

The Best of 2013

Members of *Cataract & Refractive Surgery Today's* editorial advisory board chose the year's best surgical pearls, research, and technology.

BY GILLIAN McDERMOTT, MA, EDITOR-IN-CHIEF

In *Cataract and Refractive Surgery Today's* annual article, members of the publication's editorial advisory board look back at the year winding down and make their selections of its best offerings. Of course, it is possible that, by publishing this piece in *CRST's* November/December edition, we will miss a year-end milestone. Fortunately, our board members found plenty to highlight nonetheless.

CLINICAL PEARL

IOLs

As in 2012, a majority of the panel focused on cataract surgery when selecting the best clinical pearls of the year, with several of them citing valuable tips on IOLs.

Both Mark Packer, MD, of Eugene, Oregon, and Richard J. Mackool, MD, of Astoria, New York, were impressed by techniques for aligning a toric lens. "Harvey Uy, MD, [of] Makati City, Philippines, demonstrated for me his technique of marking a reference axis for toric IOL implantation using the YAG laser to make air bubbles in the corneal stroma," Dr. Packer shared. "This procedure eliminates the need for touching the eye with ink, a needle, or a hot poker." Dr. Mackool highlighted the use of the Wet-Field Osher ThermoDot Marker (Beaver-Visitec International) to make two tiny marks for aligning a toric lens.¹ "This replaces the use of larger ink dots and permits more accurate alignment of toric IOLs in the desired axis," he said.

Uday Devgan, MD, of Los Angeles and Jai Parekh, MD, of Woodland Park and Edison, New Jersey, lauded work by Amar Agarwal, MD, and colleagues to lower the risk of a dropped nucleus in eyes with insufficient support from the iris and capsule.^{2,3} Commented Dr. Parekh, "Dr. Agarwal's rendition of glued IOL surgery and the handshake technique is a great new way of fixating a PCIOL in an eye with no capsule. Although ACIOLs have come a long way, there is no doubt that some form of PCIOL fixation in a compromised eye is still kinder to the cornea."

Wrote Jay S. Pepose, MD, PhD, of St. Louis, "The best clinical pearl I learned was from Richard Tipperman, MD, regarding the importance of measuring angle kappa in the preoperative evaluation of cataract patients who are con-



Figure 1. The surgeon sutures the IOL to the iris.

sidering a multifocal IOL. The studies of Prakash and colleagues demonstrated that multifocal IOL patients' complaints of glare and halos were positively correlated with preoperative values of angle kappa.⁴ One explanation for this observation is that, if angle kappa is greater than half the diameter of the central optical zone of a multifocal IOL, the primary path of light may traverse one of the multifocal rings instead of the central optic, leading to glare. The AcrySof IQ ReStor IOL +3.0 D [Alcon Laboratories, Inc.] has a central optical zone of 0.8 mm, and the Tecnis Multifocal IOL [Abbott Medical Optics Inc.] has a central optical zone of 1 mm. As a reasonable referent, it may be that an angle kappa of less than 0.4 mm for the AcrySof IQ ReStor IOL +3.0 D and 0.5 mm for Tecnis Multifocal IOL would greatly lessen the chances of the primary ray traversing the diffractive ring. This screening, along with evaluating the coma term on corneal wavefront maps, allows [the] screening out [of] patients who may be more likely to have issues with quality of vision or photic phenomena with multifocal IOLs."

Steven J. Dell, MD, of Austin, Texas, picked advice on refractive accuracy with premium lenses. "My favorite pearl comes from Richard Lindstrom, MD, who reminded us that transepithelial PRK is an easy and effective way to reduce residual refractive error," Dr. Dell said.⁵ "It is within the capabilities of all anterior segment surgeons and requires no nomogram adjustments. Closing the refractive loop and

getting these patients to their refractive targets is crucial to success with premium IOLs.”

David A. Goldman, MD, of Palm Beach Gardens, Florida, appreciated advice from Brandon Ayres, MD, on suturing an IOL to the iris (Figure 1). “After the optic of the implant is captured above the iris with the haptics in the sulcus, a microforceps is placed under the optic and used to grasp and retract the iris,” Dr. Goldman stated. “This maneuver puts the iris on stretch, exposing peripheral iris, and elevates the optic, allowing better visualization of the haptic under the iris [and] allowing a small and peripheral iris suture to be placed. Small and peripheral sutures allow for reduced ovalization of the pupil.”

Laser Cataract Surgery

The best clinical pearl William I. Bond, MD, of Peoria, Illinois, picked up all year was from Kerry Solomon, MD, at a training course on the LenSx Laser (Alcon Laboratories, Inc.) held in Chicago in September. “Dr. Solomon proposed what he calls *advanced testing* for cataract patients,” Dr. Bond stated. “The patient is offered this package during [his or her] cataract workup. It consists of a corneal map and an optical coherence tomography scan at an out-of-pocket cost. Should the patient desire a more advanced procedure requiring more out-of-pocket patient expense, such as a multifocal lens or intraoperative astigmatism correction, then the patient’s candidacy can be established. If a patient is found to not be a candidate through the advanced testing, then this has been detected before the surgery was done, saving much trouble for both patient and surgeon. The concept not only eliminates unnecessary staff work and expense by not having to do advanced testing on everyone and does patients the great service of identifying noncandidates for more advanced procedures, but [it] also identifies the patients who are going to be interested in more advanced procedures at all in spite of the extra expense to them. I think it is a simple but brilliant concept.”

Both Mark Kontos, MD, of Spokane, Washington, and Kathryn Hatch, MD, of Waltham, Massachusetts, tipped their hats to Eric Donnenfeld, MD. Dr. Kontos described Dr. Donnenfeld’s “simple hydrodissection technique of the cortex to facilitate cortical cleanup. Due to the cohesive nature of the cortex after laser exposure, with a little finesse, you can almost remove the entire cortical shell. This technique can make a previously tedious process a much easier one.”⁶ Dr. Hatch selected Dr. Donnenfeld’s explanation of how to adapt a nomogram for manually created limbal relaxing incisions (LRIs) for use with those created with a femtosecond laser.⁷ “The 11-mm optical zone used in the manual LRI nomogram can be reduced to 9 mm, and the arcuate length is reduced by 33%,” she stated. “The anterior penetrating depth is 80%. The fem-

tosecond laser incisions can remain unopened and can be titrated with the use of the ORA System [WaveTec Vision] or in the office postoperatively.”

George O. Waring IV, MD, of Charleston, South Carolina, noted that, “with the advent of [laser] phacoemulsification came modifications across all platforms for new surgical techniques. My good friend and colleague Jeremy Kieval, MD, described a technique to ease cortical removal after [laser] phacoemulsification, which can in some circumstances be more difficult than traditional cataract surgery. Dr. Kieval taught me to ‘polish’ a sector of cortex immediately [after] capsulotomy removal, thereby loosening the cortex-capsule adhesions and establishing a potential space for a fluid wave to travel, thereby allowing for a true hydrodissection instead of the pneumo pseudodissection that can occur after [laser] phacoemulsification.”

Instrumentation

P. Dee G. Stephenson, MD, of Venice, Florida, singled out a pearl from Shah Aminyl Islam, DO, MBBS, of Bangladesh. “He showed a very inexpensive and very ingenious way to make iris retractors using things that we already have in the OR,” she said. “He uses four 27-gauge needles and a rubber cap from a sterile bottle. ... He cuts four small pieces of rubber, threads them through the needle, and then bends the tip using a viscoelastic cannula to bend them. I tried this, and it was really great. They worked as well if not better than some that are available.”



Microinvasive Glaucoma Surgery

Cleveland surgeon William F. Wiley stated that he “was impressed with Dr. Nathan Radcliffe’s approach to iStent Trabecular Micro-Bypass Stent [Glaukos Corporation] placement in eyes that had corneal opacities resulting in difficult views or patients with neck problems [who] could not undergo a head tilt. His approach utilizes the endocyclophotocoagulation probe camera to visualize the angle and then place the iStent with the camera view.” Dr. Wiley added that he is looking forward to reading the results of an ongoing study by Dr. Radcliffe and colleagues, who are analyzing the effect of the iStent combined with cataract surgery and endocyclophotocoagulation (an approach they have dubbed *ICE*).



Corneal Surgery

Michael E. Snyder, MD, of Cincinnati, Ohio, chose a point made by Michael Straiko, MD, during an instructional course and by Lawrence Tenkman, MD, in his video submission for the film festival at this year’s meeting of

the American Society of Cataract and Refractive Surgery (ASCRS). According to Dr. Snyder, both physicians emphasized “the importance of keeping the anterior chamber shallow during the unfolding of a Descemet membrane graft in Descemet membrane endothelial keratoplasty in contrast to Descemet stripping automated endothelial keratoplasty, in which we try to keep the chamber as deep as possible.”

Minneapolis surgeon David R. Hardten focused on the rapidly advancing field of endothelial transplantation. He remarked that, at the ASCRS annual meeting, Francis Price Jr, MD, stressed “that unfolding a Descemet membrane endothelial keratoplasty graft when there is a ‘point’ in the tissue is very difficult. When unfolding the tissue, if you first make sure that the graft is curled with a linear edge, then it will unfold much easier.”

Education

For his pick, Dr. Donnenfeld cited a piece in *CRST*'s August 2013 edition.⁸ “This article made the very important point that our employees are vital to the success of our practice[s] and that our staff needs to be educated on new technologies and techniques,” he said. “I have incorporated many of the ideas from this article into my everyday practice.”

RESEARCH OR REVIEW ARTICLE/PRESENTATION

Astigmatic Correction

Astigmatism was the focus of several participants in this year's survey. Two panelists nominated research by Douglas Koch, MD, and colleagues that should improve the outcome of cataract surgery.^{9,10} “[Their article] demonstrated the importance of the posterior cornea on refractive cataract outcomes,” Dr. Donnenfeld remarked. “Most patients who have with-the-rule anterior corneal astigmatism need less treatment with toric IOLs or LRIs, because the posterior cornea corrects a mean of 0.50 D of cylinder. On the other hand, patients who have against-the-rule anterior corneal astigmatism need to be treated an additional 0.30 D, because their posterior corneal cylinder adds to their refractive cylinder.” Added Dr. Mackool, “Utilizing the information provided by this research, the amount of total corneal astigmatism can be more precisely determined and then factored into IOL selection.”

Information on the posterior cornea is just a piece of the puzzle. Two panelists chose research by Denoyer and colleagues as the best of 2013.¹¹ “Determining the orientation and appropriate cylindrical power of a toric IOL requires knowing the surgically induced astigmatism [SIA] as well as the preexisting corneal astigmatism,” Dr. Pepose remarked. “The toric calculators use these data to perform a vector analysis to assist in surgical planning. The authors showed

that not only incision width but also corneal biomechanics (represented by corneal hysteresis) are both major determinants impacting SIA and that these two factors can explain 51% of the variation in SIA values. Corneal hysteresis and incision width are both independent variables influencing the SIA.”

Added Dr. Packer, “Given the relatively large standard deviations we see in SIA, it makes sense that something other than a technique-dependent variable plays a role in determining the magnitude of SIA in any particular eye. Now, Denoyer et al have demonstrated that corneal hysteresis has a bigger impact on SIA than incision size.¹¹ Along with measuring posterior corneal astigmatism, it is likely to become necessary to measure corneal hysteresis as well to truly achieve minimal residual astigmatism.”

Presbyopic Correction

This year, Dr. Bond was most intrigued by research on the use of a presbyopic corneal inlay in the eyes of patients who had undergone RK, something he had before considered to be “inadvisable if not impossible.” The investigators, Dr. Bond continued, “described 3-month results in two patients who underwent Kamra inlay [AcuFocus, Inc.] implantation surgery after previous RK. The article reported excellent results in this admittedly small and early study (really a two-case report), with effective near vision and no impact on the uncorrected distance visual acuity in both patients. Care was taken in the first patient to not intersect the RK incisions with the Ziemer [Ophthalmic Systems AG] femtosecond [laser-made] corneal pockets, which were also created at 270° inferiorly, not temporally as usual. The second [patient] had a residual refractive error, and a LASIK procedure was performed on the same day, but immediately prior to, the inlay implantation surgery. The inlay was implanted under the LASIK flap, also in the inferior position.¹² This is wild stuff.”

Dr. Dell also nominated research on presbyopic correction. “[The study] examined 9,366 eyes implanted prospectively with a refractive segmented multifocal IOL, the Lentis Mplus [Oculentis GmbH],” he said.¹³ “Highly stereotyped surgical techniques and perioperative regimens were used.” The reasons for his choice were many. “We are simply unaccustomed to studies of this huge size,” he explained. “A typical study of this variety might include 100 patients. This innovative IOL is a technology our [US] patients deserve but might never see. The excellent results reported demonstrate that high levels of patient satisfaction are possible with advanced-generation multifocal IOLs.”

Repositioning of an IOL

The best article Dr. Hardten read this year was by Alan Crandall, MD.¹⁴ “One of the most common complica-

tions after cataract surgery, short term or long term, is an implant that needs to be repositioned,” Dr. Hardten said. “Dr. Crandall covers the most common and some of the more uncommon reasons for dislocation (such as a misaligned toric [IOL]), with great tips for repositioning them. One of the common issues is dealing with the bulb at the distal end of the toric IOLs. He recommends wisely not to pull centrally with the haptic but to follow the anatomy of the capsule and rotate the implant instead. One other option is to amputate the haptic.”

Laser Cataract Surgery

In addition to sharing a practice, Dr. Hatch and Jonathan Talamo, MD, were of like minds on the best research of 2013. “Abell et al compare effective phacoemulsification time [EPT] between cataracts of the same grade undergoing cataract extraction with femtosecond laser pretreatment compared to conventional cataract surgery,”¹⁵ Dr. Hatch said. In her estimation, the article “demonstrates [a] clinically significant reduction in EPT, including the possibility of 0 EPT, in the femtosecond laser pretreated group compared to controls. The lower EPT was also associated with a 36.1% reduction in endothelial cell loss. Clinically, this research has allowed me to explain to patients how the femtosecond laser can improve safety measures during cataract surgery compared to the manual technique.”

Commented Dr. Talamo, “Such an approach is particularly advantageous when treating very dense nuclei. Even careful small-incision phacoemulsification by experienced surgeons can result in corneal edema taking weeks to clear, longer operating times, and capsular complications resulting from chamber instability.” He added that, in a series of several dozen eyes treated by Dick and colleagues, pretreatment with the Catalys Precision Laser System (Abbott Medical Optics Inc.) reduced the cumulative dispersed energy needed to remove the lens by more than 90% on average. The amount of phaco energy used was thus more like that needed for the control group, which underwent standard manual removal of grades 2 to 3 cataracts, he said.¹⁶

For his part, Mitchell A. Jackson, MD, of Lake Villa, Illinois, chose an article due out in November that, he said, “reviews the available FDA-approved laser platforms and discusses the necessary modifications in cataract surgery technique and administrative and business logistics of incorporating a femtosecond laser into one’s practice. This article gives a great introduction of this new technology and how it can alleviate a host of new clinical, logistical, and financial challenges for eye surgeons.”¹⁷

Cataractogenesis

Dr. Parekh voted for research out of the Lone Star State. “For those of us in ophthalmology who take care of patients

with hypercholesterolemia, a recent, large study linked statin use to the development of cataracts,” he noted.¹⁸ “The medication in the study was simvastatin, and over 45,000 subjects were studied in a Texas military health care system. We may start to get more referrals for cataract surveillance in these patients.”

Endophthalmitis

Lisa Brothers Arbisser, MD, of the Quad Cities in Iowa and Illinois identified research reinforcing the importance of thorough cortical cleanup to avoiding endophthalmitis.¹⁹ “In addition to the desire to reduce inflammation, fibrosis, and lens decentration,” she wrote, “[it appears that] there is another very good reason to remove all cortex, especially in the setting of a broken capsule, and that is that it is a breeding ground for bacteria.” She continued, “Especially in the setting of a complicated cataract surgery, less than thorough cleanup is rationalized. This study shows that residual cortex increases the likelihood that the inoculum that so frequently gains access to the anterior chamber can promote endophthalmitis.”

IOP Spikes

For Dr. Devgan, a presentation by David Chang MD, hit home. “[Dr. Chang] identified the patients who were most likely to suffer from a steroid-induced IOP spike after cataract surgery,” Dr. Devgan stated. “These were the young high myopes. And, the more I look at my cataract surgery patients, the more I realize that my anecdotal experience agrees with this astute observation.”²⁰

Corneal Collagen Cross-Linking

For two panelists, corneal collagen cross-linking (CXL; procedure not approved in the United States) was the subject of the year’s best research. Miami surgeon William B. Trattler highlighted a presentation by Shamik Bafna, MD, at The International Congress on Surface Ablation, Femto-Lasers, & Cross-Linking.²¹ “[The] excellent research answered the question as to whether cross-linking can help patients who have had RK and suffer from diurnal fluctuations,” Dr. Trattler said. “This is a challenging condition.” He noted that, in the study, CXL reduced diurnal fluctuations somewhat but also produced a hyperopic shift. Previously myopic patients were quite happy with their results, but hyperopes ended up with worse UCVA, he said.

Dr. Waring selected comparative biomechanical data for femtosecond laser-enabled refractive lenticule extraction, surface ablation, and LASIK. He said that the investigators “demonstrated that lenticule extraction had the least biomechanical impact on the cornea, followed by surface ablation and then LASIK.”²² Although it is well accepted that thin-flap femtosecond LASIK is safe and effective in normal

eyes, lenticule extraction procedures such as [ReLEx] SMILE [small-incision lenticule extraction; Carl Zeiss Meditec, Inc.] are gaining popularity in the Free World for refractive correction and possible combination procedures such as simultaneous CXL or inlay implantation for [the] correction of presbyopia.”²³

TECHNOLOGY

Intraoperative Aberrometry

The greatest consensus of opinion regarded the best technology of 2013. Four panelists voted for the VerifEye monitoring system, a hardware upgrade to the ORA System (both from WaveTec Vision). Dr. Hatch and Dr. Stephenson noted that the upgrade provides real-time, streaming refractive information in the preview screen. “[This feature] allows the surgeon to verify that the refraction is stable before a reading is taken,” Dr. Stephenson said. Added Dr. Talamo, “VerifEye allows the surgeon to rapidly identify when data being generated with the wavefront device [are] in a steady-state mode before activating the data capture and processing mode, ensuring accurate, reproducible intraoperative determination of spherical equivalent and cylinder readings that are not being affected by an unstable tear film or IOP.”

Dr. Stephenson commented that the upgrade has made her placement of toric IOLs and LRIs easier and faster. More important, she said, is that her outcomes “are even more accurate.” She stated that learning to use the monitoring system involved a minimal learning curve.

Dr. Pepose also voted for VerifEye. He asserted that the ORA System and Holos (Clarity Medical Systems, Inc.) “have the potential to enhance outcomes, particularly in patients with previous refractive surgery and in toric IOL implantation.”

Phacoemulsification

According to Dr. Mackool, the best new technology of 2013 is the Centurion Vision System (Alcon Laboratories, Inc.). In support of his pick, he cited “the addition of variable infusion pressure to maintain IOP and a balanced tip that removes all nuclei more efficiently.” He stated that the system is especially effective for dense nuclei.

IOLs

The Trulign Toric IOL (Bausch + Lomb) got Dr. Jackson’s vote, because it corrects astigmatism, provides distance visual acuity, and “offers a broader range of vision, especially for near-vision tasks such as [viewing] the computer, unlike any other US FDA-approved toric IOL as of October 2013,” he said. Dr. Jackson added that offering a toric accommodating lens based on Bausch + Lomb’s Crystalens AO platform has brought a bigger “wow” factor to premium cataract surgery on postoperative day 1 in his practice.

Topography

According to Dr. Packer, color light-emitting diode topography (Cassini; i-Optics) “overcomes radial symmetry issues associated with traditional Placido technology and offers significantly increased accuracy.” He said the integration of this topographer into the Refractive Cataract Toolset (TrueVision Systems, Inc.) allows him to route a digital eye image and the topographic data into the OR for registration with the live view using ocular features. “In the OR, a dynamic guidance algorithm incorporates the individual SIA to optimize both incision location and toric IOL alignment to achieve the lowest possible residual astigmatism,” he added.

Imaging

Dr. Snyder stated, “2013 heralded the US introduction of intraoperative, real-time, surgical microscope-based optical coherence tomography [iOCT; Haag-Streit GmbH; Figure 2], which adds a new dimension in our ability to resolve tissue layers in the Z-axis, especially in the burgeoning techniques of lamellar corneal grafting.”

Laser Technology

The big news in this category, said Dr. Bond, is the FDA’s approval of topography-guided LASIK using the WaveLight excimer laser system in conjunction with the WaveLight Allegro Topolyzer (Alcon Laboratories, Inc.). “This will be a great boon to patients, particularly those with corneal problems [that] could not be addressed with the technology previously available to us in the United States,” he said.

Karl G. Stonecipher, MD, of Greensboro, North Carolina, was enthusiastic about outcomes analysis using the new IBRA (Internet Based Refractive Analysis) software on the WaveLight EX500 excimer laser (Alcon Laboratories, Inc.) “[The online system] allows me to coordinate both my refractive practice and my refractive cataract practice,” Dr. Stonecipher said. “Looking at these

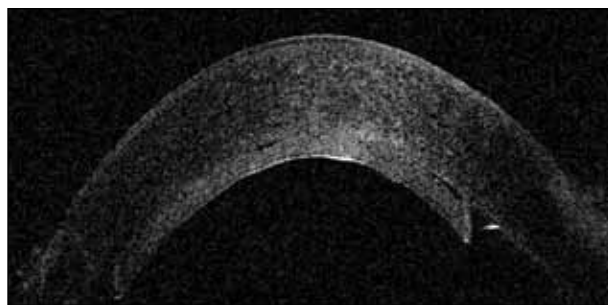


Figure 2. iOCT image captured just after bubble placement in Descemet stripping automated endothelial keratoplasty procedure. Note the thin fluid cleft between the graft and the host tissue at right. Subsequent additional stroking of the corneal apex cleared this cleft.

(Courtesy of Michael E. Snyder, MD)

outcomes with the same software has helped me dramatically to incorporate more of my refractive outcomes into my cataract practice and vice versa.”

Dr. Trattler was also excited about recent developments in laser technology, but his focus was on astigmatic keratotomy (AK). On April 3, 2013, the FDA cleared the Lensar Laser System (Lensar, Inc.) to perform AKs, and Dr. Trattler has been using this laser and the iFS Laser (Abbott Medical Optics Inc.) to create these incisions. He said that laser AKs have greatly helped his patients “achieve improved vision by effectively reducing astigmatism.”

IOP Monitor

One of the best technologic developments Dr. Hardten saw this year won the grand prize at the 2013 ASCRS film festival. “[Samir Melki, MD, PhD, described a] device implanted into the eye during cataract surgery that could measure and record the IOP with an external receiver,” Dr. Hardten reported. “Wow—what a new world it will be when we can do this routinely!”

Test of Functional Vision

For Dr. Waring, the year’s best technology assesses patients’ functional vision. “The HD Analyzer [Visiometrics SD] is an advanced diagnostic device that measures forward light scatter and quality of vision objectively,” he said. “This double-pass wavefront device captures the forward light scatter component of the ocular wavefront and generates a point spread function of the light scatter pattern. Furthermore, it quantifies the light scatter magnitude in terms of the ocular scatter index. Additional capabilities include depth of focus curves and tear film breakup analysis. This device is an important part of my diagnostic and educational algorithm for the dysfunctional lens syndrome, cataracts, and patients who report difficulty with quality of vision, and [it] represents a future paradigm of functional vision testing.”

New Publication and App

Dr. Wiley lauded the electronic publication and app *Millennial Eye*, launched this year by the publisher of *CRST*. He called it “arguably one of the greatest new digital technologies we have seen over the past year. It allows for great media content summarizing the latest and greatest in ophthalmology, which is presented in an easily digestible and entertaining format. In the age of digital media, *ME* is setting new standards.”

Data Management

Dr. Goldman voted for CareCloud Central (CareCloud Corporation), for which an app was released this year. He said that this practice management system is “incredibly

easy to use” and that the app “makes it even more accessible.” Dr. Goldman added, “[The program] has a great layout, has the ability to electronically file and keep track of payments/denials, in addition to adjusting charges automatically. It has allowed me to function very well without an in-house professional billing assistant or using an out-office billing group.”

Dr. Hovanesian praised NextPen (NextGen Healthcare Informations Systems, Inc.). He described it as “a pen-like device that allows users (patients or doctors) to fill in paper forms preprinted with a light grey background dot pattern. The pen has a built-in camera that reads the dot pattern on the paper, ... knows exactly what boxes are being checked, and does reasonably accurate handwriting recognition as well when the user checks boxes on the form or fills in text fields. Putting the NextPen into a USB dock uploads the paper form to the server without any scanning. The form appears on the screen, and the fields filled in are automatically converted to structured data.” Dr. Hovanesian provided the following example: “If a patient fills out a history form and checks the box for diabetes, the [electronic health record] history field will automatically be updated to show that the patient has diabetes. This saves significant staff time in taking patient forms and transferring the information to the computer.”

A different sort of data management was Dr. Arbisser’s selection for the technology category. She chose the American Academy of Ophthalmology’s (AAO’s) IRIS (Intelligent Research in Sight) Registry. Announced this summer, the IRIS Registry is described by the AAO as the world’s first comprehensive eye disease clinical registry. According to the AAO, the development of this centralized system will help practitioners to improve the delivery of eye care. Said Dr. Arbisser, the IRIS Registry “will give us the power of numbers to do the right thing for our patients and watch our backs.”

Education

Dr. Dell voted for Echo (Eyemaginations, Inc.). “This highly interactive patient education software allows us to communicate extremely complex concepts to our patients in a visually compelling format,” he remarked. “In the exam room, the software functions much like a PowerPoint presentation [Microsoft Corporation], allowing the surgeon to give a mini-lecture with understandable video graphics. The software also allows us to e-mail an interactive summary of the topics discussed directly from the education screen.” ■

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