

# Wills Eye to Consolidate Data Using EyeRoute®

The world-renowned hospital joins with Topcon to create a centralized diagnostic imaging system.

By Frank Celia, contributing writer



When ophthalmologist Julia A. Haller, MD, traveled to Southeast Asia with ORBIS International, a non-profit that provides eye care in developing countries, she brought along copies of ophthalmology's bestselling

textbook, the Wills Eye Manual, to hand out as gifts. The surgeon quickly realized just how sought after her goodwill offerings really were. In Bangkok, tattered Xeroxed portions of the manual's old editions were treated like

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# IMAGEnet®: An All-Round Digital Documentation Solution In The Academic Medical Environment

For years ophthalmic imaging systems have helped to enhance the documentation and diagnosis of pathologies, making it an integral part of ophthalmology and eyecare. Within the setting of a large academic medical center, high-quality imaging

documentation is also crucial for education and clinical trials. The staff at the Penn State Department of Ophthalmology has been using Topcon's IMAGEnet® system for three years to fulfill these needs.

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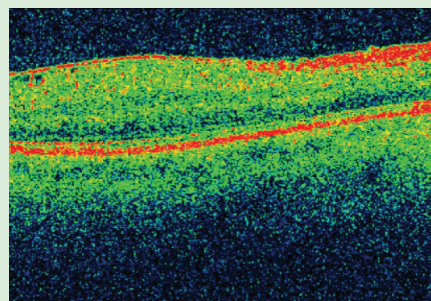
# Advanced OCT

The Next Integral Diagnostic in Refractive Surgery

Daniel S Durrie, MD

During the ASCRS meeting in San Francisco in April, Dr Durrie explained how advanced posterior segment OCT is valuable to the anterior segment surgeon. Here he discusses why he performs OCT imaging as part of his routine eye examination for all refractive surgery patients and the impact it has in his practice.

From manual keratometry, to pachymetry, topography and wavefront, we have seen a series of must-have refractive surgery diagnostic equipment that have influenced the way we diagnose patients over the last 30 years. It is now becoming apparent



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# Letter from the President

Dear Reader,

Without change, we cannot progress.

And that is why Topcon is changing. In fact, our company has been undergoing some major changes over the past 18 months and will continue to transform itself.

We believe that change is a good thing, a great thing, because we believe that Topcon is evolving into a new, exciting and innovative company. We do not want to forget our legacy, which is to deliver you fair-valued, high quality, effective instruments. In contrast, we want to use this legacy as a foundation. In building on it, we believe we can create a company that is both: forward facing, while embracing its heritage.

Over the past months we have begun a transformation of our business with the goal to be closer to our customers and deliver speedier more efficient service and support. We have implemented a direct sales force that is now also complemented by regional clinical support and healthcare IT specialists. Our service department is making aggressive changes to deliver the best customer support possible and we continuously strive to improve our existing products as we aim to bring new, exciting technologies to the marketplace.

This quarterly newsletter is part of our ongoing effort to be closer to you – our customer. We hope it provides valuable clinical insight and information about our business and our products. But it is only a first step of what is to come: the new Topcon.

I am excited about the changes and possibilities that lie ahead and I hope you will be excited too.

Sincerely,

**Nobuyuki Ryu**

President

Topcon Medical Systems





# New OCT Software More Intuitive

New software offers increased speed and better analysis.

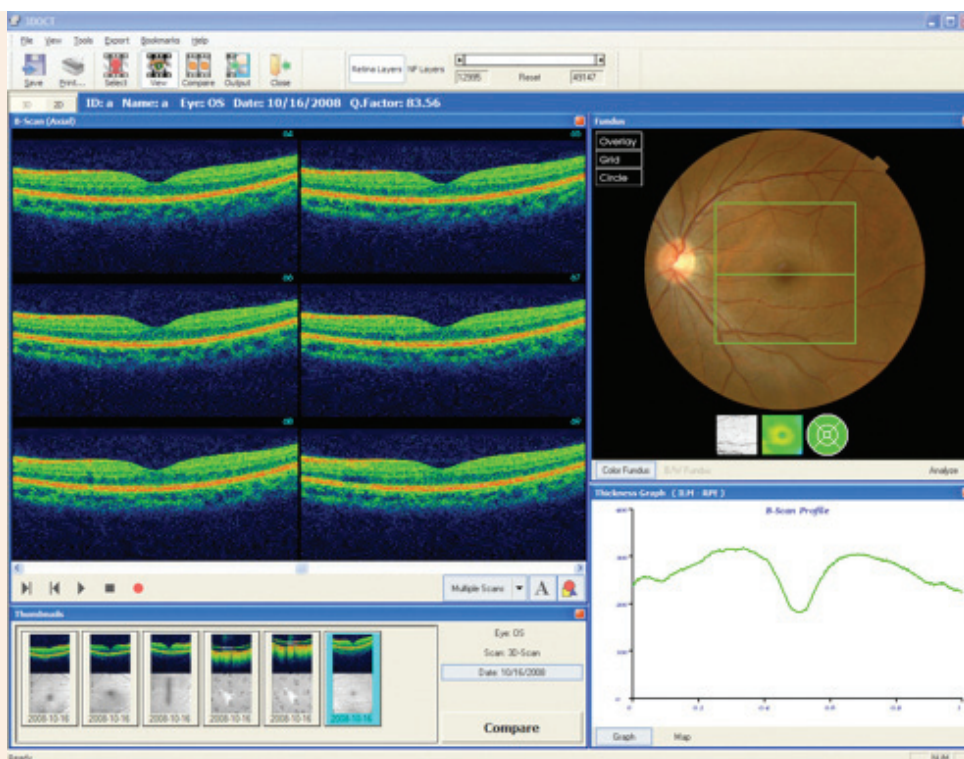
By Frank Celia, contributing writer

Already arguably the easiest-to-use OCT system on the market, Topcon's 3D OCT recently has been made easier still by the introduction of its new TrueMap version 2.2 software. The software includes customized capture protocols, enhanced analysis protocols, and a new 3D OCT Dynamic report interface that features a historical report viewer, expanded exam comparison features, additional icons, improved data base functionality, and connectivity to IMAGENet®.

The software upgrade package is included in the cost of the instrument's warranty, so customers under warranty or service contract can receive the new software at no additional charge.

"To me, probably one of the best features of this new software is the increased speed," says Charles W. Mango, MD, Clinical Assistant Professor of Ophthalmology at Weill Cornell Medical College. A retinal sub-specialist, Dr. Mango's team was one of the first to use the new software in a clinical setting. "If you take an OCT image at the capture station, it is available without delay on any one of the review stations throughout the office. This increases office efficiency and allows the physician to promptly analyze the images."

Another attractive offering of the new software is the synchronized playback feature, according to Dr. Mango. This allows the practitioner to place two different OCT images that were taken at different times next to each other. The practitioner can then slowly scroll through both OCT images simultaneously, one line at a time, looking for changes. "This is basically a two dimensional, synchronized B-scan," says Dr. Mango. "It is a high-quality feature, because it allows you to localize a specific area of pathology on an initial visit and compare that same area on



a follow up visit."

Other new features of the software include:

- A new "dynamic report interface" which allows rapid selection of the exact image you want to include in your report, plus an area to type notes.
- Customized capture protocols driven by new icons. This ensures that the desired imaging protocol is taken quickly, and adds considerably to the user friendliness of the device. A new "auto analyze" feature that is triggered when the image is saved, thus reducing technician time.
- A new "quick report" function, plus auto-storage and easy retrieval of all reports. This ensures the practitioner can quickly access the information he or she needs.

Additionally, the software comes with an expanded glaucoma module that includes:

- A topography module that enhances visualization of the OCT data.

- A new OU report that enhances reporting and viewing of the OCT data.

"These new software improvements have made the easiest spectral domain OCT that much faster and better to use," says Robert Gibson, Senior Director of Marketing for Topcon Medical Systems. Finally, the new software brings with it improved database features. Topcon has always been known in the industry for the quality of its database technology, but these improvements put the function in an even higher class, according to the company.

Overall, the new software offers a much quicker, more user-friendly experience. "The user interface is more intuitive for the technicians acquiring the scan, and also for the physicians evaluating and interpreting the scans," notes Dr. Mango. ■

# Wills Eye to Consolidate Data Using EyeRoute®

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cherished possessions, and in another town she and the local practitioner made quick use of the textbook to look up an alternative treatment when the mainstay therapy proved unavailable.

The experience reinforced to Dr. Haller how important shared knowledge is in the practice of medicine, especially in eye care, where visualization of pathology holds such vital importance.

It was a lesson not lost on Dr. Haller when she became Ophthalmologist-in-Chief at Wills Eye Hospital in 2007. The proliferation of imaging diagnostics during the previous decade or so had led to a situation in which instruments were spread haphazardly throughout the hospital's eight-story building in downtown Philadelphia. Efforts quickly got underway to consolidate these various instruments into one room, a "diagnostic imaging center" that would centralize patients' imaging needs.

Wills officials also wanted some method of keeping track of all the data produced by these instruments. Having worked first-hand with the EyeRoute® system's introduction to the market when she was a Professor of Ophthalmology at Johns Hopkins University, Dr. Haller knew it would enhance the hospital's educational capacity and simplify workflow.

EyeRoute® is designed to integrate information from various ophthalmic instruments into a single, secure, digital environment, giving practitioners instant access to their patients' tests. Using any web enabled device—be it remote, in an office, or at home—doctors can view, analyze, or transport the information and images as they follow patients' care. EyeRoute's® open software architecture allows easy access to the output of virtually any ophthalmic instrument, and safely and securely stores these often cumbersome computer files on a large-capacity host server, thus

employing the same technology that powers the internet.

"I don't know that we have any plans to put the Wills Manual online using EyeRoute®," says Dr. Haller, referring to her experience in the Far East, "but certainly it will enable the type of sharing of cases via the internet that I think could lead to productive interactions in patient care."

The initial goal of collaborating with Topcon Medical Systems, Inc. to consolidate diagnostic data under EyeRoute® is to simplify workflow and enhance patient information exchange with referring doctors in the surrounding community, which encompasses practices in the Philadelphia suburbs, New Jersey and Delaware. Another goal is to enhance the educational opportunities for the hospital's medical students, residents, and fellowship physicians.

Wills also plans to launch the "Wills Eye Knowledge Portal," an ambitious web-based educational tool that will feature online lectures, surgical videos and case studies in every ophthalmic sub-specialty. If all goes as planned, the web portal should be accessible to practitioners throughout the world, and users will earn continuing medical education credits. The portal is expected to go online sometime this year, according to Dr. Haller.

Yet another area where the EyeRoute® system should come in handy is a new contract the hospital has with the United States Department of Defense. It is a training program whereby military eye care providers will travel to Wills to learn about the latest instruments used in diagnosing disease. The military doctors will listen to lectures and get hands-on experience with the latest equipment. "This is something that is going to be done on a quarterly basis," Dr. Haller says, "so that in the course of three years or so all of the eye care providers in

the military will have come to town and participated in this seminar."

The utilization of EyeRoute® will provide not only enhanced patient care, but ongoing operational savings, according to Ryan Burke, national sales manager for informatics at Topcon. "Wills' patients and caregivers will benefit from continuity of diagnostic information as they move through the different Wills departments," explains Burke. "Patient images will no longer be reliant solely on where the patient chart resides. The downtime a paper-based system causes will be a thing of the past." An EyeRoute® based, wholly centralized system, may even reduce testing duplication not just within the hospital itself, but among the referring practices in the community as well, he notes, which saves time and ultimately money. ■



**Julia A. Haller, MD**  
Ophthalmologist-in-Chief,  
Wills Eye Hospital.

# IMAGEnet®: An All-Round Digital Documentation Solution In The Academic Medical Environment

*continued from cover*

## The Value of High-Resolution

High-resolution imaging is important for accurate analysis of ophthalmic pathologies, to support diagnoses, monitoring and treatment decisions [Figure 1]. IMAGEnet® offers a variety of image analysis and measurement tools, including photodynamic therapy rings, linear distance and area measurement and EDTRS segmentation reports. Within large medical centers, these factors are not only important in terms of clinical diagnosis; they are also crucial for academic support for teaching resident ophthalmologists and to support multi-center clinical trials, according to Timothy Bennett, ophthalmic photographer at Penn State's Department of Ophthalmology.

Digital image documentation systems like IMAGEnet® have further clinical benefits in medical centers, Mr. Bennett suggests. "High-resolution images documented

with IMAGEnet® can be used to help identify patients with specific pathologies that may be eligible for particular clinical trials," he says. "And having instant access to the images in high resolution also provides physicians with the ability to show patients what is going on inside their eyes, so that the patients can better understand their retinal conditions and the recommended treatments."

## Connectivity, Compatibility and Control

In any ophthalmic center, an effective workflow and the ability to network efficiently are fundamental for a successful practice, and a reliable and compatible

documentation system is an important component of this, according to Mr. Bennett. "IMAGEnet® is mature, reliable and robust, and integrates seamlessly within our system, giving us confidence in our ability to capture, store, share and retrieve digital images from any monitor within the network," he explains. "We are able to transfer images via DICOM to our radiology Picture Archiving and Communications (PACS) system, making it possible to distribute and retrieve images electronically throughout our entire medical system."

While most ophthalmic instrumentation has proprietary standalone software, Mr. Bennett says that he and his staff use IMAGEnet® to connect all their equipment

and manage it in a single documentation system. They have been able to adapt several imaging modalities using various instruments with IMAGEnet®, which acts as a "funnel" to their PACS system.

For example, it is possible to take images of the external eye, slitlamp photography and corneal topography, and import these into IMAGEnet® and transmit the images via DICOM to the entire network. Effective networking capabilities also mean that printing costs are reduced, as it is possible to view imported images on monitors at any workstation within the network.

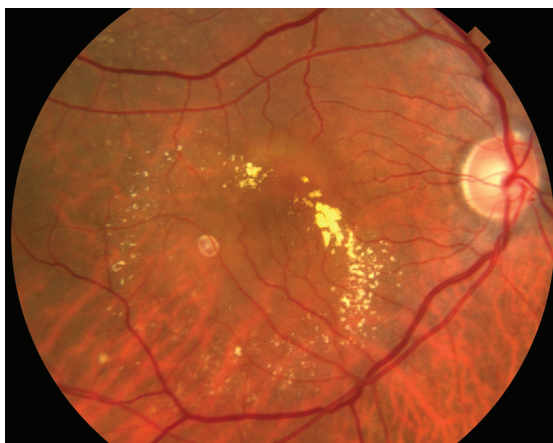
In terms of image capture, Mr. Bennett believes IMAGEnet® system offers significant control, with its histogram interface tool that enables the photographer to adjust exposure and color balance, which is particularly useful for clinical trials. It also

allows the photographer to view images in stereo, and to observe color images in separate color channels.

## The Future of Ophthalmic Imaging

As scanning and imaging technologies continue to develop, it is becoming apparent that ophthalmology is moving more towards hybrid instruments that combine multiple technologies, Mr. Bennett points out. The existence of an all-round digital documentation solution is therefore important, to ensure the integration of all the hardware and software within a medical network.

However, while technologies continue to develop and become easier to use, Mr. Bennett says that putting good tools in the hands of well-trained and qualified photographers or imagers is the best way to serve patients' needs: "While attempting to make technologies easier to use for under-trained imagers, there is a danger that newer technologies can be oversimplified and fall short in skilled hands. Therefore it is important that manufacturers strike a balance between automation and control." ■



**Figure 1**



**Timothy Bennett, CRA, FOPS, OCT-C** is based at Penn State Department of Ophthalmology. He was previously President of the Ophthalmic Photographers' Society, and remains a member of the Board of Directors for the society.



# Diagnosis and Treatment of Vitreomacular Traction Syndrome

## An OCT Case Study.

By Charles W. Mango, MD

Spectral domain Optical Coherence Tomography (SD-OCT) is a valuable tool in the detection of vitreomacular traction syndrome (VTS). VTS is a disorder caused by incomplete separation of the posterior vitreous from the macula region. While some cases of VTS spontaneously resolve, most cases of VTS either remain stable or worsen over time if left untreated. If a decision is made to perform surgery, SD-OCT can be a useful aid to plan the procedure and to monitor follow-up care of the patient. The following case report illustrates these points.

A 66-year-old woman presented with

blurred vision, which she had been experiencing in her right eye for three months. Upon clinical examination, a blunted foveal reflex was identified. Using the Topcon 3D OCT-1000, the presence of VTS was clearly detected; it was possible to view the posterior vitreous face, the focal adhesions of the vitreous to the parafoveal area, and traction on the retina. The scans also showed a partial-thickness macula hole that was developing secondary to the traction, and a mild epiretinal membrane.

After a period of observation where it was noted that the patient was experiencing

worsening visual acuity, a surgery was scheduled. Using the Topcon 3D OCT-1000 it was possible to observe a three-dimensional model of the foveal anatomy and pinpoint important landmarks useful for surgery from various angles. For instance, the three-dimensional model illustrated the potential space between the posterior vitreous face and the underlying retina (Figure 1 – 3). This concept allowed for the placement of the vitreous cutter at a safe distance from the retina, while still being able to remove the vitreous gel. In addition, the extent of the epiretinal membrane was clearly visible

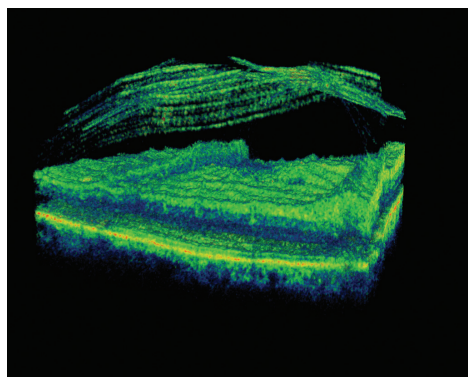


Figure 1

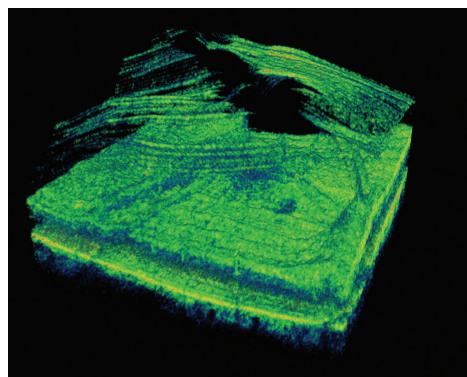


Figure 2

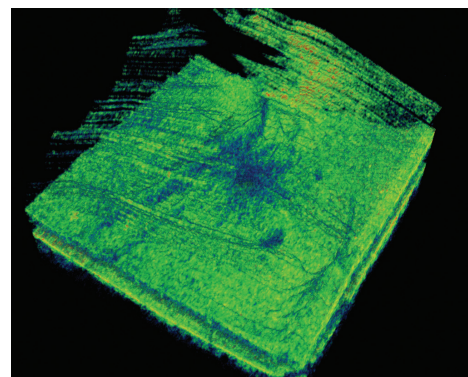


Figure 3

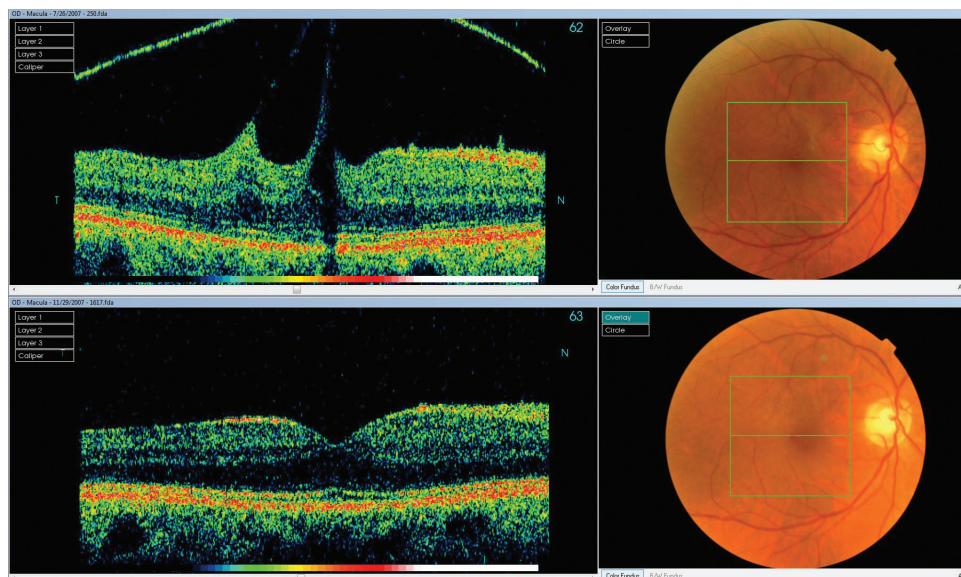


Figure 4

# Advanced OCT

## The Next Integral Diagnostic in Refractive Surgery

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using three-dimensional modeling. After the vitreous was removed, the epiretinal membrane was approached from the edge, allowing it to be grasped and peeled away.

After the surgery, the patient's visual acuity gradually improved. SD-OCT confirmed the resolution of VTS, the absence of an epiretinal membrane, and the resolution of the partial thickness macula hole. A comparison of SD-OCT images taken immediately preoperatively and three months postoperatively reveals a restoration of the foveal architecture following the surgery (Figure 4). ■



**Charles W. Mango, MD**, is a Clinical Assistant Professor of Ophthalmology at the Weill Cornell Medical College of Cornell University. He is in private practice in Westchester, New York.

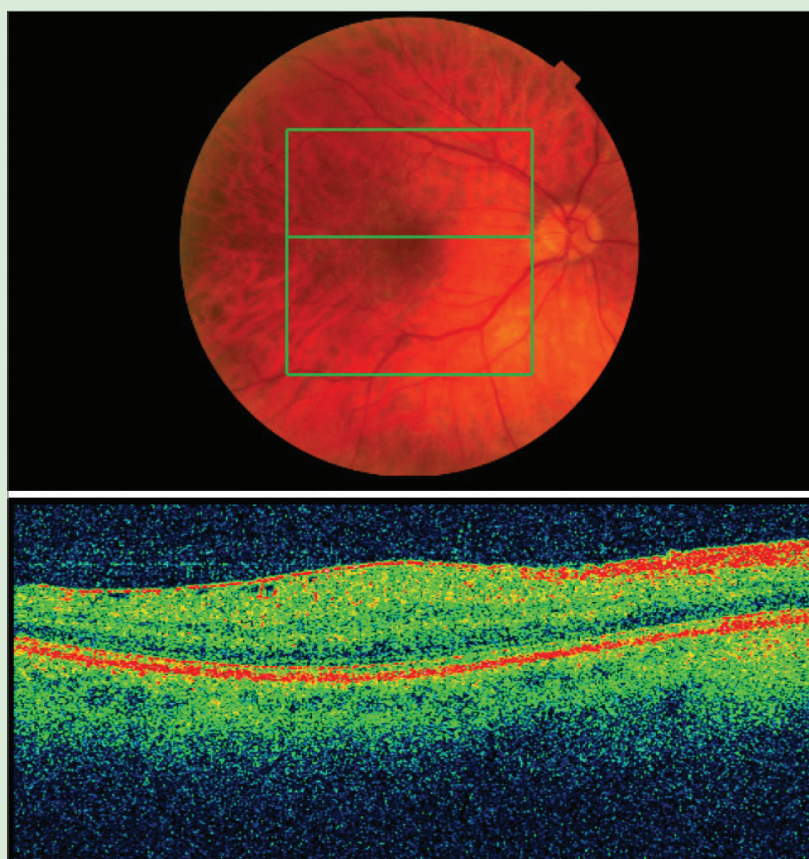
that posterior segment OCT may soon be heralded as the next must-have diagnostic technology for refractive surgery. OCT is a revolutionary technology that has enabled us to see what we might not otherwise be able to see. It allows us to make accurate quantitative measurements of detailed cross-sections of the anterior and posterior segment. The development of spectral domain OCT technology, such as Topcon's 3D OCT-1000, means that surgeons are now able to obtain a more accurate delineation of pathology, ensuring effective diagnoses and monitoring, as well as enhancing the surgeon's ability to communicate with clinical staff and patients.

But most significantly, advanced OCT has increased the value of the examination. With the 3D OCT-1000 surgeons are able to acquire high-resolution images in a short period of time. While conventional time-domain OCT provides retinal images of about 5% of the scanned area, the 3D OCT-1000 captures significantly more data in the important macula and optic nerve areas. This device also features a built-in fundus camera, so the patient only needs to be sat down at one instrument for the surgeon to acquire digital color fundus images as well as high-resolution OCT.

### Advanced OCT in Routine Examinations

In recent years we have replaced 'routine

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**Figure 1:** OCT and fundus images of a 55-year-old refractive lens exchange candidate; 3D OCT imaging enabled the detection of a loss of the foveal pit and epiretinal membrane.



# Advanced OCT

## The Next Integral Diagnostic in Refractive Surgery

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eye examinations' with an Advanced Ocular Analysis (AOA) for all refractive surgery patients in our practice. This advanced examination includes a normal ocular examination plus digital slit lamp photography of lids and lashes, the lens, and the fundus and optic nerve. It also includes dilated scheidtflug imaging of the lens, Pentacam topography and, most recently, posterior segment 3D OCT.

In our center, approximately 1% of patients have had visually significant retinal or optic nerve abnormalities that were otherwise overlooked. This includes cases of epiretinal membrane, macular edema, macular cysts and vitreous pathologies with and without

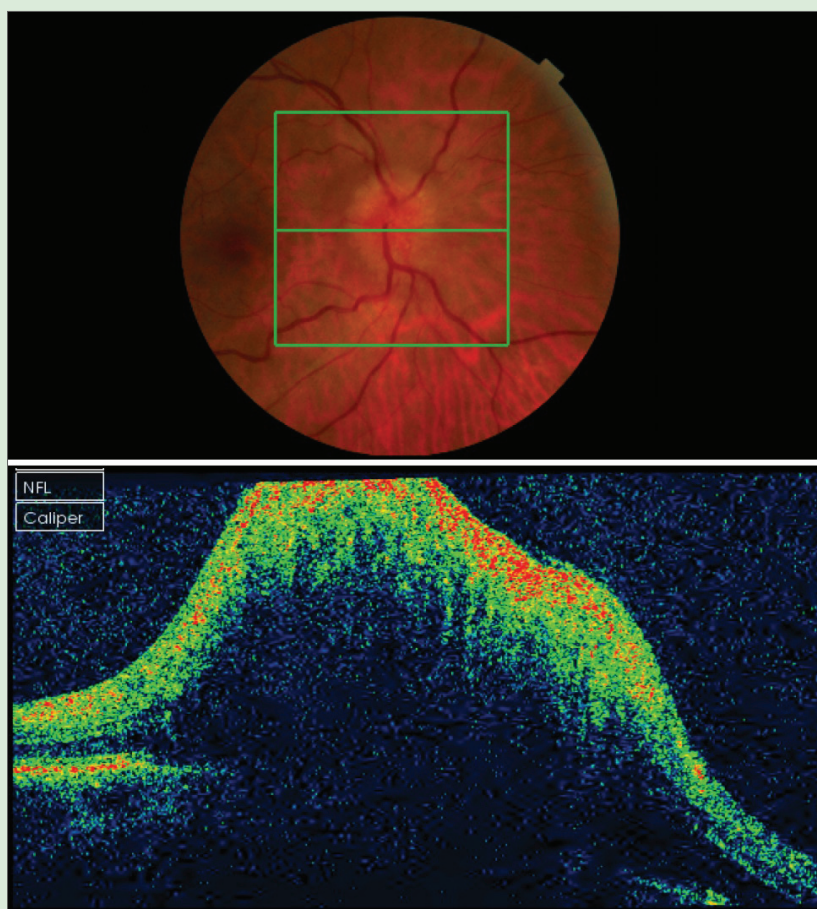
retinal traction. In one example, a 58-year-old male who wanted IOL implantation underwent an AOA examination to determine whether he was a suitable refractive surgery candidate. Scanning the retina using 3D OCT, I could see that the macula was elevated in his right eye from an epiretinal membrane (Figure 1). Without OCT imaging, this pathology would not have been detected.

### A Crucial Case

A notable case that has added tremendous value to the importance of posterior segment OCT in refractive surgery involves a patient who visited the practice for a routine postoperative AOA, with 20/20 vision and without complaints. Using OCT

imaging, observation fell on a small area of elevated retinal pigment epithelium with overlying edema. Upon examination of his optic nerve, there appeared to be dramatic papilledema present (Figure 2), and using 3D OCT imaging, I was able to demonstrate the critical nature of this condition to the patient, who had been unaware of any problems. He was quickly referred to neurosurgery for evaluation based on what was observed with the OCT. The patient was diagnosed with a baseball-sized tumor in his brain; the neurosurgeon said that he had never seen a patient with a brain tumor of this size who had not had a stroke or a bleed and was surprised that it had gone completely unnoticed until now. The tumor was removed successfully and without complications. This case demonstrates the importance of looking for details during patient evaluations, which can be achieved effectively with advanced OCT imaging. In addition to helping to diagnose pathologies, 3D OCT allows me to communicate more effectively with patients, by enabling me to show them what I am seeing inside their eyes.

From my clinical experience, it has become apparent that it is important to embrace advanced OCT technology for refractive surgery, as it adds more detail to our examinations. It allows us to perform a screening process to determine whether patients are suited to specific refractive surgery procedures, and enables us to make accurate analyses of pre-existing conditions that may affect the outcome of surgery. ■



**Figure 2:** With 3D OCT imaging Dr Durrie was able to show his asymptomatic patient the severe papilledema in his eye that was subsequently identified by a neurosurgeon to be caused by a baseball-sized frontal lobe tumor.



**Dr. Durrie** is Director of Durrie Vision in Overland Park, Kansas. He is a paid consultant for Topcon.



# Topcon Takes Customer Support to the Next Level

Topcon makes vast improvements in its customer support systems.

Topcon has expanded its customer service division by significantly increasing the number of telephone technical support representatives at its call center and establishing a field support division throughout the United States to serve large metropolitan areas including Atlanta, Chicago and Los Angeles. The customer support service has also been enhanced with the addition of clinical trainers to the customer service group, to provide better training for clinicians and ophthalmic technicians.

The Topcon Call Center was launched in January 2007 to improve Topcon's standard of customer service. It employs a large group of dedicated service specialists available from 9:00AM until 8:00PM EST every weekday to respond to any technical questions that customers might have. Customer support for non-technical issues is also available every weekday, from 9:00AM until 5:00PM EST. According to Topcon's Technical Services Manager, MunMun Malik, there are currently between 12 and 15 customer support representatives available to take calls from the Call Center at any given time, and there are plans to increase this number even further.

Topcon has been able to monitor the amount of incoming calls to its Call Center, as well as the nature of the calls, which has helped to improve the efficiency of the service. In the last quarter alone, a total of 7144 inbound calls were presented to Topcon customer support. Since the inception of the Call Center, Topcon's customer service has been able to significantly improve the speed and efficiency in which customer calls are answered. Although there had been significant progress, there is always room for more improvement. MunMun Malik, who heads up the customer service center recognizes that this is merely the start of a series of planned improvements. "We continuously strive to pick up calls even sooner, and avoid abandoned calls altogether – we always raise our own benchmarks,"

she says. "The transparency that we have been getting through our new system has been vital in realizing our performance and monitoring it in real time."

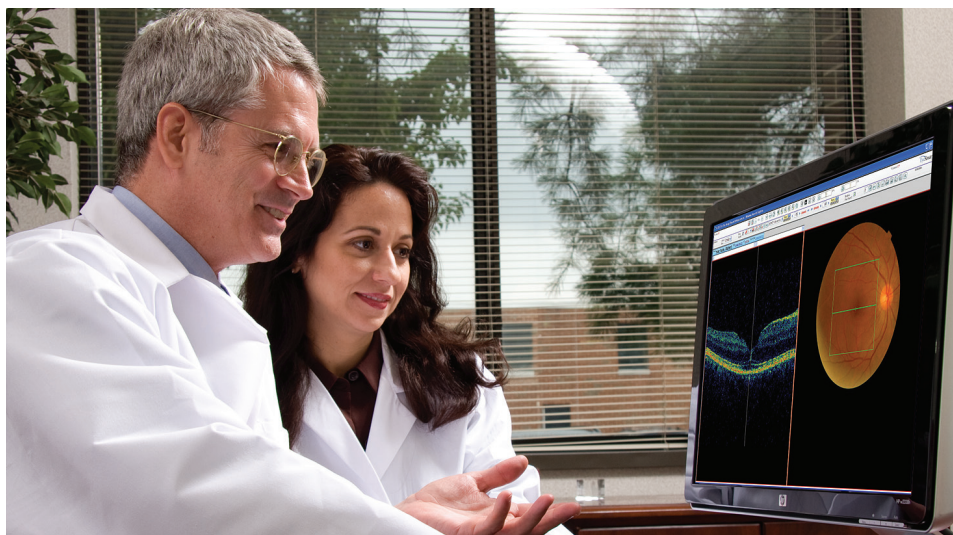
Topcon's online system has also contributed significantly to customer service support. The two online services, Citrix GoToAssist and GoToMyPC, provide support for Topcon Digital Imaging and the EyeRoute® system. Utilizing the online sessions has enabled Topcon to provide a quick and easy remote solution. In April, 800 sessions were recorded on GoToAssist in that month, with an average time per session of 40 minutes for Digital Imaging and 30 minutes for EyeRoute®. Ms. Malik says the accessibility and user-friendliness of the online interface ensures that customers are able to find solutions quickly and efficiently: "We have the capabilities to allow customers to simply log in and find answers online, and we urge customers to have internet access so that it is possible to resolve issues instantly."

## Future Improvements

Topcon plans to introduce an aggressive

continuing education program for its Call Center support team, so that they can increase the number of successful calls and shorten the time it takes to solve the problem. The training program also aims to solve problems on the first call, rather than requiring additional contact, which ultimately reduces customer waiting time. To further expand the service hours, Topcon also has plans to employ members of the field support team in the Call Center when they are available.

Another critical area that Topcon is focusing on is the expansion and improvement of its online services. This will include the implementation of customer portals so that customers can log into their own accounts via Topcon's website, where their instruments and contract details are registered, so that Topcon can seek to resolve the issue according to the specifications of the individual customer, and offer information about relevant upgrades. ■



Topcon offers remote training (to customers under warranty or contract) and support with a dedicated toll-free number for technical support open every weekday from 9:00AM to 8:00PM EST: 866-922-6278.

# How to Maximize Your OCT Billing

Tips on how to avoid under-billing.

By Robert Rebello, coding consultant

The introduction of spectral domain optical coherence tomography (SD-OCT), also known as Fourier domain OCT, makes it possible to visualize large areas of the retina in greater detail than with standard OCT. While practitioners recognize the value of this highly useful diagnostic tool, such is not always the case among insurers.

In this article, I'll explain how to code appropriately for this device, as well as how to avoid some common pitfalls.

At the outset, it is necessary to understand why coding standards for all medical procedures are so Byzantine. The Centers for Medicare and Medicaid Services (CMS) set the national policy for diagnoses that support various procedures. These are known as National Coverage Determinations (NCDs). However, local payers in the 95 different regions throughout the United States can modify NCDs any way they see fit. Suffice it to say, no region completely follows the national guidelines.

Thus, among the most common reasons for claim denial is practices assuming a diagnosis and procedural combination will work in their region because it works for colleagues in another part of the country. Usually this is not the case.

So what can you bill for? Typically, the following are common supporting diagnoses for spectral domain (SD) OCT:

- 361.xx Retinal Detachment
- 362.0x Retinopathy - Diabetic
- 362.1x Retinopathy - Hypertensive, Exudative, etc.
- 362.3x Retinal - Artery and Vein Occlusion

- 362.4x Retinal - Layer Separation, Hemorrhages, etc.
- 62.5x Macula Degeneration
- 362.6x Other Retinal Degenerations
- 362.7x Retinal Dystrophies
- 362.8x Retinal - Nerve Fiber Layer Defects, Edemas, etc.
- 365.xx Glaucoma

But guidelines change on a regular basis. What worked last year or even last month may not work today. Many regional payers change their standards throughout the year. For this reason, I strongly argue against printed "cheat sheets" and coding contained in Practice Management and Electronic Records systems to determine diagnoses-procedures congruity. These sources use National Coding which none of the local regions follow and are not updated. This leads to denied reimbursement and leaving money on the table.

When billing SD-OCT exams, two important issues are "frequency limitation" and procedures considered "mutually exclusive."

Frequency limitation just means you can only perform so many SD-OCT scans each year for each condition. Each carrier has its own limits, so keep up to date on the rules of your region.

The rule for mutually exclusive procedures states that if you perform two or more of certain procedures on the same patient for the same diagnosis, you only get reimbursed for one of those procedures (the one with the lowest payment, of course!). Except for one, the following procedures are always mutually exclusive in every region: 92135 Scanning

Laser (SD-OCT); 92250 Fundus Photography; 92285 Photography - External Ocular; 92225 Ophthalmoscopy Extended - Initial; 92226 Ophthalmoscopy Extended - Subsequent; and 92081-3 Visual Fields (only in a handful of regions).

One way to sidestep the mutually exclusive rule is simply to have the patient return another day. For example, if a patient with a single diagnosis requires both an SD-OCT and a fundus photo, perform SD-OCT on the examination day, then have the patient return another day for the fundus photo.

Another loophole is "multiple dissimilar diagnoses." For example, if the patient has an unrelated retinal issue and glaucoma, you can perform and bill the SD-OCT on the retinal diagnosis and bill the fundus photo on the glaucoma diagnosis. However, you must ensure that the claim has the correct Procedure/Diagnosis links. It should look something like Figure 1. ■



**Robert E. Rebello** is the founder and President of Nteon Systems.

## DIAGNOSES (Fig. 1)

1 362.81 Retinal Hemorrhage		2 365.11 Glaucoma - Open-Angle - Primary		
Dates of Service	Place Of Service	Procedure	Diagnosis Code	
08 12 08	08 12 08	92135 Scanning Laser (OCT)	1	
08 12 08	08 12 08	92250 Fundus Photography	2	

If the second diagnosis is not properly noted, your claim will most likely be denied.

## Summary

Physicians tend to under-bill for almost all their services. Practices I work with routinely increase their billing by \$50,000 to \$100,000 per practitioner. By following the advice laid out above, you can ensure proper reimbursement for SD-OCT.

The coding information in this article can be found in EyeCOR. EyeCOR is a Medical Coding and Reimbursement system that works with all practice management and EMR systems.

For questions or information regarding coding, contact EyeCOR at:

888-866-5367

www.EyeCOR.com

EyeCOR@nteon.com

# Topcon Implements Dedicated Software Solutions Team

Ryan Burke to help customers make the switch to electronic health records.

*By Frank Celia, contributing writer*

The days of a paperless office being a new-age, avant-garde, cutting-edge practice management novelty are rapidly drawing to a close. If the new administration in Washington, DC has its way, practices that implement or already use certain elements of digital information technology will receive financial bonuses. But, after several years, those failing to do so will incur financial penalties. In the near future, it appears, going paperless will simply become the price of doing business.



**Ryan Burke**

Responding to this reality, Topcon is making efforts to hire personnel trained at helping eye care practitioners smoothly transition from paper to pixels.

One such new hire, Ryan Burke, National Sales Manager for Informatics, joined the Topcon team in January. Mr. Burke gained extensive knowledge of electronic medical records (EMR) technology during his previous employment at NextGen Healthcare Information Systems, Inc.

"NextGen provides comprehensive medical software solutions," says Mr. Burke, "from scheduling, eligibility

checking, and referral management to specialty specific EMR documentation and outcomes reporting — very soup to nuts. The benefit professionally was identifying how to deliver the right solutions to the right people."

After several years at NextGen, Mr. Burke, seeking to further specialize himself, gravitated toward the field of ophthalmology. "I really fell in love with working with ophthalmologists while I was working in EMR," he says. "It is a very technical specialty, with drastically different workflow needs than their peers. It definitely requires particular attention to detail in going electronic. The extensive in office instrumentation is an advantage to providing patient care, but adds an additional layer of complexity for EMR vendors to integrate."

A brief stint at Carl Zeiss Meditec followed, where he sold the company's full line of diagnostic devices. Mr. Burke was then hired by Topcon to manage national sales of EyeRoute®, a software connectivity solution

that brings all the diverse instrumentation in a typical ophthalmic setting into a secure digital environment.

His new job is a perfect fit because Mr. Burke had been advocating EyeRoute® to clients during his time at NextGen. "I was recommending EyeRoute® as an ophthalmic integration supplement to my software," he says. "EyeRoute® was the missing piece in the transition and helped to make really happy, happy customers."

He explains that EyeRoute® is especially needed in eye care because, in addition to the usual burden of patient information, ophthalmologists must also bring together and analyze data from various in-office diagnostic instruments, not all of which interface easily with each other. "What EyeRoute® does is consolidates this clinical information into a single secure web based system. We can deploy this as a standalone system, as a stepping stone to adopting EMR, as well as interface it to various EMR packages to smooth their workflow." he says.

One of the things that attracted Mr. Burke to Topcon was the company's commitment to implementing long-term, software solution strategies. "We have a proven solution that our customers can use today, as well as the reassurance that the company providing it will be there for them in the future with the newest diagnostic tools," he says. "As eye care further transitions into an information world, it is no surprise that payers, other physicians and even patients will be demanding a higher level of access to this information. Right now, making meaningful use of EMR is the bar to pass to move towards that goal, Topcon is helping to make that a reality." ■



## Upcoming Events

See Topcon at the following upcoming industry events:

### ALABAMA ACADEMY OF OPHTHALMOLOGISTS

July 23-25, 2009  
Sandestin Golf & Beach Resort  
Destin, FL  
[www.aleyemd.com](http://www.aleyemd.com)

### FLORIDA OPTOMETRIC ASSOCIATION

July 23-26, 2009  
Fontainebleau Hotel  
Miami Beach, FL  
<http://florida.aoa.org>

### CLEVELAND CLINIC: INNOVATIONS IN OCT

July 24-25, 2009  
Ritz-Carlton  
Cleveland, OH  
<http://my.clevelandclinic.org/eye>

### NATIONAL MEDICAL ASSOCIATION

July 25-29, 2009  
Mandalay Bay Convention Center  
Las Vegas, NV  
[www.nmanet.org](http://www.nmanet.org)

### ALABAMA OPTOMETRIC ASSOCIATION

July 31-August 1, 2009  
Sandestin Golf & Beach Resort  
Destin, FL  
<http://alabama.aoa.org>

### VFW NATIONAL CONVENTION

August 15-20, 2009  
Phoenix Convention Center  
Phoenix, AZ  
[www.vfw.org](http://www.vfw.org)

### NORTH CAROLINA SOCIETY OF EYE PHYSICIANS & SURGEONS

September 10-13, 2009  
Myrtle Beach Marriott Resort  
Myrtle Beach, SC

### OPTOMETRIC RETINA SOCIETY

September 11-13, 2009  
Loews Philadelphia Hotel  
Philadelphia, PA  
[www.optometricretinasociety.org](http://www.optometricretinasociety.org)

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For more event details please visit **[topconmedical.com/events](http://topconmedical.com/events)**.

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