmology Health Information

Purpose: There is a lack of ophthalmology health information and patient education material in languages other than English and Spanish. My goals were to raise awareness of this issue, consider possible solutions, and put forth a method by which this material may be developed.

Methods: I reviewed the patient education materials available by the American Academy of Ophthalmology and the “Eye Health” resources online. I discussed this issue with the Academy’s director of patient education. I reached out to the directors of interpreting services and patient education within my medical group, a large multi-specialty group serving a very ethnically diverse population.

I authored health information on ten core general ophthalmology topics and these were translated into Somali by a professional medical translator. These include: Flashes and Floaters, Retinal Detachment, Macular Degeneration, Diabetic Retinopathy, Glaucoma, Cataract, Blepharitis, Dry Eye, Presbyopia, and Eye Drops.

Results: The final version of these ten topics is two pages total in length. The reading grade level is 7.6. This document will be posted on the Minnesota Academy of Ophthalmology’s website. This document may be distributed as a health information document or used at the point of care for patient education in an after visit summary.

Discussion and Conclusions: The development of concise, impactful ophthalmology health information is extremely important, but also time-consuming and expensive. The American Academy of Ophthalmology has excellent “Eye Health” material available online and patient education materials in English and Spanish. The Spanish materials were developed and are continually reviewed by Spanish speaking ophthalmologists. New online translation technology (Google Translate) has been incorporated recently into the Academy’s Eye Health website for other languages, but unfortunately these translations are nowhere close to the quality of those developed by ophthalmologists speaking the language.

As I developed these ten topics I encountered several issues. First, the readability (grade level) of the source document in English was too high. Second, too much information was presented, far beyond what most readers could understand and remember. Thirdly, some words and even concepts did not translate well or at all. Thus, through the editing process my aim was to generate material which is easy to read, concise, and practical.

A core conclusion from this project is that ideally health information in a given language is developed by an ophthalmologist who is fluent in the language and either part of and/or familiar with the culture. The second best option is what I did in this project. The first step is a process of simplification of the material in English. The next step is not merely translation, rather, interpretation of this material into the respective language and culture.
Somali language was chosen because this is the language of many recent immigrants to Minnesota. This model could be applied to other languages. In the meantime, in the absence of complete libraries of health information in all languages, professional interpreters are vital to the care we provide. The difference between translation and interpretation was highlighted throughout this project.
Title of Project: Access to Eye Care

Purpose: To quantitatively measure the access to eye care in the Continental United States by calculating driving routes and driving time.

Methods: For each state in the US, the addresses of all practicing ophthalmologists and optometrists were obtained from the 2012 Medicare Provider Utilization and Payment Data from the Centers for Medicare and Medicaid Services. The US Census data from 2010 were then used to calculate the geolocation of the US population at the block group level. Geometries and driving speed limits of every road, street, and highways in the US from the OpenStreetMap project were used to calculate the exact driving distance and driving time to the nearest eye care provider.

Results: Access to care for 3.05 X 10^8 people were calculated using a total of 3.88 X 10^7 available roads for 25,508 optometrists and 17,071 ophthalmologists. Nationally, the median driving time to the nearest optometrist and ophthalmologist were 2.81 and 4.36 minutes, respectively. Ninety percent of the population lives within 12.21 and 21.26 minutes to the nearest optometrist and ophthalmologist, respectively.

Conclusion: The majority of the United States lives within close proximity of an eye care provider and there is minimal difference between access of care to an optometrist versus an ophthalmologist.
Figure 1: Map of the Continental United States with calculated driving routes for every US census block group. Blue lines represent routes to the nearest ophthalmologist and red lines represent routes to the nearest optometrist. The width of the line is determined by the number of people who would utilize that road segment.
Figure 2: Cumulative distributions of driving time for national and US economic regions to the nearest ophthalmologist and optometrist. The shaded black area represents the percentage of people under a given driving time to an ophthalmologist. The shaded grey area represents the incremental percentage of people under a given driving time to an optometrist.
Aaron Y. Lee, MD MSCI

Access to Eye Care

Figure 3: Circos plot of state statistics on distribution of driving time. The outermost track designates the states as well as the number of people living in the state in millions of people. Track 1 shows the difference in driving time to the nearest optometrist versus ophthalmologist. Track 2 and 3 shows the driving time to the nearest ophthalmologist and optometrist respectively. The inner links show the connectivity of the states to each other by US economic regions.
Title of Project: Georgia Society of Ophthalmology - Comprehensive Plan for Young Ophthalmologist Engagement

Purpose: When looking at the future of a state society, membership is key. Retaining current members and soliciting new members is essential for growth and maintaining importance and relevancy. By creating a comprehensive plan for the recruitment, engagement, and retention of young ophthalmologist, The Georgia Society of Ophthalmology (GSO) will be strategic in developing the future of our society. The overarching theme of our plan will be to highlight the membership value provided by GSO.

Methods: Our plan will focus on personal relationships, direct outreach from leadership to new membership, and highlight our membership value. After a critical review of our current strategies for our young ophthalmologists, we have developed a comprehensive plan identifying opportunity areas to increase our recruitment, engagement, and retention of young ophthalmologist membership.

Results: Below is the plan we created:

1. Recruitment
   a. Identifying YOs in Georgia
      i. Members in Training (MITs)
         1. Working with residency programs directors on obtaining accurate list of residents and fellows each July
      ii. New-to-Georgia YOs
         1. Have council and leadership review lists from AAO and make edits and additions
   b. Personalized welcome letter to new to Georgia YOs from a council member or leadership
      i. GSO staff will identify a member of leadership to reach out directly to the new YO and serve as a point of contact between GSO and the member.
      ii. GSO staff will create a draft sample letter for the council member to use and edit
         1. Personalized welcome letter with member benefits specially for MITs / YOs using a positive tone “we’re here for you”
            a. Due waiver for MITs/ graduated dues for YOs
            b. Waiver or registration fees to meetings for MITs
            c. Opportunity to attend AAO- Mid-Year Forum with GSO
            d. GSO advocacy day at the Gold Dome
            e. Reduced fee for AAO/ GSO coding events
            f. List of GSO accomplishments
            g. A personal statement from a current YO GSO member or member of GSO leadership answering “Why I am a member?”
2. Engagement/ Retention
   a. Members In Training
      i. Advocacy Ambassador Program support
      1. Opportunity for GSO to interact directly with future membership
ii. Residency Training program visits
   1. Opportunity for YOs to meet with GSO staff and leadership
   2. Opportunity for GSO to share member benefits and value to MITs directly
   3. Sponsor billing and coding sessions at local programs

iii. Due waiver for MITs
   1. Allowing free membership will provide MITs the opportunity to see how state societies work and why membership is important

b. YOs in Practice
   i. Dues
      1. New members received reduced dues for first year
      2. YOs allowed to register for meetings with member pricing if membership application is pending
      3. Graduated dues structure for YOs
   ii. Budget funds dedicated to supporting YOs to be used for...
      1. YO specific programming at GSO meetings
         a. GEM meeting
         b. Summer meeting
      2. YO networking events at GSO meetings
         a. Opportunity for YOs to meet and network with GSO leadership
      3. Financial Support for YOs to attend Mid-Year Forum
   iii. YOs in leadership
      1. Involve YOs in GSO leadership positions
         a. Create an official YO Committee
            i. Structure
               1. Chair (member of the council)
               2. Co-chair (member of the council)
               3. MITs representatives from each program
            ii. This would ensure that at least 2 YOs are included on the council at all times
      2. CME committee
         a. At least 1 YO on the CME committee
         b. Recruit YOs to speak at GEM meeting ophthalmic tech program
      3. Leadership Development
         a. Continued support of GSO YO leaders in the Georgia Physicians Leadership Academy through Medical Association of Georgia
         b. Continued support of GSO YO Leaders in AAO Leadership Development Program
   iv. Highlighting YOs in Actions feature on GSO website
      1. YOs in Actions feature on GSO website
         a. This would highlight a YO each quarter with a link to the YOs website

Conclusion: This comprehensive plan will provide an opportunity for the GSO to make a secure and measured investment in the future of the society. The plan is based on a personal and strategic approach to engage more YOs in the programming and leadership of the society.
Title of Project: Increasing Generic Drug Prices Affecting Uveitis Patients

Purpose: To investigate the extent of recent increases in generic drug prices, particularly those that are indicated for the treatment of uveitis as part of standard of care and to help develop and AAO statement regarding this issue.

Methods: Generic drugs constitute approximately 80% of all prescriptions in the US. The increase in drug costs are two-fold. One of the reasons is increases in the drug cost, another is multiple payers denying coverage. It’s been increasingly common for uveitis patients to have their prescriptions—which have become standard of care- denied. The resources insurers utilize to make decisions about coverage are searched. Second, a computerized survey is being designed to understand the extent of the problem among uveitis specialists. This survey will gather data about years in practice, average number of patients seen, proportion of different insurance plans and the proportion and frequency of drug coverage denials experienced, the specific type of drugs commonly denied for coverage, and the average time spent by the physician to appeal the decision of denial.

Results: The price of >25% of generic drugs rose by 10% to >100% in 2014, 18% rising by >25%. Multiple reasons are believed to contribute to recent increases that range from market consolidation, informal collusion, fewer drug wholesalers to increased raw material costs. Americans spend approximately 106 billion/year on generic prescriptions. While approximately half of generic drugs decreased in price the other half experienced an increase, not all of them explained by increase in the cost of production. Increase in cost can lead to denial of coverage by some insurers.

Conclusions: Generic drugs constitute >80% of all prescription drugs in general. Most commonly prescribed drugs for the treatment of uveitis are generic drugs. Significant increases in generic drugs may lead patients to not fill their prescription leading to more serious health problems in the long run. Efforts to identify reasons and mitigate hurdles are important. Survey responses from uveitis practitioners are pending.
Title of Project: Improving Access to Incisional Glaucoma Surgery for Patients with Glaucoma Who Have Limited Financial Resources Through AGS Cares

Background: Glaucoma is a sight-threatening disease that affects over 3 million Americans. Racial minorities including blacks and Latinos are disproportionately affected by glaucoma with rates of blindness 4 times higher in these groups compared to whites. While the passage of the Affordable Care Act has resulted in an expansion of access to health insurance, there continue to be Americans who are unable to pay for necessary health care services, including surgical interventions for glaucoma.

Purpose: The purpose of AGS Cares is to develop a network of glaucoma specialists throughout the country who are willing to provide incisional glaucoma surgery (i.e trabeculectomy, glaucoma drainage device surgery), completely free of charge, to eligible patients who are at risk of experiencing vision loss and blindness from this disease.

Methods: Working closely with the members of the AGS Foundation, members of the AGS leadership, and members of an AGS Cares Task Force that I am leading, we have been developing and working through the logistics of this newly-created AGS Cares program. This has included interacting with colleagues who run EyeCare America and the American Society of Cataract and Refractive Surgery (ASCRS) program that offers free cataract surgery to those in need to learn how these established programs are able to provide eye care services to many socioeconomically disadvantaged patients. We have also engaged colleagues in industry to see if they would be willing to help support AGS Cares and/or donate needed equipment and supplies for the program. Furthermore, we hired a social worker who will assist us with identifying longer term solutions for those patients who require ongoing glaucoma care.

Results: We have successfully recruited a dozen glaucoma specialists to serve on the AGS Cares Task Force. After a lot of information gathering, we have worked through all of the logistics of the AGS Cares program including eligibility criteria for patient participation, a description of what services will and will not be covered, and ways to make the program sustainable. We submitted a grant proposal seeking 100K in funding to help support the program. We are presently developing a national network of glaucoma specialists throughout the country who are willing to participate in this program. Our goal is to begin pilot testing the AGS Cares program on January 1, 2017 with the hope that in the first year of the program, we will be able to provide glaucoma surgical care to a few dozen patients who are in need of such surgery.

Conclusion: The AGS Cares program will connect patients who are at risk for blindness from glaucoma with volunteer surgeons who are willing to perform incisional glaucoma surgery, free of charge, to patients who are in need. This program can have a dramatic impact on the lives of patients who do not have the resources themselves to pay for these sight-saving glaucoma surgical procedures.