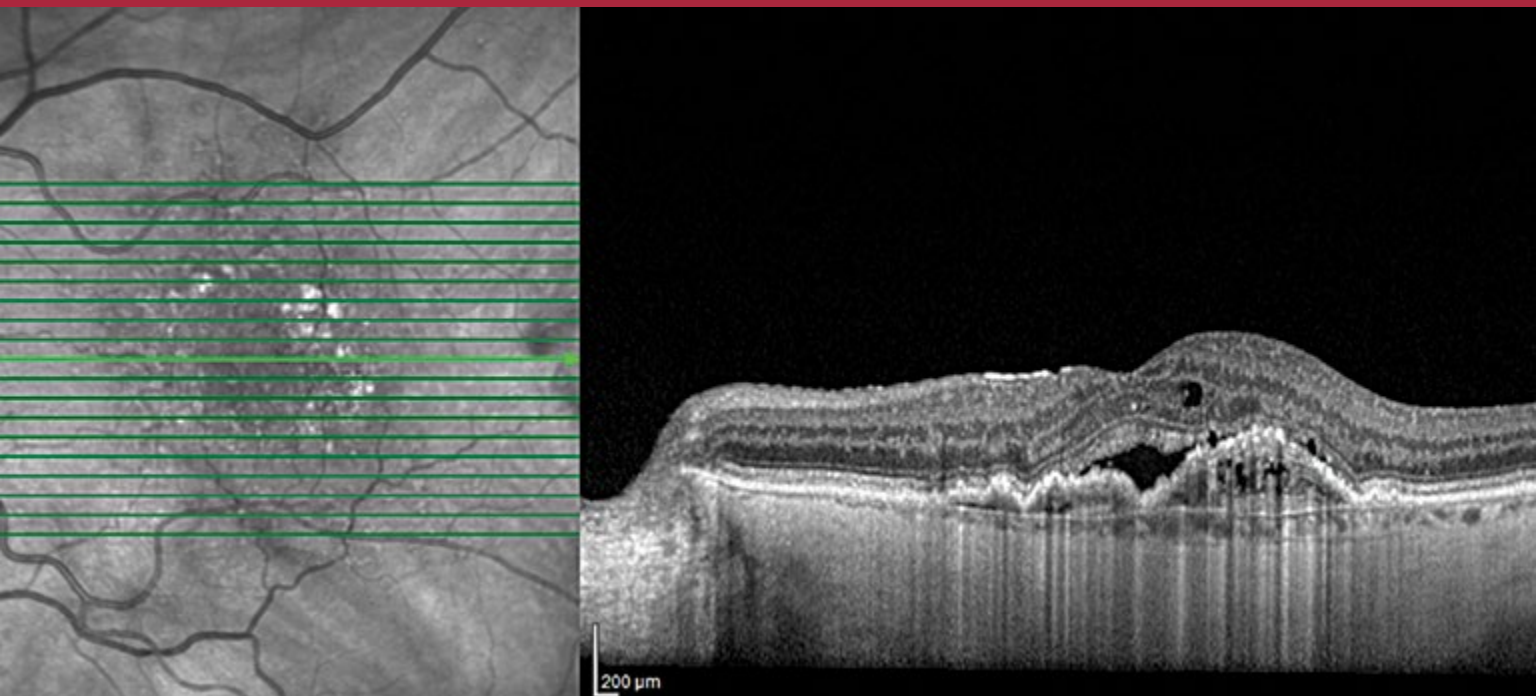


# Practice Management — Cincinnati Eye Institute AMD anti-VEGF Workflow Study Trial

*Improved patient through-put time for diagnosing and treating anti-VEGF therapy patients with the addition of one (1) SPECTRALIS® Imaging Platform in the injection lane.*



*“There is no doubt this can and will increase physician productivity by allowing smarter and more efficient template construction and by cross-training employees. In addition, our photography team can now better apply their considerable skill set to obtaining great color images and angiograms as well as meeting the growing and time consuming demands of clinical trial imaging. In the end, we feel our ROI analysis will compel us to fast-track this solution for every retina suite in all venues.”*

*– Robert E. Foster, MD; Chairman, Board of Directors Cincinnati Eye Institute*

*By Daniel Miller, MD; Matthew Dressler, Clinic Efficiency & Project Manager; Darlene Casbar, Retina and Diagnostic Testing Manager: Cincinnati Eye Institute-Middletown, Cincinnati, OH*

## **STUDY DESIGN**

The workflow study was conducted over the course of a six (6) week timeframe. The first two (2) weeks were dedicated to the implementation. The following four (4) weeks were dedicated to the data collection. Dr. Miller was chosen for the workflow study because his staff is very efficient in utilizing the patient tracking within the EMR (NextGen) System. Matthew Dressler also spent the entire trial period in the Middletown location to verify and confirm the patient process flow times manually to ensure the analysis and reports matched up.

## **RESULTS**

Reduced and shortened overall processing time by approximately 27%<sup>1</sup> or more in patient tech work-up to out-the-door time. This time reduction allowed the practice to increase revenue and patient satisfaction.

***What was the standard “old” injection workflow process for treating and injecting anti-VEGF therapy patients?*** All of the patients requiring anti-VEGF injection treatment therapy were funneled to the appropriate retina specialist waiting area. It was a linear process as we have a large demographic of patients. (See Figure 1a.)

***What were the disadvantages of the current workflow for your team, the doctors and patients?*** The old workflow was not efficient enough to cope with an increasing number of patients, in particular for patients with wet AMD which require multiple visits, examinations and treatments. The old process slowed down physician productivity. The doctors were running from one exam room to another in order to examine and treat patients. Our photography team was always rushed and sometimes this impacted the quality of the images acquired. The patients would experience lengthy wait times between the reception area, work-up room, testing area, back to the waiting room, then to the doctor’s exam lane.

***In your experience, what is the typical process flow in a U.S. retinal practice?*** The OCT and photography are done in separate rooms and this creates a road block by holding up the processing of patients. Typically, in our practice, the clinical staff was held up for 40 minutes per patient (old process). With the implementation of the new SPECTRALIS OCT unit within the workup lane, our new and improved processing times are now 26 minutes per patient.

***Is that from the time the patient enters the office and checks-in at reception?*** It’s from the time the patient is called back to the time they walk out the door.

***Does the new improved 26 minute processing time per patient include the injection?*** Yes, the new 26 minute patient processing time includes the injection. While the OCT image is being taken the injection is being prepared in the background. The retina specialist then comes into the room and administers the injection.

***What is the “new” treatment process flow for treating anti-VEGF patients?*** The patients who require an OCT are prioritized and expedited. Once arrived, these patients are sent to the designated retina wait area. The SPECTRALIS Imaging Platform is dedicated in one (1) tech’s room for injection patients. This allows the patient to wait only once and stops them from having to self-navigate numerous times as required by the old process. (See Figure 1b.)

***How has the addition of one (1) SPECTRALIS Imaging Platform improved the productivity of the physicians and tech teams?*** By adding one additional SPECTRALIS Imaging Platform we were able to increase physician productivity time, allow the photography team to obtain greater quality diagnostic images and angiograms for the growing demands of clinical trial imaging. Our pilot project gives a whole new meaning to the concept of linear flow and lean methodology.

***How has the addition of one (1) SPECTRALIS Imaging Platform into the tech work-up room improved the patients’ experience?*** For patients accustomed to the seemingly built in wait times moving from reception to workup room to testing area to wait room to doctor’s exam lane, the concept of diagnostic testing “up-front” removes much of the real as well as perceived wait from the patient’s experience. Patients and their families absolutely notice and very much appreciate the difference, and we have received more positive feedback than with any other wait time reduction effort.

***How many steps are there in the new injection process?*** It is now a 3-step injection process.

***What effect did removing OCT from photography have on other patients being seen and treated?*** Removing OCT from photography decreased the appointment times for other patients as well. This is because the large volume of OCT patients are now having their images taken in the tech lane. Removing this high volume of OCT imaging from centralized photography decompressed the volume of patients being imaged. We have seen a 40% decrease in wait time for other patients in photography processing times.

***Do you feel your team is now working more efficiently?*** Yes, in the first two (2) weeks we did not see a dramatic difference. The staff was adjusting to the new process. However, after three (3) weeks of implementing the new process, our staff was definitely more efficient.

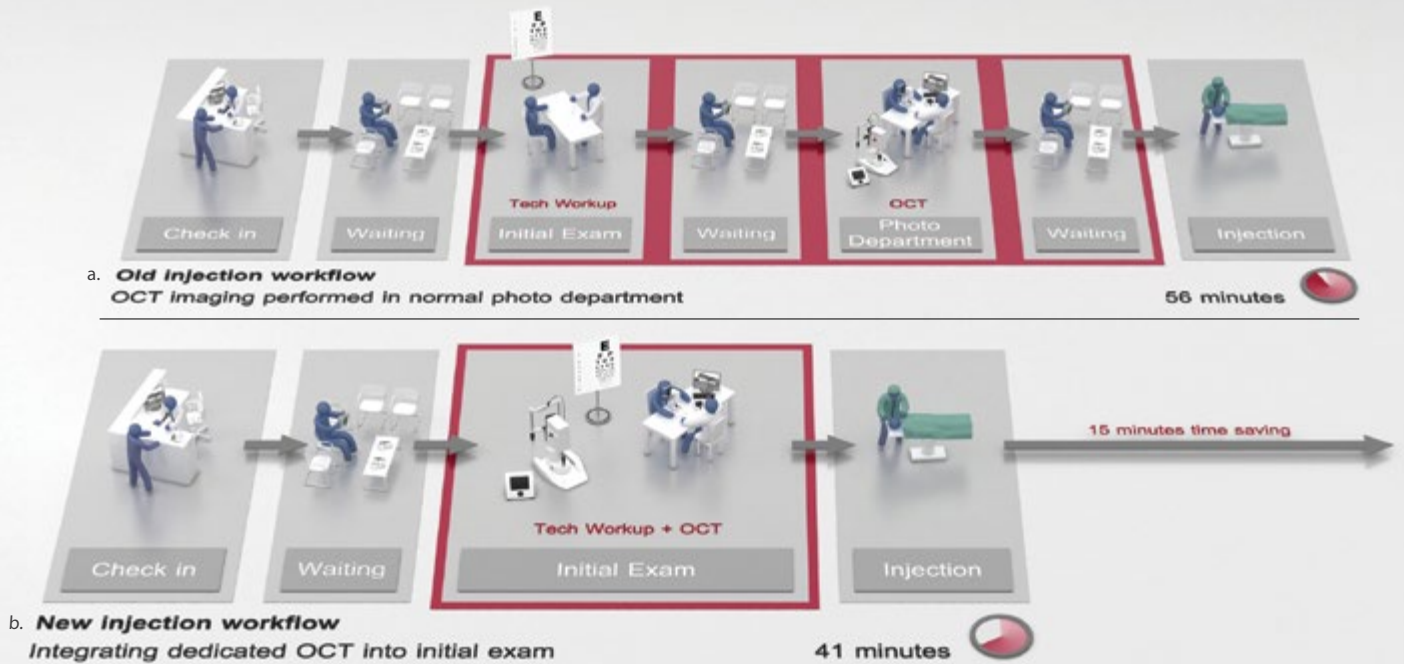
***Do you have dedicated injection days?*** No, we do not. We optimize the physician’s template schedule. The tech knows when the patients are coming in and therefore they are prepared and ready to expedite the OCT and anti-VEGF treatment injection process.

You completed the study at the Middletown practice facility. What happened when you removed the additional SPECTRALIS Imaging Platform? The patients and their families became very agitated and upset that their wait times became longer. The patients noticed a big difference in wait-times and they want us to go back to the expedited anti-VEGF injection treatment process.

What is the wide-range impact of conducting the Workflow Study? We are fast-tracking this solution to every satellite office we have a retina presence. This includes current sites and future expansions.

Figure 1: Cincinnati Eye Institute anti-VEGF Workflow Study

**Adding an additional SPECTRALIS OCT into the injection lane may shorten overall process time by 27% or more**



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