Why the EPIC Is

Over the last 10 years, we’ve come to rely on the system’s clinical, financial and practice management advantages.

We’ve been using the EPIC 5100 system (from Marco) for 10 years in multiple practice locations, and the system is indispensable. The primary reason for getting the EPIC was to get consistent, accurate refractions every time, no matter who did the test or who the patient was. We met that goal and later exceeded it with the addition of the 3D Wave wavefront aberrometer. The system also saved us time and money while making technicians and patients happier. At this point, our technicians would be furious if we took the EPIC machines away from them — but we certainly don’t want to.

Key Advantages

With any new diagnostic technology, we evaluate the clinical advantages, the financial advantages, and the practice management advantages. However, it can be difficult to separate those things. We’ve never studied the dollars and cents, and we’ve been using the EPIC system for so long that the “before picture” is more than a decade gone, but there are ways in which we’re certain the EPIC has improved the practice in several key areas.

1 Consistency. We have eight doctors and 18 technicians, so we’re always looking for ways to improve consistency. We want all of our technicians to provide the same accurate refraction results every time. The EPIC can be programmed to follow a set refraction sequence, which means all 18 technicians do the same steps every time and the results always look the same to the doctors. We also very rarely see remakes because of the consistency among technicians. For the superstar refractionist, automated refraction will be no more accurate, but for the average technician, quality autorefraction provides more consistent, reliable results.

2 Time. Obviously we save time. For 10 years, we’ve been using the EPIC to refract most patients in 10 minutes or less, which means we have a long track record of seeing six patients per hour. We couldn’t do that with a manual refraction system.

3 Flow. Not only does the EPIC require less time than manual refraction, but it also helps us keep patients moving and cuts down on the time they spend in the waiting room. The patients’ visual acuity with and without eyeglasses, lensmeter readings, refraction and keratometry are all done at once, so they don’t have to move between machines or wait for a device to become available. The EPIC also makes it easier for us to accommodate patients with wheelchairs, which saves time and satisfies patients.

4 Accuracy. By adding the OPD to our EPIC system, we’ve gained a whole new level of accuracy. It measures low- and high-order aberrations on a single axis. It allows us to perform refractive and cataract surgery screenings and evaluate postoperative complaints. The printout includes corneal measurements and topographic maps, as well as measurements such as vertex distance and pupillary distance. Even the K values give us a starting point that we can refine for refractive surgery. Combined with the 3D Wave, we’re very comfortable with the measurements we obtain as part of the surgical workup.

5 Space. The EPIC takes up very little office space. Years ago, we took a standard exam lane and put a wall down the middle with the EPIC on one side and visual field machines on the other. That’s half the space. Now we have an office designed around the EPICs. The smaller footprint saves money and makes us more flexible.
Good for Staff; Good for Patients

Technicians like EPIC from the start because it’s easier and faster than manual refraction. It’s an easier experience for patients as well, which makes the experience better for technicians, too.

For staff, training is simple. New technicians love it. All of our techs are trained to perform a manual refraction but if someone came in who didn’t know how to do that, they could be using the EPIC before too long. They might not understand all of the mechanics behind the refraction, but they could still get an accurate refraction. The practice can use a less skilled employee, and even skilled employees can use the EPIC with less work and time and greater consistency.

On any day, we have three technicians working on the EPIC machines and three working on other areas, and we rotate to keep everyone cross-trained. On-screen step-by-step instructions take the operator through the whole process. Once the routine is complete, the technician hits a button and sends the results to the printer, then adds the printout to the chart.

Patients seem to understand the EPIC’s steps better than they do those of the phoropter. They still have to be able to tell us which eye is better, but the EPIC makes the steps easier for them. They don’t get confused as easily. Younger kids and older patients can undergo a refraction in a few seconds, and technicians see the patients’ view of the pictures or numbers onscreen, making it much easier to help patients answer their questions.

Future for Additional Features

The EPIC system is an integral part of how our practice works today. It once needed service at one of our locations, and from our technicians’ reactions, you would have thought the world was coming to an end. The consistency, reliability and confidence mean a great deal to our physicians.

We may also start using some of the other features we’ve not yet tried. Although the EPIC is very simple to use, it is by no means rudimentary, and we’re looking forward to taking advantage of more of the features the system has to offer.

In the future, we’ll be working to integrate the EPIC system with our new electronic health record (EHR) system. EHR implementation will be difficult, but we don’t anticipate any problems with the EPIC, because it is a robust diagnostic workstation that has the capability to grow with our practice’s needs and expertise.

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