Time is of the essence – especially when managing progressive disease and prescribing treatment for sight threatening conditions that require swift and accurate intervention.

In a busy practice, where multiple diagnostic innovations are at play, a myriad of important but overwhelming testing data are being generated for each case. The arduous process of finding correlations among all the results is challenging for physicians who prefer to spend less time interpreting and more time leading their patients to better outcomes.

For Dr. Peter A. Karth, M.D., a Retina and Vitreous Physician & Surgeon, board certified ophthalmologist and fellowship trained retina specialist in Oregon (USA), reviewing and analyzing this ever-increasing amount of data has become increasingly complex and unbearably time-consuming. “I need to be able to use this mountain of diagnostic data to support complex, and often expensive, treatment decisions,” he says. This task takes time – and as patient loads increase, it must be done quickly.

“How can we leverage our diagnostic tools to provide more efficient care to our patients? For me, the answer is simple: improved data integration, visualization, and analysis,” says Dr. Karth.

Thankfully for Dr. Karth – and ophthalmologists worldwide – an answer has arrived. From Carl Zeiss Meditec Inc. (Jena, Germany), the Integrated Diagnostic Imaging (IDI) platform not only means better care for patients, but more efficiency for doctors as well. This powerful software-driven system allows doctors to visualize and analyze data from different modalities all on one screen.

Recently unveiled at the European Society of Cataract and Refractive Surgeons (ESCRS) 2018 meeting in Vienna, Austria, the ZEISS Integrated Diagnostic Imaging easily and seamlessly pieces together images from multiple modalities over time. By gathering, integrating and combining data from different diagnostic devices and developing simple individualized assessments, this platform helps doctors make optimal treatment decisions, quickly and efficiently.

IDI is expanding physicians’ level of care by providing a clinical cockpit for understanding. With multi-modal and treatment effect overlays, point-to-point registration and expanded temporal comparison ability, IDI is changing the landscape of diagnosis and treatment… for the better.

This multi-modality in diagnostics and imaging is increasingly becoming the standard of care in eye clinics. Not only does this technology save precious time, the ability to assess and compare
IDI is expanding physicians’ level of care by providing a clinical cockpit for understanding. With multi-modal and treatment effect overlays, point-to-point registration and expanded temporal comparison ability, IDI is changing the landscape of diagnosis and treatment... for the better.

data from multiple modalities also gives doctors more confidence in proposing customized treatment regimens for each patient’s needs.

This could have an impact on diagnosis and treatment of complicated retinal conditions. According to Dr. Karth, this integration is crucial in detecting, diagnosing and treating retinal disease. “One of the biggest challenges in retina practices today is viewing and integrating multimodal imaging to efficiently and fully assess macular disease in busy clinics,” says Dr. Karth.

For retinal applications, the IDI works with ZEISS’s gold-standard instruments such as CIRRUS™ HD-OCT, ultra-widefield retinal camera CLARUS® 500, complemented with therapy with the new VISUALS green therapeutic laser. It allows physicians to see all relevant imaging on one screen, navigate patient data up to three visits at a time, track treatment efficiency with history charts and clinical events, and review and analyze multiple exams simultaneously.

In addition, data from OCT Angiography can be registered from CIRRUS AngioPlex, and AngioPlex Metrix quantitation tools support complex disease investigation. In addition, True Color HD ultra-widefield fundus images can be integrated and registered with OCT Angiography for targeted pathway visualization... allowing doctors to fully assess retinal diseases from the macula to the periphery in seconds.

“Retinal workplace gives clinicians fully integrated multi-modality assessment capabilities from the macula to the periphery with a single click in a few seconds all-in-one view,” adds Dr. Karth.

The ability to integrate data from multiple modalities is not just beneficial for detecting and treating retinal diseases, it’s also valuable for managing glaucoma, a complex progressive disease that requires continuous follow-up assessment.

In glaucoma, with the IDI, results from visual field testing and OCT can be combined and associated to enable clinicians to identify changes in progression that could impact disease management. It simplifies the complex with a unique combination of data from the Humphrey Field Analyzer and CIRRUS OCT. By viewing this integrated information, doctors can detect signs and symptoms of glaucoma early, identify changes and create an individualized treatment plan.

These digital solutions can help doctors who are faced with an overwhelming amount of data from different sources – making eye care even more complex. Not only is analyzing this data time-consuming, it can also be inefficient: If the data is not correctly identified in the clinical findings, doctors could miss something that is vital to their treatment and prognosis. ZEISS and IDI are working to change that by transforming data into turning points of care.

“I consider the ZEISS Integrated Diagnostic Imaging platform to be a key part of patient management, giving me the data integration that I need to make the best decisions for my patients,” adds Dr. Karth.

For more information about IDI and to watch related videos, visit: https://www.zeiss.com/meditec/int/c/zeiss-integrated-diagnostic-imaging.html.

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1 VISUALS green therapeutic laser is 510(k) pending.

2 RETINA Workplace 2.5 is 510(k) pending.