



Association of University
Professors of Ophthalmology

EDUCATING THE EDUCATORS MEETING SYLLABUS

January 25

Provided by:
AUPO Program Directors Council

San Diego JANUARY 25-28
AUPO 2023
ANNUAL MEETING



MEETING SUPPORT

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Educating the Educators 2023

The Association of University Professors of Ophthalmology's Program Directors Council welcomes you to the 20th annual Educating the Educators conference in San Diego, California.

The morning will begin with the optional Book Club featuring *Give and Take*, by Adam Grant. The opening session features "MSE - From Applicant to Application Review," which will feature several Program Director and Director of Medical Student Education speakers and take a deeper dive into challenging application and advising questions DMSEs and PDs often face when mentoring their medical students. The morning will also include the "Free Paper Session" consisting of six presentations chosen from abstracts submitted for this year's meeting. The morning will conclude with a symposium on "Pearls for Running a Residency" which will cover essential elements of running an effective residency training program.

The afternoon sessions will include the Organization Updates followed by two "Guidance with Gurus" sessions where learners may join small group discussions on a myriad of topics with knowledgeable facilitators. The day will conclude with the "Misery Loves Company" session, an interactive symposia featuring case studies highlighting difficult scenarios related to residency training.

Don't forget to take advantage of time during the breakfast, lunch, break time and before the cocktail reception to check out the poster session!

We look forward to seeing you in San Diego, and hope you enjoy the meeting!

Jules Winokur, MD
Chair, Educating the Educators
Member-at-Large
AUPO Program Directors Council

Anju Goyal, MD
Chair, From Applicant to Application Review Session
President
AUPO Directors of Medical Student Education Council

Jeffrey SooHoo, MD
Chair, Free Paper Session
Member-at-Large
AUPO Program Directors Council

Misha Syed, MD
Chair, Guidance with Gurus Sessions
Former Member-at-Large
AUPO Program Directors Council

Fasika Woreta, MD, MPH
Chair, Book Club Session
Member-at-Large
AUPO Program Directors Council

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Educating the Educators Program

Wednesday, January 25

6:30 AM – 8:00 AM	Registration and Breakfast	Indigo West Foyer
7:00 AM – 7:55 AM	Book Club Please join the EE Book Club to discuss the New York Times Bestseller, <i>Give and Take</i> by Adam Grant, an organizational psychologist at The Wharton School. Throughout this book, three fundamental styles of reciprocity at work are defined: Givers, Takers, and Matchers. Join us to reflect on the benefits and drawbacks of each style, which style is associated with most success, and actions to apply the principles in this book to your work and life.	Indigo Terrace
	7:00 AM – 7:05 AM Introduction - <i>Fasika Woreta, MD, MPH</i>	
	7:05 AM – 7:55 AM Book Club Discussion Groups	
8:00 AM – 8:05 AM	Welcome and Announcements - <i>Jules Winokur, MD, MBA</i>	Indigo BCFG
8:05 AM – 9:20 AM	From Applicant to Application Review - Moderators: <i>Anju Goyal, MD</i> and <i>Rukhsana Mirza, MD, MS</i> This session will take a deeper dive into challenging application and advising questions DMSEs and PDs often face when mentoring their medical students. This session will highlight the opportunity for shared discussions between PDs and DMSEs, while we educate ourselves on changes in the application process and help support the professional development of students to become successful ophthalmology residents.	Indigo BCFG
	8:05 AM – 8:10 AM Introduction - <i>Anju Goyal MD</i> and <i>Rukhsana Mirza, MD, MS</i>	
	8:10 AM – 8:18 AM Professionalism: Transitioning from Medical Student to Resident - <i>Prithvi Sankar, MD</i>	
	8:18 AM – 8:26 AM Situational Judgement Testing: The Who, What, and Why? - <i>Daniel Knoch, MD</i>	
	8:26 AM – 8:34 AM Dual Application: What, Why, When, and How - <i>Jamie Rosenberg, MD</i>	
	8:34 AM – 8:42 AM Gap Years/Advanced Degrees: the Pros - <i>Zachary Elkin, MD, MPH</i>	
	8:42 AM – 8:50 AM Gap Years/Advanced Degrees: the Cons - <i>Ariane Kaplan, MD</i>	
	8:50 AM – 8:58 AM USMLE Step 1 Changes: Applicant Screening in the Pass/Fail Era - <i>Peter Veldman, MD</i>	
	8:58 AM – 9:20 AM Discussion	
9:20 AM – 10:20 AM	Free Paper Session	Indigo BCFG
	9:20 AM – 9:23 AM Introduction - <i>Jeffrey SooHoo, MD</i>	
	9:23 AM – 9:30 AM The Effect of Mandatory Post-call Relief on Sleep and Wellness in Ophthalmology Residents - <i>John Davis, MD</i>	
	9:30 AM – 9:37 AM Correlation of Faculty Assessment Scores with Resident Experience and Preparation at the AUPO SCOR Lab - <i>Mithra Nejad, MD</i>	
	9:37 AM – 9:44 AM It's Really That SIMPL: Use and Feasibility of Smartphone Application for Ophthalmology Resident Operative Evaluations - <i>Tania Padilla Conde, MD</i>	
	9:44 AM – 9:51 AM Impact of Gender and Underrepresented in Medicine Status on Research Productivity Among Ophthalmology Residency Applicants - <i>Emily Sun, BS</i>	
	9:51 AM – 9:58 AM The Role of Bias Reduction Practices in Ophthalmology Residency Recruitment - <i>Ogul Uner, MD</i>	
	9:58 AM – 10:05 AM Resident Education and Health Equity: Rethinking Resident Ophthalmology Continuity Clinics - <i>Rachel Wozniak, MD, PhD</i>	
	10:05 AM – 10:20 AM Q&A	
10:20 AM – 10:45 AM	Break, Poster Viewing, Exhibits	Indigo West Foyer
10:45 AM – 12:00 PM	Pearls for Running a Residency - Moderator: <i>Jeff Pettey, MD, MBA</i> In this symposium we will cover essential elements of running an effective residency training program. Successful training programs require coordination between a myriad of stakeholders including the ACGME, local GME, faculty, and trainees. Understanding leadership principles, regulatory requirements, and best practices will empower residency leaders toward success.	Indigo BCFG
	10:45 AM – 10:47 AM Introduction - <i>Jeff Pettey, MD, MBA</i>	
	10:47 AM – 10:55 AM Building an Educational Program - <i>Rachel Simpson, MD</i>	
	10:55 AM – 11:03 AM Prepping Residents for OKAPS and Beyond - <i>Daniel Moore, MD</i>	
	11:03 AM – 11:11 AM Getting Meaningful Evaluations - <i>Geetha Davis, MD</i>	
	11:11 AM – 11:19 AM Giving Feedback to the Resident - <i>Evan (Jake) Waxman, MD, PhD</i>	
	11:19 AM – 11:27 AM Remediation of Residents - <i>Grace Sun, MD</i>	

Educating the Educators Program

Wednesday, January 25

	11:27 AM – 11:35 AM	Peer Coaching of Faculty - <i>Kimberly Crowder, MD</i>	
	11:35 AM – 11:40 AM	Experience with Joint Internship - <i>Pavlina Kemp, MD</i>	
	11:40 AM – 11:45 AM	Experience with Integrated Internship - <i>Jules Winokur, MD, MBA</i>	
	11:45 AM – 12:00 PM	Discussion - Moderated by <i>Jeff Pettey, MD, MBA</i>	
12:00 PM – 12:25 PM	Organizational Updates - Moderator: <i>Fasika Woreta, MD, MPH</i>		Indigo BCFG
	12:00 PM – 12:05 PM	OKAP Update - <i>Kathryn Peters, PMP</i>	
	12:05 PM – 12:10 PM	SF Match Update - <i>Dennis Thomatos</i>	
	12:10 PM – 12:15 PM	OPHTHPAC@: Working to Protect Ophthalmology on Capitol Hill - <i>Jeffrey Henderer, MD</i>	
	12:15 PM – 12:20 PM	Surgical Curriculum for Ophthalmology Residents - <i>Shahzad Mian, MD</i>	
	12:20 PM – 12:25 PM	VA Update - <i>Jennifer Lindsey, MD</i>	
12:25 PM – 1:20 PM	Lunch		Indigo Terrace
1:25 PM – 2:50 PM	Guidance with Gurus Sessions - Moderator: <i>Jennifer Lindsey, MD</i> Are you looking for guidance from a guru? Would you like to have an exchange with an expert? Join these small group discussion opportunities with knowledgeable facilitators and varied topics chosen by attendees. These breakout sessions will be limited to small groups of people at a time. Multiple sessions will run concurrently. They are designed to be intimate to allow small group discussions with topic specialists.		
	1:25 PM – 2:05 PM	Guidance with Gurus Session #1	Indigo A
		1. Holistic Review of Applications - <i>Andrew Barkmeier, MD</i>	
		2. How to Deal with USMLE Pass/Fail - <i>Griffin Jardine, MD</i>	
		3. Career Counseling for Academic Physicians - <i>Sonal Tuli, MD, MEd</i> and <i>Richard Braunstein, MD</i>	
		4. Under-Represented in Medicine Candidates: How Can We Recruit and Retain? - <i>Lora Dagi-Glass, MD</i>	
		5. Re-engaging a Disengaged Resident - <i>Hassan Shah, MD</i>	
		6. Counseling Struggling Medical Students Interested in Ophthalmology - <i>Pavlina Kemp, MD</i>	
		7. Wetlab Fundraising, Philanthropy, Educational Fundraising - <i>Tetyana Schneider, PhD</i>	
		8. Improving Non-verbal Communication Effectiveness (Avoiding Death by Email) - <i>Anjali Tannan, MD</i>	
		9. ACGME: Ask a Guru from the RC - <i>Laura Green, MD</i>	
		10. Strategies to Promote Wellness in Your Residents and Faculty - <i>Geetha Davis, MD</i>	
		11. Imposter Syndrome in Residents, Faculty, Yourself: How to Deal - <i>Royce Chen, MD</i>	
		12. How to Increase Resident Surgical Experience and Numbers - <i>William White, MD</i>	
		13. Educating on DEI in your Program - <i>Tara Uhler, MD</i>	
		14. Use of Social Media in Academic Medicine - <i>Annie Wishna, MD</i>	
		15. Faculty Burnout - <i>David DiLoreto, MD, PhD</i>	
	2:10 PM – 2:50 PM	Guidance with Gurus Session #2	Indigo Terrace
		1. Holistic Review of Applications - <i>Misha Faustina, MD</i>	
		2. How to Deal with USMLE Pass/Fail - <i>Shannon Lynch, MD</i>	
		3. Career Counseling for Academic Physicians - <i>Prithvi Sankar, MD</i>	
		4. Under-Represented in Medicine Candidates: How Can We Recruit and Retain? - <i>Aruoriwo Oboh-Weilke, MD</i>	
		5. Re-engaging a Disengaged Resident - <i>Robert Swan, MD</i>	
		6. Counseling Struggling Medical Students Interested in Ophthalmology - <i>Jamie Rosenberg, MD</i>	
		7. Wetlab Fundraising, Philanthropy, Educational Fundraising - <i>Matthew Wilson, MD, FACS</i>	
		8. Improving Non-verbal Communication Effectiveness (Avoiding Death by Email) - <i>Kimberly Crowder, MD</i>	
		9. ACGME: Ask a Guru from the RC - <i>Stacy Pineles, MD</i>	
		10. Strategies to Promote Wellness in Your Residents and Faculty - <i>Katherine Talcott, MD</i>	
		11. Imposter Syndrome in Residents, Faculty, Yourself: How to Deal - <i>Rachel Simpson, MD</i>	

Educating the Educators Posters

Wednesday, January 25

	12. How to Increase Resident Surgical Experience and Numbers - <i>Jules Winokur, MD, MBA</i>	
	13. Success with Succession - <i>Paul Edwards, MD, FACS</i>	
	14. SF Match: Ask a Guru from the AUPO Match Oversight Committee - <i>R. Michael Siatkowski, MD, MBA</i>	
	15. Engaging Trainees in Advocacy - <i>Jennifer Lindsey, MD</i>	
2:50 PM – 3:10 PM	Break, Poster Viewing, Exhibits	Indigo West Foyer
3:15 PM – 4:25 PM	Misery Loves Company - Moderator: <i>Jules Winokur, MD, MBA</i> and <i>Jeff Pettey, MD, MBA</i> This interactive symposium will feature case studies highlighting difficult scenarios related to residency training. All members of the AUPO EE day participate in the education and professional development of resident trainees. Through a group discussion we hope to learn effective and innovative ways of tackling difficult situations. Interactive Panel Discussion - <i>Geoff Bradford, MD; Thomas Oetting, MD, MS; Robert Swan, MD; Tara Uhler, MD; Laura Green, MD</i>	Indigo BCFG
4:25 PM – 4:30 PM	Conclusion and Adjournment - <i>Jules Winokur, MD, MBA</i>	
5:00 PM – 5:30 PM	New Program Directors Reception	Aqua Patio
5:30 PM – 6:30 PM	EE Reception	Indigo Terrace

Poster Abstracts

Indigo West Foyer

1	Predictors of Matching into an Ophthalmology Fellowship for International Medical Graduates - <i>Muhammad Ali, MBBS</i>
2	Diversity Among Ophthalmology Fellowships: A San Francisco Match Analysis - <i>Muhammad Ali, MBBS</i>
3	Establishing a Standardized Method of Teaching Intravitreal Injections For Ophthalmology Residents Through Video - <i>Jonathan Barnett, MD</i>
4	Efficacy of a Dedicated Corneal and Oculoplastics Suturing Curriculum - <i>Masako Chen, MD</i>
5	Quality of Narrative Feedback for Residents Performing Cataract Surgery - <i>Junsang Cho, MD</i>
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7	The Feasibility of a Rubric to Evaluate Residency Applicants: Saving Time and Promoting Objectivity - <i>Soman Khan, BS</i>
8	Resident Surgical Complications in Relation to an Experienced Attending Surgeon - <i>Dipen Kumar, MD</i>
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10	Factors Influencing Accuracy of Trainee Cycloplegic Refraction - <i>Avi Toiv, BA</i>
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15	Trends in Resident Glaucoma Surgical Experience - <i>Annie Wu, MD</i>
16	Evaluation of a Self-Guided Neuroradiology Curriculum for Ophthalmology Residents - <i>Grace Xiao, BA</i>
17	Diagnostic Accuracy of Emergency Department Consultations Among Ophthalmology Residents - <i>Charles Zhang, MD</i>

Guidance with Gurus Schedule

Wednesday, January 25

Session 1: 1:25 PM – 2:05 PM

Inidgo A

- 1 Holistic Review of Applications - *Andrew Barkmeier, MD*
- 2 How to Deal with USMLE Pass/Fail - *Griffin Jardine, MD*
- 3 Career Counseling for Academic Physicians - *Sonal Tuli, MD, MEd* and *Richard Braunstein, MD*
- 4 Under-Represented in Medicine Candidates: How Can We Recruit and Retain? - *Lora Dagi-Glass, MD*
- 5 Re-engaging a Disengaged Resident - *Hassan Shah, MD*
- 6 Counseling Struggling Medical Students Interested in Ophthalmology - *Pavlina Kemp, MD*
- 7 Wetlab Fundraising, Philanthropy, Educational Fundraising - *Tetyana Schneider, PhD*
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- 11 Imposter Syndrome in Residents, Faculty, Yourself: How to Deal - *Royce Chen, MD*
- 12 How to Increase Resident Surgical Experience and Numbers - *William White, MD*
- 13 Educating on DEI in your Program - *Tara Uhler, MD*
- 14 Use of Social Media in Academic Medicine - *Annie Wishna, MD*
- 15 Faculty Burnout - *David DiLoreto, MD, PhD*

Session 2: 2:10 PM – 2:50 PM

Inidgo Terrace

- 1 Holistic Review of Applications - *Misha Faustina, MD*
- 2 How to Deal with USMLE Pass/Fail - *Shannon Lynch, MD*
- 3 Career Counseling for Academic Physicians - *Prithvi Sankar, MD*
- 4 Under-Represented in Medicine Candidates: How Can We Recruit and Retain? - *Aruoriwo Oboh-Weilke, MD*
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- 15 Engaging Trainees in Advocacy - *Jennifer Lindsey, MD*

Free Papers

The Effect of Mandatory Post-call Relief on Sleep and Wellness in Ophthalmology Residents

JOHN DAVIS, MD*; **PARISA TARAVATI, MD**; **WHITNEY LOMAZOW, MD**; **JONATHAN YI, MD**; **JOHNSON HUANG**; **GALIA DEITZ, MD**; **LEONA DING**; **SHU FENG, MD**

Background:

The University of Washington Ophthalmology residency previously used a traditional home call system with optional post-call relief. However, residents averaged <4 hours of sleep on call and experienced high burnout.

Purpose:

Examine whether implementing a mandatory post-call relief and partial night float system affects resident sleep, activity, and wellness.

Methods:

Data from 20 PGY-2 ophthalmology residents between 2017-2020 were collected from Fitbit Alta HR wrist actigraphers and from surveys including the Maslach Burnout Inventory and Depression, Anxiety, and Stress Scale. From 2017-2019, residents took home call every 5 nights with optional post-call relief at noon the following day. From 2019-2021, a night-float resident took call for 2-3 nights a week and other residents rotated call duties on remaining days with no assigned clinical duties starting at noon the following day. Sleep, activity, and survey results were compared between groups.

Results:

There was no difference between overnight sleep on call or sleep off call, but residents napped and exercised more in the mandatory post-call relief cohort. Emotional exhaustion and stress improved with mandatory post call relief.

Conclusions:

Mandatory post-call relief improved resident sleep, activity, and wellness.

Correlation of Faculty Assessment Scores with Resident Experience and Preparation at the AUPO SCOR Lab

MITRA NEJAD, MD*; **MARIO CALE, BS;** **JONATHAN REED, BA;** **ISHA CHEELA, DO;** **SHAHZAD MIAN, MD;** **GRACE SUN, MD;** **STACY PINELES, MD**

Background:

The Surgical Curriculum for Ophthalmology Residents (SCOR) provides a standardized system of surgical training and assessment. Workshops were held on November 2021 and February 2022 and a learning management system (LMS) was made available to participating residents beforehand

Purpose:

To assess correlations between faculty assessment scores with the residents' prior experience level and preparation time.

Methods:

Residents self-reported the number of cataract surgeries they had performed to date and number of hours spent practicing on a surgical simulator or wetlabs prior to the workshop. The total minutes spent on the nuclear disassembly module on the SCOR LMS was recorded. Faculty assessments for all phaco-chop techniques were collected.

Results:

There was a statistically-significant correlation between the number of cataract surgeries performed to date and faculty assessment scores for "stop and chop" ($p=0.019$). There was no correlation between number of hours spent on surgical simulation or in a microsurgery lab with faculty assessment scores. There was also no correlation between the minutes spent on the LMS phaco-chop modules with assessment scores.

Conclusions:

The residents' experience level correlated with their assessment score while other preparatory methods did not, suggesting that surgical volume may be the most effective way to improve phaco-chop skills.

It's Really That SIMPL: Use and Feasibility of Smartphone Application for Ophthalmology Resident Operative Evaluations

TANIA PADILLA CONDE, MD*; **DANIEL B. MOORE, MD**

Background:

Intraoperative surgical performance of residents is of great interest to trainees and faculty. Current approaches to evaluation are often burdensome and delayed, limiting their value.

Purpose:

To determine the feasibility of using SIMPL (System for Improving and Measuring Procedural Learning) smartphone application for obtaining timely resident operative evaluations and performance data.

Methods:

SIMPL was made available to faculty (n=14) and residents (n=12) after completion of a 1-hour training session. Outcome variables included number of procedures performed by faculty-and-resident pairs, time required to complete assessments, time lapsed to submission, percentage of assessments with narratives, and the faculty response rate.

Results:

From January 2021 through April 2022, 752 evaluations were submitted by 9/12 residents and 8/14 faculty. The top procedures evaluated were cataract (n=628), strabismus (n=67), and filtering/shunting (n=6). Faculty evaluation response to resident self-assessment was 97.2%. Users averaged less than 2 minutes for completing evaluations. 98% of evaluations were submitted within 24-hours of the procedure. Faculty dictated additional comments in 5.7% of evaluations. Data for the type of help, performance, and complexity of cases were collected.

Conclusions:

SIMPL can be integrated into an ophthalmology residency program to obtain timely intraoperative evaluations of surgical skills, engagement by faculty and residents, and collection of detailed procedural data.

Impact of Gender and Underrepresented in Medicine Status on Research Productivity among Ophthalmology Residency Applicants

EMILY SUN, BS*; **JING TIAN, MS;** **BRITTANY TSOU, BS;** **LOAAH ELTEMSAH;** **DIVYA SRIKUMARAN, MD;** **FASIKA WORETA, MD, MPH**

Background:

Insufficient representation of women and underrepresented in medicine (URiM) students remains a problem in ophthalmology. In the residency selection process, research productivity remains an important factor.

Purpose:

We determined the average research output listed by applicants and assessed for differences by gender and race.

Methods:

San Francisco Match applications to the Wilmer Eye Institute for the 2019 ophthalmology residency cycle were reviewed. Each applicant's number of published research articles was recorded and sub-classified into first-author publications, publications in ophthalmology, and first-author publications in ophthalmology. Multivariable logistic regression was performed to determine factors associated with successful publication.

Results:

A total of 458 applications were reviewed. Males were less likely than females to list first-author publications in ophthalmology (OR: 0.6, $p=0.02$), but gender had no significant effect on the likelihood of listing any publication or any first-author publication. URiMs were less likely to list any publications (OR: 0.36, $p=0.02$) and publications in ophthalmology (OR: 0.31, $p=0.03$) compared to non-URiMs.

Conclusions:

Females were more likely than males to have a first-author publication in ophthalmology at the time of applying while URiMs had fewer publications overall. Greater research mentorship and opportunities to support URiM students may facilitate the recruitment of diverse trainees to ophthalmology programs.

The Role of Bias Reduction Practices in Ophthalmology Residency Recruitment

OGUL UNER, MD*; THOMAS S. HWANG, MD; AMBAR FARIDI, MD

Background:

Best recruitment practices for increasing diversity, such as interview standardization and unconscious bias training, are well-established. The adoption and impact of these practices in ophthalmology residency recruitment are unknown.

Purpose:

To describe the adoption and impact of bias-reduction practices in ophthalmology recruitment.

Methods:

A 20-question survey was distributed to the AUPO Program Directors (PD) Council listserv. Information on interview structure, selection committee bias training, and presence of residents underrepresented in medicine (URiM) in the last 5 residency classes were collected.

Results:

Among 109 PDs, 44 (40.4%) completed the survey. Twenty-six (59.1%) PDs indicated some interview standardization, 38 (86.4%) provided bias training, and 28 (63.4%) reported using post-interview metrics to assess DEI efforts. Use of application filters, post-interview metrics, and interview standardization were not significantly associated with URiM presence. Multivariate analysis showed a larger residency class ($p=0.01$) and use of multiple bias reduction interventions ($p<0.001$) were positively associated with increased URiM presence, whereas use of interview rubrics ($p=0.02$) was negatively associated.

Conclusions:

Ophthalmology residency interviews are variably standardized. Use of multiple bias reduction tools is significantly associated with increased URiM resident recruitment. Interview rubrics, while intended to reduce bias, may inadvertently increase inequity.

Resident Education and Health Equity: Rethinking Resident Ophthalmology Continuity Clinics

RACHEL WOZNIAK, MD, PHD*; **RONALD PLOTNIK, MD, MBA;** **RANDY IGBINOBA, MD, MPH, MBA;** **WENDY WINSLOW;** **KRYSTINA MALONEY;** **AMANDA ANGIE;** **MARCIA SCOFIELD, MSN, RN;** **JOSEPH GABRIEL;** **DAVID A. DILORETO JR, MD, PHD**

Background:

Healthcare inequities are magnified by resident-run ophthalmology clinics.

Purpose:

To address these inequities and improve resident education, we have transformed our traditional resident clinic into an Urgent Eye Care (UEC) clinic and simultaneously provided all patients access to faculty practices.

Methods:

All former resident clinic patients were assigned a faculty provider. The educational curriculum shifted to 3-month longitudinal rotations, and the faculty practice became responsible for generating all surgical cases. Concurrently, the UEC was formed to accommodate same-day visits from the outpatient setting as well as the Emergency Room and inpatient wards.

Results:

Of 200 recent UEC patients 82 (41%) were classified as high (n=47), or moderate (n=35) acuity. Of these, etiologies included trauma (n=22, 27%), infectious (n=20, 24%), retinal (n=15, 18%), corneal (n=11, 13%), neuro-ophthalmic (n=10, 12%), and inflammatory (n=4, 5%) diagnoses. In the faculty practice, PGY4 surgical cases have remained stable.

Conclusions:

Our approach improves trainee education by exposing residents to complex pathology in the UEC, while providing continuity of care in longitudinal faculty rotations. Importantly, the dissolution of the traditional resident clinic has given all patients equal access to urgent care as well as faculty providers, thereby improving ophthalmic health care parity in our community.

Poster Abstracts

Predictors of Matching into an Ophthalmology Fellowship for International Medical Graduates

MUHAMMAD ALI, MBBS*; SAFA SAEED; KARL C. GOLNIK, MD; FASIKA WORETA, MD, MPH

Background:

International medical graduates (IMG) have significantly lower match rates than US medical Graduates (US-MG). Analysis of IMG applicant characteristics and match rates may assist IMG fellowship applicants and their mentors.

Purpose:

To describe characteristics and outcomes of IMGs applying for ophthalmology fellowship match.

Methods:

Characteristics of IMGs who applied using San Francisco Match between 2010 to 2017 were compared by their match outcome. Multivariable logistic regression was used to assess the effect of applicant characteristics on match outcomes.

Results:

22.62% (785 /3,471) of the fellowship match applicants were IMGs, of which 35.92% (n= 282) matched. This rate was lower than 86.4% match rate for US-MG ($p<0.001$). Factors associated with higher odds of matching among IMGs were completing a US based ophthalmology residency (OR:2.330;95%CI:1.433-3.789), higher USMLE Step 3 score (OR:1.019;95%CI:1.006-1.032), applying to more programs (OR:1.035;95%CI:1.017-1.053), ranking more programs (OR:1.200;95%CI:1.096-1.313) and having a higher percentage of programs ranked (OR:1.021;95%CI:1.014-1.028).

Conclusions:

Fellowship match rates for IMGs are significantly lower than US-MGs. IMG residents may benefit from evidence-driven mentorship in light of our findings.

Diversity Among Ophthalmology Fellowships: A San Francisco Match Analysis

MUHAMMAD ALI, MBBS*[†]; MAYLANDER MENARD, MHS; BASIL WILLIAMS, MD; O'RESE KNIGHT, MD; FASIKA WORETA, MD, MPH

Background:

Given disparities in ophthalmic care, evaluating diversity among ophthalmology fellowships is critical.

Purpose:

To assess diversity by sex, race, and ethnicity among ophthalmology fellowships and match rates by these characteristics.

Methods:

Percentages of fellowship applicant's sex and Underrepresented in Medicine (URiM) background were compared in every ophthalmic subspecialty during 2021. Match rates and characteristics of applicants by sex and race/ethnicity were compared.

Results:

42.6%(n=224) applicants were females and 12.9%(n=60) were URiM. Females had similar match rates (70.54%,n=158) to males (69.21%,n=209;p=0.743) while URiM applicants had lower match rates (55.0%,n=33) than non-URiM applicants (72.2%,n=293;p=0.007). Females had higher median Step 2 scores (248 vs 245 for males;p=0.012). URiM applicants had lower median Step 1 scores (Median 238 vs 244 for Whites;p=0.035), distributed less applications (Median 17 vs 21.5 for Whites;p=0.001) and completed less interviews (Median 9 vs 10 for Whites;p=0.001). Pediatric ophthalmology had the highest percentage of females (67.5%) while retina had the highest percentage of males (68.9%). URiMs comprised 13.9% of glaucoma, 10% of pediatric ophthalmology, 7.3% of cornea and 6.6% of retina fellowship positions.

Conclusions:

Fellowship match rates were significantly lower for URiM versus non-URiM applicants. Significant underrepresentation of women and racial/ethnic minoritized population exist in retina. Monitoring trends in fellowship diversity over time is critical to help inform where targeted efforts are necessary to improve diversity.

Establishing a Standardized Method of Teaching Intravitreal Injections For Ophthalmology Residents Through Video

JONATHAN BARNETT, MD*; XIANGYU JI, MS; JANICE C. LAW, MD

Background:

US ophthalmology residents perform hundreds of intravitreal injections for patients with retinal disorders during their training period. However, there is no standardized resource that walks residents through this procedure, from indications to material gathering to injecting.

Purpose:

To create and evaluate the impact of a comprehensive audiovisual tutorial as a standardized tool for safely teaching the cognitive and procedural aspects of intravitreal injections.

Methods:

A narrated video was created to watch prior to starting the resident clinic rotation. Three surveys were administered to residents at different time points (baseline, post-video intervention, and post-rotation) to assess their knowledge, confidence level, and preferred learning style.

Results:

Nineteen residents participated in the video surveys. Compared to more seasoned trainees (PGY-3 and -4), the junior residents (PGY-1 and -2) benefited the most from the video tutorial with regards to knowledge ($p < 0.001$) and confidence ($p = 0.003$). Residents who favored audiovisual learning gained more confidence than those who did not ($p = 0.046$).

Conclusions:

Residents make an enormous contribution to patient care through injections which must be delivered safely and effectively as they begin learning. Our video improves knowledge and confidence for residents and comes at a time when online audiovisual resources are becoming a core part of medical education.

Efficacy of a Dedicated Corneal and Oculoplastics Suturing Curriculum

MASAKO CHEN, MD*^{*}; SUMAYYA AHMAD, MD; FARZAN GORGANI, DO; NISHA DHAWLIKAR, MD; HARSHA REDDY, MD

Background:

Early introduction of microsurgical skills in a wet laboratory has been shown to benefit resident surgeons and improve surgical outcomes. One important component is suturing, a task that requires residents to prioritize intentional practice amidst their busy schedules. We investigate the efficacy of two graded suturing sessions, with an expectation for interval individual practice, in improving resident suturing skills.

Purpose:

To evaluate the efficacy of our microsurgical suturing curriculum.

Methods:

Baseline corneal and oculoplastics suturing skills of 9 PGY-2 residents were evaluated by faculty members in respective subspecialties. For the cornea portion, residents had 10 minutes to place radial sutures on a keratoplasty model (Bioniko) and graded using a pre-determined rubric (1-24). For the oculoplastics portion, residents were given 4 minutes to demonstrate interrupted and continuous suturing, and graded using a pre-determined rubric (1-5). Residents then completed a 3-month curriculum and expected to practice suturing on their own. Finally, the residents' proficiency in the same skills were re-evaluated by faculty members using the same protocol.

Results:

Prior to the suturing curriculum, the mean score for corneal suturing was 10.4 (+/- 2.96) with a mean of 1.4 sutures placed. Post-curriculum, the mean score increased to 14.8 (+/-1.3) with a mean of 3.1 sutures. For oculoplastics, the pre-test score for interrupted sutures was 3.3 (+/- 0.5) with a mean of 4.3 sutures passed. The post-test score was 3.6 (+/- 0.9) with a mean of 5.3 sutures. For continuous suturing, the pre-test score was 2.8 (+/-0.3) with a mean of 6.9 passes. Post-curriculum, the score increased to 3.6 (+/-0.7) with a mean of 8.4.

Conclusions:

Our dedicated wet-lab suturing curriculum improved resident suturing performance, presumably through incorporating the curriculum and motivating residents to practice suturing independently.

Quality of Narrative Feedback for Residents Performing Cataract Surgery

JUNSANG CHO, MD*; RACHEL POEPELMA, MD; TEJAS C. SEKHAR, BA; ADAM BAIM, MD; EVAN L. WAXMAN, MD, PHD; SUSAN M. CULICAN, MD, PHD

Background:

High frequency, low stakes assessments have been demonstrated to improve learning. We modified the Ottawa Surgical Competency Operating Room Evaluation (O-SCORE) assessment to include a single-item, entrustment competency question and narrative comments to simplify feedback. This tool dramatically increased the number of surgical assessments and the single item O-SCORE demonstrated validity for resident skill development in cataract surgery.

Purpose:

To determine the quality of narrative feedback using the modified O-SCORE tool.

Methods:

The modified O-SCORE assessment included a single-item procedural competence question and narrative commentary. Online evaluations were completed by attending surgeons at a single residency program evaluating PGY-2 through PGY-4 residents performing cataract surgery between July 2017 and June 2020. Narrative comments were evaluated using Quality of Assessment of Learning (QUAL) scores. "Good quality" assessments were those with QUAL scores greater than or equal to 3, while "bad" assessments were those with QUAL scores less than 3 (range 0-5).

Results:

Of 857 evaluations collected from 15 attending evaluators, 60% were deemed "good" quality (QUAL >3). A cross-sectional analysis of these surgical evaluations demonstrated that higher single item O-SCORE and QUAL scores correlated with postgraduate year in training (one-way ANOVA, $P < 0.05$). As quality of assessments increased, character count of subjective commentary increased (logistic regression, $P < 0.05$). There was no relationship between O-SCORE and QUAL score.

Conclusions:

The majority of narrative comments from attending physicians evaluated using the QUAL score assessment tool were deemed high quality. Residents in later years of training showed improved surgical skills and their evaluations by attendings were higher in quality. Narrative assessments that were higher in quality included more commentary. Continued investigation must take place to determine what deems an evaluation effective.

Residency Program Characteristics Associated with Higher Cataract Surgery Volumes

PRANEETH KALVA, BS*; **TAIMUR HASSAN, MPH, MBA;** **AKASH KAKKILAYA, BSA;** **KARANJIT KOONER, MD, PHD**

Background:

The average number of cataract surgeries (CS) performed per graduating resident is a key benchmark for grading residency programs. National trends in case numbers are well studied, but the influence that program-specific characteristics may have on CS volume is unclear.

Purpose:

To analyze the associations between ophthalmology residency program characteristics and mean CS cases per graduating resident.

Methods:

We collected data on 92 residency programs using the SF Match Program Profile database regarding CS cases per graduating resident from years 2018 to 2021 in addition to program characteristics including the number of resident and fellow spots per year, number of faculty, presence of a Veteran Affairs (VA) training site, affiliation with a medical school, and percent of graduates entering fellowship training. Statistical analysis utilized simple linear regression.

Results:

The mean CS volume per resident across all programs was 196.5 ± 58.4 cases. The 75(81.5%) programs with VA sites had a higher mean CS volume of 202.5 ± 57.2 cases/resident compared to 169.6 ± 57.5 cases/resident in the 17(18.5%) programs without VA sites ($P=0.035$). Other program characteristics had no significant association with CS volume.

Conclusions:

The presence of a VA training site is associated with significantly higher CS volumes for graduating residents and a factor applicants may consider when evaluating programs.

The Feasibility of a Rubric to Evaluate Residency Applicants: Saving Time and Promoting Objectivity

SOMAN KHAN, BS*; **COLE MARTIN, BS;** **GENE KIM, MD**

Background:

The steady increase in the number of medical residency applications has led to a challenge among Program Directors seeking to admit qualified applicants. The time being spent on application review is approaching the impractical. Little is known of the feasibility of implementing a rubric to assist in evaluating residency applicants, but if successful, a rubric would both save time and promote objectivity.

Purpose:

This study seeks to evaluate the success of an objective rubric in predicting if a prospective applicant matches into an ophthalmology residency program.

Methods:

Applicants for the 2021 match year were ranked by the Dell Medical School ophthalmology residency program with the help of an objective rubric. The rank of each applicant was then compared to their match status using logistic regression.

Results:

With a sample size of 70, it was found that there was a statistically significant association between Dell rank list position and match status, with $P = .008$.

Conclusions:

An objective rubric was found to be successful in predicting match success for ophthalmology residency applicants. This shows that a rubric can supplement the holistic review process to bring a quantitative measure to an often qualitative process, all while saving time.

Resident Surgical Complications in Relation to an Experienced Attending Surgeon

DIPEN KUMAR, MD*; ROMA PEGANY, MD; JASON ZEHDEN, MD; KENNETH L. COHEN, MD; ALICE Y. ZHANG, MD

Background:

One aspect of the resident cataract learning curve that has not been thoroughly studied is the experience of the surgical educator. While studies have shown new surgical educators have decreasing rates of resident complications over time, no study has looked at resident surgical complication rates in experienced attending surgeons.

Purpose:

Evaluate surgical complications from residents supervised by an experienced attending surgeon.

Methods:

Retrospective review of the first 50 cases performed by 4 years of residents supervised by an experienced attending surgeon. An experienced attending surgeon was defined as having fifteen or more years of experience as a surgical educator. Data was collected from ACGME surgical logs and operative notes. Preoperative risk factors, the rate of intraoperative complications grouped by academic year, and factors associated with occurrence of complications were analyzed.

Results:

890 resident cataract cases were reviewed. The overall complication rate was 14.4%, with no trend observed in the rate of intraoperative complications across the study years. Multivariate analysis found that complications during cataract surgery were more likely to occur in eyes with a preoperative risk factor ($p < 0.001$).

Conclusions:

An experienced attending surgeon can teach novice surgeons consistently with a similar complication rate over a 5-year period suggesting a plateau effect of the surgical educator. Further analyses are required to report visual outcomes.

Resident Cataract Surgery Intraoperative Complication Rates and Refractive Outcomes

JAMAL AZHARI, MD*; **MOHAMMAD SIDDIQUI, MD;** **PAUL PHILLIPS, MD;** **AHMED SALLAM MD, PHD**

Background:

Quality repetitions in cataract surgery is needed during residency training. Posterior capsular rupture (PCR) is an effective metric to monitor resident performance.

Purpose:

To report the intraoperative complication rates of PCR and the visual and refractive outcomes of cataract surgery performed by residents.

Methods:

Retrospective analysis of surgical outcomes of 1474 eyes operated by PGY3-4 residents. We collected data on VA, ocular co-morbidity, intraoperative complications, refraction outcome, and surgeon grade. To account for different sample sizes between surgeons, we utilized a funnel plot statistic for data representation.

Results:

Mean pre-operative VA was 0.66 logMAR (20/100). Post-operative VA of 20/40 or better was achieved in 1129 (89%) eyes. We achieved a refractive error within +0.50 diopters of the target refraction in 73% of eyes. Intraoperative complication of PCR with vitreous loss, PCR without vitreous loss, and PCR with dropped lens fragment was seen in 65 eyes (4.4%), 9 eyes (0.6%), and 15 eyes (1.0%), respectively. Funnel plot demonstrated no intersurgeon variation with all surgeons within the 99.8% upper and lower control limits.

Conclusions:

Resident cataract surgery is associated with favorable refractive and safety outcomes. Funnel plot is a sound method for fairly displaying resident surgical outcomes and for monitoring performance.

Factors Influencing Accuracy of Trainee Cycloplegic Refraction

AVI TOIV, BA*^{*}; KEVIN FIRL, MD; ANNA CONLON, PHD; ADAM JACOBSON, MD

Background:

Retinoscopy is a crucial skill, but can be difficult to master. There are various methods of instruction, including videos, simulators, and patient encounters. To our knowledge, there is no published data on trainee accuracy, improvement throughout training, or factors affecting accuracy.

Purpose:

To review the accuracy of trainee cycloplegic retinoscopy throughout the academic year and to identify factors affecting accuracy.

Methods:

A retrospective study of a random sample of pediatric patients evaluated at the University of Michigan between 2012 and 2022. Both trainee and attending cycloplegic refractions, corneal and lens status, and presence of strabismus or nystagmus were recorded. The main outcome measured was trainee retinoscopy accuracy compared to the attending's refractive exam.

Results:

200 charts were identified with both trainee and attending refractions. Corneal clarity, age, race, lens status, strabismus, and nystagmus were found to negatively affect trainee refraction in various ways ($p < 0.05$). Trainee refractions were more myopic than attendings' but improved throughout the year.

Conclusions:

Trainee refractions were initially more myopic compared to attendings' but improved throughout the academic year. Decreased corneal clarity or pseudophakia/aphakia were most associated with errant cycloplegic refraction, especially in measurement of cylinder.

Preparing Ophthalmology Residents for Call: Evaluation of Online Case-Based Learning Tool in Ophthalmic Emergencies

CLAIRE UFONGENE, BA*; **JESSICA H. TRAN, BS;** **AMINA AVRIL, BA;** **HARSHA REDDY, MD;** **SAMIRA FAROUK, MD, MS, FASN;** **NISHA CHADHA, MD**

Background:

Primary call (PC) for incoming PGY-2 ophthalmology residents (OR) is challenging due to poor fund of knowledge. Multimodal learning may facilitate knowledge acquisition.

Purpose:

To develop and assess the impact of a web-based ophthalmic emergency case series (OECS) on comfort of incoming ORs taking PC.

Methods:

We developed and published 9 common PC cases on "20/20 SIM" (www.2020sim.com), an ophthalmology case-based learning tool (CBLT), modeled after NephSIM. The OECS was introduced to PGY-2 OR. Participants completed anonymous pre and post-surveys 1 month later assessing confidence taking call and perceptions of the OECS.

Results:

10 (100%) pre-surveys and 9 (90%) post-surveys were completed. In pre-surveys, 70% of OR reported feeling uncomfortable/very uncomfortable taking PC. During the 1 month pilot, 6/9 cases were explored. CRAO (5/9) and retinal detachment (4/9) were most reviewed. 88.9% of participants found the OECS relevant to training and 66.6% perceived a 25-50% increase in confidence with PC. Most (77.8%) stated they would recommend and continue use of the OECS. All participants felt future OR should utilize OECS.

Conclusions:

Our results suggest the OECS aided PC preparation and confidence of PGY-2 OR during the first month of residency.

Development and Implementation of a Novel Wellness Curriculum for Ophthalmology Residents

MARGUERITE WEINERT, MD*; **MARISA TIEGER, MD;** **ETHAN LESTER, PHD;** **ALICE LORCH, MD, MPH**

Background:

Residency training is a high-risk time for occupational burnout [1]. At Massachusetts Eye and Ear (MEE), we partnered with our in-house clinical psychologist to develop a resident wellness curriculum for our PGY2 residents.

Purpose:

To describe the implementation of a novel wellness curriculum for ophthalmology residents.

Methods:

Partnering with our clinical psychologist, we co-developed a year-long, monthly, small-group discussion and skills-based curriculum targeted to known stressors during the PGY2 year. Each session (60 minutes) had residency-specific topics, skills and psychoeducation, and were run independent of hospital/program leadership.

Results:

Curriculum was delivered July 2020-June 2021. Qualitative feedback from these residents was positive, constructive, and favored expanding the curriculum beyond the PGY2 year. Groups are currently ongoing (currently third cohort). Our clinical psychologist is developing a parallel program for otolaryngology residents and is also expanding wellness and support efforts among hospital administration, faculty, and staff.

Conclusions:

Implementation of an integrated wellness curriculum is possible, with benefits including community building, skill development, and dedicated mental health support across an ophthalmology residency program. Initial successes in our ophthalmology residency program have led to system-wide wellness efforts. Robust data is needed for tracking program progress.

The AUPO SCOR Skills Transfer Workshop: Baseline Experience and Training Outcomes in Cataract Extraction

JAMES WINEBRAKE, MD*; **SHAHZAD MIAN, MD;** **GRACE SUN, MD**

Background:

The AUPO Surgical Curriculum for Ophthalmology Residents (SCOR) serves to standardize surgical education, comprising online modules and a day-long, in-person skills transfer workshop (STW) to hone trainee skills in anterior segment surgery.

Purpose:

We describe residents' baseline experience with various industry phacoemulsification platforms and intraoperative maneuvers in cataract surgery, as well as enhancement of comfort level with each after the SCOR STW.

Methods:

Descriptive analysis was conducted on data gathered from questionnaires administered to resident participants after STW sessions.

Results:

Trainees reported variable number of previous primary cataract surgeries (208 ± 52) ($n=69$) and use of adjunct devices such as miLOOP (0.7 ± 1.6), capsular tension rings (2.9 ± 3.6), and other pupil expansion devices (28.0 ± 17.7) ($n=66$). Among phacoemulsification platforms, use of the Alcon Centurion was most pervasive. In context of wide-ranging but often minimal prior hands-on experience, at least 77% of participants endorsed increased comfort with anterior vitrectomy, ACIOL placement, IOL explanation, Yamane technique, intraocular knot-tying, and other maneuvers after the STW.

Conclusions:

STW participants arrived with disparate cataract surgery training experience in terms of total volume and general exposure to industry platforms, adjunct devices, and advanced maneuvers. Workshops conferred opportunity for orientation, hands-on practice, and ultimately enhanced comfort with the above.

The AUPO SCOR Skills Transfer Workshop: Baseline Experience and Training Outcomes in MIGS

JAMES WINEBRAKE, MD*; **SHAHZAD MIAN, MD;** **GRACE SUN, MD**

Background:

The AUPO Surgical Curriculum for Ophthalmology Residents (SCOR) serves to standardize surgical education, comprising online modules and a day-long, in-person skills transfer workshop (STW) to hone trainee skills in anterior segment surgery.

Purpose:

We describe residents' baseline experience with various minimally invasive glaucoma surgery (MIGS) procedures, as well as enhancement of comfort level with each after the SCOR STW.

Methods:

Analysis was conducted on data gathered from questionnaires administered to resident participants after the conclusion of the STW in fall 2021 and winter 2022.

Results:

66 residents responded reporting variable number of previous primary MIGS procedures (12.6 ± 11.4). 54 (81.8%) reported prior utilization of iStent, 43 (65.1%) of Kahook Dual Blade, 34 (51.5%) of Hydrus, and 26 (39.3%) of Omni. 18 (27.2%) reported experience with all modalities. At least 67% of participants endorsed increased comfort with each modality following the STW. Chi-Square Test of Independence showed a statistically significant relationship between first-time exposure and endorsed increased comfort for three MIGS procedures (approaching so for Hydrus) ($P=.01$, $P=.04$, $P=.054$, $P=.01$).

Conclusions:

STW participants arrived with disparate MIGS training experience. The STW conferred enhanced comfort among trainees, particularly first-time users.

Trends in Resident Glaucoma Surgical Experience

ANNIE WU, MD*; **YAN ZHAO;** **MICHAEL BOLAND, MD, PHD**

Background:

Glaucoma implants and microinvasive glaucoma surgeries (MIGS) have steadily gained popularity throughout the last decade. Recent trends in resident glaucoma cases have not been studied.

Purpose:

To evaluate trends in glaucoma surgery experience among US residents.

Methods:

Accreditation Council for Graduate Medical Education (ACGME) case log data from 2009-2021 were analyzed for year-to-year trends.

Results:

From 2009-2021, mean total primary glaucoma surgeries among ophthalmology residents increased 41.1% from 12.4 to 17.5, which represented a 3.1% increase per year ($P < 0.01$). Mean primary glaucoma filtering surgeries initially decreased 30.0% from 6.0 to 4.2 from 2009-2014, then increased 51.1% from 4.5 to 6.8 from 2014-2021, a 5.6% increase per year over this 7 year period ($P = 0.04$). Mean primary glaucoma shunt surgeries increased 48.9% from 4.5 to 6.7 from 2009-2021, a 2.3% increase per year ($P = 0.01$). During the same time period, mean primary "other" glaucoma surgeries increased 110.5% from 1.9 to 4.0, a 6.6% increase per year ($P < 0.01$). Primary phacoemulsification surgeries increased 30.3% from 143.8 to 187.3, a 2.6% increase per year ($P = 0.003$).

Conclusions:

There are increased total primary glaucoma surgeries performed by US ophthalmology residents, driven by increases in glaucoma shunt surgeries and "other" glaucoma surgeries. More detailed procedure logs are required to determine trends in MIGS.

Evaluation of a Self-Guided Neuroradiology Curriculum for Ophthalmology Residents

GRACE XIAO, BA*; **NAILYN RASOOL, MD;** **SARAS RAMANATHAN, MD**

Background:

Knowledge of radiology modalities and characteristic findings is critical for diagnosis of specific ophthalmologic conditions. Studies have demonstrated that neuroradiology is highly valued by ophthalmology residents but that no standard neuroradiology curriculum exists across residency programs. Many ophthalmology residents may not feel capable following residency to review the radiology imaging on their patients.

Purpose:

To develop, implement and evaluate the efficacy of a standardized curriculum to teach neuroradiology to ophthalmology residents.

Methods:

An online learning module was developed including pre-test, tutorial and post-test. Ophthalmology residents completed the neuroradiology module in up to 90 min and took 10-question pre- and post-tests to name structures and identify diagnoses. Scores were collected for 8 residents and t tests were used for statistical analysis.

Results:

The neuroradiology module, pre-and post-tests were completed by 8 ophthalmology residents across three years. The mean score improved from 54% to 73% ($p=0.02$), with 7 of the 8 participants attaining a higher or equal score on the post-test after completing the online module.

Conclusions:

Ophthalmology residents who completed a self-guided online module improved in assessments of neuroradiology knowledge. A standardized online neuroradiology curriculum could enable effective asynchronous learning for ophthalmology residents across programs.

Diagnostic Accuracy of Emergency Department Consultations Among Ophthalmology Residents

CHARLES ZHANG, MD*; **TIM KUNG, BS;** **SINAN ERSAN, BS, BA**

Background:

Accurate ophthalmologic diagnoses can prove challenging for junior residents on-call. Balancing resident autonomy and patient safety remains a difficult challenge.

Purpose:

We aim to assess the ability of junior residents in their diagnostic capabilities and assess the safety of an autonomous resident-driven on-call model.

Methods:

Chart review of all ED consultations at our teaching hospital was conducted from July 2019 to December 2021. Consults were categorized by subspecialty subdivisions delineated in Will's Eye Manual, 8th Edition. Each consult was graded as accurate, partially accurate, or inaccurate based on examination findings, diagnosis and management relative to an attending follow-up visit.

Results:

2092 consults were evaluated. 1518(73%) were designated to follow-up at Ross Eye Institute. Of these, 940(62%) attended their follow-up visit. The resident diagnosis was accurate in 904(96%) of cases, partially accurate in 15(2%) of cases and inaccurate in 21(2%) of cases. In 2(0.1%) cases the patient was sent back to the hospital for additional management or treatment. Retina diagnoses comprised the greatest proportion of inaccurate diagnoses at 9/21(43%).

Conclusions:

We demonstrate that an autonomous resident driven on-call model leads to highly accurate diagnostic accuracy with low patient risk.

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655 BEACH STREET SAN FRANCISCO, CALIFORNIA 94109
(415) 561-8548 · AUPO@AAO.ORG
WWW.AUPO.ORG