The key to optimizing Big Data? Your EMR contains a multitude of insights into your practice.

By Frieda Wiley, contributing editor October 1, 2018

"Big Data" continues to be "big news" in ophthalmology. That's been particularly true since the 2015 launch of IRIS, the AAO's national database. AAO members can submit Medicare- and Medicaidrelated patient information to IRIS to meet their physician quality-reporting system requirements. Big Data's appeal lies in its potential to help physicians improve patient care, track efficiencies and maximize reimbursement. IRIS gave physicians further incentive to adopt EMRs, a trend already going strong thanks



to government initiatives such as the Medicare Electronic Health Record Incentive Program (the federal mandate more commonly known as "Meaningful use").

But practices don't have to wait for reports from a national registry or CMS for the valuable data contained in EMRs. Each practice's system holds a wealth of information that could help it improve patient care and efficiency, increase reimbursement and even market its services. Often, however, the trick is extracting it — you can't just ask Siri.

As Cynthia Matossian, MD, founder and chief executive officer at Matossian Eye Associates sees it, the problem is that the wealth of the practice's information is buried within its EMR and EPM (electronic practice management) systems. She says that practices cannot access

much outside of cookie-cutter EMR or EPM reports designed by EHR companies.

Fortunately, some IT companies are finding ways to help practices make the most of the data that is just out of reach.

IMPORTED DATA OFTEN UNTAPPED

Like many physicians, Dr. Matossian finds that EMRs/Meaningful Use enhance the quality of her practice in several ways. They give the patient access to medical records through a secure portal, help her practice appear current and competitive, provide real-time data and facilitate the practice's ability to provide immediate assistance from a remote location. While those advantages have been a tremendous help, Dr. Matossian, as a physician-entrepreneur, believed her EMR platform had the potential for more benefits — that it contained invaluable data that could help her optimize her practice. Getting to that data, though, proved a complex undertaking.

"I want to utilize the information contained within my EMR to do business in a smarter way," Dr. Matossian says. "I have been trying to extract data out of our EMRs, and it is like pulling teeth."

Michael Isaac, cofounder of Conclusn, which characterizes itself as an "action-ready analytics firm," says that every practice should be able to extract all of their data on demand. "But, many EHR/EMR software providers make that difficult, usually with good reason," he says. "They excel at collecting and securing data, but it takes a different approach to extract and generate insights from it."

A SOFTWARE SOLUTION

To optimize efficiency, Dr. Matossian recruited an add-on software platform that she felt could improve her ability to analyze the data collected. She turned to Mr. Isaac's Conclusn, which specializes in what it calls "SMART analytics" — a form of data analysis software that helps organizations improve business decisions by accessing information that is within their EMR.

EMR systems capture data and ensure its immediate accessibility, but "when we're talking about hidden treasures, you have to review and format it differently," Mr. Isaac says. Conclusn uses enterprise tools and methods to rapidly connect with and unlock those insights — usually within a few days, according to the company.

The software generates visualizations that allow Dr. Matossian to review data that can streamline her marketing strategies and optimize her business productivity. The platform has a dashboard feature with different tabs that enable her to assess individual physician and location productivity as well as other metrics to help better strategize business growth.

In addition to analyzing providers, SMART analytics can drill down to specific patient zip codes, procedures, cost per procedure and compare revenue from month-to-month and previous years, according to the company.

GUESSWORK IS GONE

Jay Greiling, co-founder of Conclusn, believes this helps businesses better understand their patient demographics to improve marketing strategies. "When we bring in a wealth of information about patients on an aggregate level, the software allows the practice to download all of that data from the platform to create an email list targeting specific demographics," Mr. Greiling says. "By cutting down on the unwanted solicitation e-mails, we are driving down costs and improving efficiency."

Dr. Matossian confirms the real-life value of the features. "If I have \$100 set aside for marketing, why spread the \$100 equally if it touches zip codes where I now know through SMART analytics that there is no uptake?" she asks. "It would make more sense to spend \$80 of that \$100 marketing budget for the zip codes where I have the most return on investment and maybe \$20 on zip codes with less traction."

SMART analytics also paints a more in-depth picture of the practice's patient population. Dr. Matossian now knows the average educational level of her patients — those who select advanced technology options have post-secondary education, for instance; the majority of her patients who select premium implants hold undergraduate or advanced degrees. Armed

with this information, Dr. Matossian tailors her marketing content, such as e-mails, to carefully target these patients.

When faced with expanding aesthetics and oculoplastic services within the practice, Dr. Matossian used SMART analytics to determine the best uptake of these services within her three offices. Accordingly, additional hours were added to that particular location to continue growth within the subspecialty.

Additionally, Mr. Greiling says Conclusn is currently performing new data collection and reporting for practice demands in Accounts Receivable (AR) management. "It's a big need, we discovered, when our clients told us EMR reports and other accounting software is missing the ability to truly understand the scope of their practice AR, what causes it and how you can get that money in the door quickly," he says. Conclusn found its software can pull metrics and measurements from EMR and finance systems to help practices better "monitor and detect potential fraud, AR and other finance and operational metrics."

Will it work with your EMR? Mr. Isaac says his company has yet to meet an EMR system with which SMART analytics failed. "However, we have met a few practices that have systems that are so antiquated and tied up in knots that we have spent a lot of time getting data extracted," he says. To get started, the company's computer engineer team needs administrative access to the practice's EMR. Once obtained, work on building the individual SMART analytics system begins. "The build is custom, so we need all executive management involved in the process of creation," Mr. Isaac says. "Once the creation design is agreed upon, we move into automation of the analytics."

DON'T LET IT GO TO WASTE

Mr. Isaac advises practices implementing an EMR system to take a well thought-out approach when getting started.

"There is always some insight in your data," he says. "You don't have to know everything about analytics and data. It's important that ophthalmologists start small but start now. There are ways to extract EHR data, regardless of what software you use." **OM.** - *Ophthalmology Management*, Volume: 22, Issue: October 2018, page(s): 96, 98, 100.