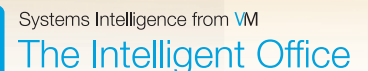


...Could Hurt You or Your Patients



Continued on page 46



Professional Registries: Drilling Into Patient Information to Mine Big Data

It will soon be commonplace for eyecare professionals to automatically integrate with health care professional Registries to aggregate their own patient data for analysis and compare themselves to the benchmarks of their peers. In fact, several key eyecare professional Registries are already being formed.

These include the IRIS Registry (www.aao.org/iris-registry) in ophthalmology and the EyeCare Registry (www.eyecareregistry.com) in optometry. The American Optometric Association also plans to launch a Registry for its members in June 2015.

Like Health Information Exchanges, Registries are part of the interoperability that is intended to save money while improving patient outcomes by enabling practitioners to electronically share and use secure, encrypted patient data. Information is automatically sent from medical providers' electronic health record (EHR) systems to whichever Registries the practice has designated, and that information is combined with data from that doctor's other patients to determine quality of care. Patient data is also anonymously and collectively aggregated with millions of other patient records from other similar specialists to generate real-life and real-time benchmarks of best practices to improve patient care.

In addition to being used to determine best practices, aggregated information from the patients of one particular doctor will also be used to help them adhere to quality reporting requirements such as the Physician Quality Reporting System (PQRS), which will have a direct impact on the level at which that practitioner will be reimbursed.

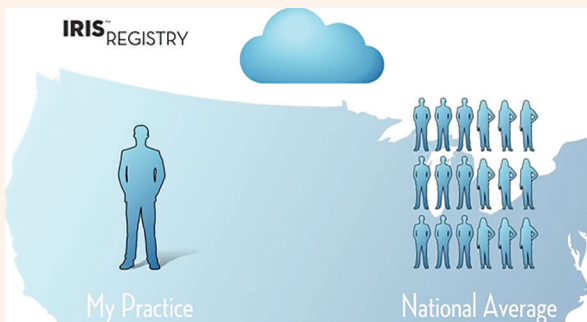
This is what is referred to as "outcomes-based" measurement and what experts say will determine and help drive all future professional reimbursement levels.

As with much of the transition converting health care reimbursements from pay-for-service to outcomes-based, change is slow and still in its early phases. Like the nascent Health Information

Exchanges (see "Why ODs Must Embrace Health Information Exchange," opposite) registries are also still in their infancy. But this is a development that will take on more importance.

Ophthalmology's IRIS Registry

Although it has only been in operation since early 2014, the IRIS Registry from the American Academy of Ophthalmology (AAO) is the longest and most active of the eyecare-related Registries already in existence. Getting its name from the acronym for Intelligent Research in Sight, the IRIS Registry performs statistical analysis of aggregated, de-identified patient data to produce easy-to-interpret, national and practice-level benchmark reports.



Among the benefits of participating in Registries is the ability to compare the outcomes from one practice with a national average benchmark.

As an approved PQRS electronic health record submission vendor, the IRIS Registry can directly and automatically extract data for PQRS measures and submit it to the Centers for Medicare and Medicaid Services (CMS) on a practice's behalf, eliminating the need for the traditional method of ophthalmologists manually reporting their data on their Medicare claims throughout the year.

Open to participation from ophthalmologists based in the U.S. who are members of the AAO, the IRIS Registry can also be accessed by optometrists who are in a practice with an AAO member using IRIS, a representative of the organization told VM.

Following an official launch in 2014 and a limited rollout that began in 2013 with about 2,300 physicians in 47 states, currently about 5,000 ophthalmologists are contracted to report data to IRIS. This represents about four million unique patients registered, accounting for about 10 million individual patient visits.

This is still "really at the beginning of the process in the amount of analytics" that can be produced, according to Portland, Oregon-based ophthalmologist, Michael Chiang, who was instrumental in creating IRIS. "What we can do now in 2015 is very primitive to what we'll be able to do," he told VM, explaining that it's still early for much specific data analytics because the registry has been live for less than a year.

Optometry's EyeCare Registry

It takes at least six months to a year for a registry to have enough data to generate results, according to Ron Snyder, OD, of Boca Raton, Fla., who has launched the EyeCare Registry, primarily focused on optometry but open to both ODs and MDs.

He and Jim Grue, EyeCare Registry director of analytics, explained how a Registry's data analysis can have superior results to traditional clinical studies, which are often

geared toward one very specific population, often do not take into account comorbidities, and can take a lot of time to generate useful results.

As an example, they cited a study that illustrates just how effective a Registry's analysis can be on patient care: "In 2006, a group of pediatricians decided to see if they could improve clinical outcomes for pediatric Crohn's Disease patients. At that time, approximately 50 percent of pediatric Crohn's patients were in remission at any given time. There were many different approaches and products, and it was difficult to determine which were the most effective."

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Why ODs Must Embrace Health Information Exchange

To be a part of the new emerging outcomes-based medical model and the changes in reimbursement that will result, optometrists must embrace the ability to electronically share and use secure, encrypted patient data.

Built on a foundation of electronic health records, this interoperability is one of the steps toward transforming health care.

One way to achieve interoperability is through Health Information Exchanges (HIEs), which enable providers to securely and efficiently share and use patient data among caregivers.

'No More Clipboards'

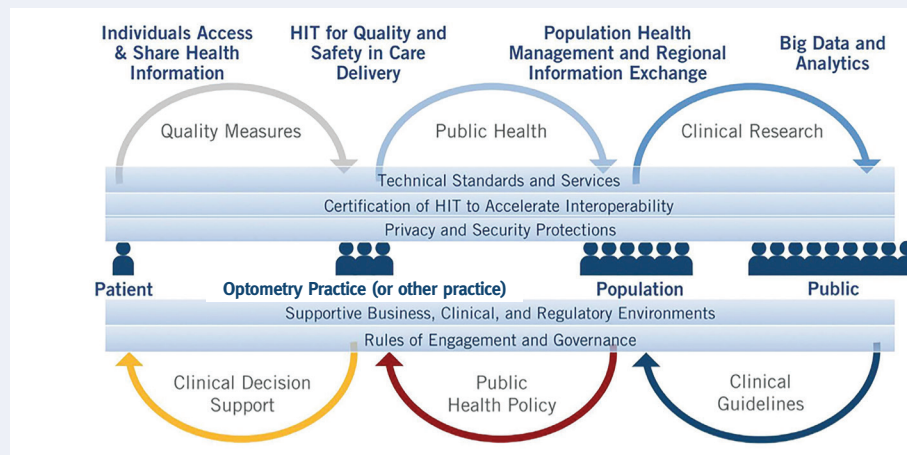
"Health information exchange is both an action and an organization," said Scott Jens, OD, CEO of RevolutionEHR, whose optometry-focused EHR software offers the Revolution Personal Health Record that he describes as a consumer-based health information exchange. The "action" would be the actual exchange of information, while the "organization" would be the entity in which information is exchanged by practitioners who both provide and access the patient data it contains.

"No more clipboards," said Jens, referring to the fact that the objective of health information exchange is to now be able to obtain patient data electronically rather than through a form completed each time the patient sees a new doctor. "If we don't participate and we rely on 1990s faxing, there's going to be a point where we will be left behind," said Jens.

Three Types of HIEs

CMS defines three types of health information exchange:

1. Directed Exchange – (provider to provider) the ability to send and receive secure information electronically between care providers to support coordinated care.



In the new world of health care, optometrists are one integrated element of a broader, complex system, in which they will be required to exchange and analyze patient data.

2. Query-based Exchange – (one entity asking another entity for information) the ability for providers to find and/or request information on a patient from other providers, often used for unplanned care.

3. Consumer Mediated Exchange – ability for patients to aggregate and control the use of their health information among providers (emerging and yet to be accomplished).

While not the most efficient, communicating directly from provider to provider is currently the most prevalent and the best established. Query-based exchange requires using one of the state-based HIE platforms, which have gotten off to a rocky start, and consumer-mediated exchanges are still emerging.

Using the standardized electronic language established by the Direct Project enables disparate EHRs to share secure encrypted patient data directly from one provider to another. Launched in March 2010 as a part of the Nationwide Health Information Network, the Direct Project was created to specify a simple, secure, scalable, standards-based way for participants to send authenticated, encrypted health information directly to known, trusted recipients over

the internet. When used to transport and share qualifying clinical content, the combination of content and Direct-Project-specified transport standards may satisfy some Stage 1 Meaningful Use requirements (see sidebar, page 48).

Query-Based HIEs

However, even though the Direct protocol enables disparate software to share data, communicating directly from one provider to another requires that they have the necessary contact information for communicating with each other's EHR system.

A more efficient model is a Health Information Exchange in which providers securely share their patients' encrypted health data that can then be accessed (via a query) by other authorized practitioners also caring for a particular patient who has given them permission to access that information.

Eduardo Martinez, development manager of EHR software provider, MyVision Express, provided an analogy that helps illustrate why HIEs that allow for query-based exchanges are more efficient than sharing information directly from provider to provider. He compared one provider communicating direct-

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Shared Care: ECPs in the Age of Interoperability

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Interoperability

In addition to taking the first step of digitally storing patient data in EHRs, the conversion from fee-for-service to outcomes-based care will also require that all health care participants be capable of electronically exchanging information and using the information that has been exchanged. This is known as “interoperability.” Two ways to achieve interoperability are with Health Information Exchanges (HIEs) and Registries.

effectively and efficiently utilized by other providers.”

After health care providers have successfully implemented EHRs, the digital patient information they store can then be shared automatically and electronically through HIEs, which enable other authorized caregivers to access that information. Patient information from EHRs can also be automatically and electronically shared with Registries, where it will be aggregated with other similar patient information to determine best practices for particular conditions.

Medicare and Medicaid Services (CMS) to providers who have attested to the Meaningful Use of EHRs. Eligible optometrists who have attested to Meaningful Use have received in aggregate over \$260 million in incentives from CMS (see charts, page 54).

Any practitioners who have not already begun the process of attesting to Meaningful Use are out of time to receive incentives. Now, penalties will begin to be implemented for those not using EHRs. Beginning in 2015, one of the sticks designed to discourage practitioners from continuing to practice without the use of EHRs will go into effect. Optometrists who have not attested to the Meaningful Use of EHRs by 2015, will be subject to penalties. Payment reductions begin in 2015 for providers who are eligible but choose not to participate.

“It’s coming, and it’s coming fast,” said Steve Baker, president of technology provider, Eyefinity, referring to payment reductions coming as a result of not implementing the Meaningful Use of EHRs. “Those who waited until 2015 to begin attesting to Meaningful Use no longer have access to the incentives that were made available to those who attested to Meaningful Use starting in 2011.”

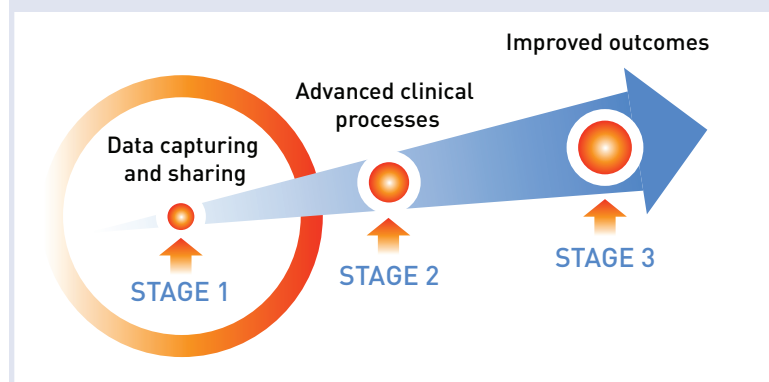
Optometrists who have not successfully demonstrated Meaningful Use of certified EHR technology will be subject to payment adjustments of their Medicare reimbursement, starting with a 1 percent reduction in 2015, two percent in 2016, and 3 percent in 2017 and each subsequent year, unless it is determined that for 2018 and subsequent years that less than 75 percent of eligible providers are meaningful users, in which case the payment adjustment will change by one percentage point each year until the payment adjustment reaches 95 percent.

The Stages of Meaningful Use

Meaningful Use is being rolled out in stages, with Stage 1 requiring that providers store and share patient data, Stage 2 working toward advancing clinical pro-

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Explaining the Stages of Meaningful Use



Meaningful Use of electronic health records begins with Stage 1, in which patient data must be stored and shared electronically, and continues through Stage 2's advanced clinical processes to reach improved patient outcomes in Stage 3.

Brett M. Paepke, OD, of First View Eye Care Associates in Plattsburgh, N.Y., who has successfully implemented RevolutionEHR's software, explained what optometrists need to know and why: “Data sharing, developing a better understanding of outcomes and, in turn, improving care is at the core of Meaningful Use, HIEs, and Registries. Since the dawn of Meaningful Use, many providers have bemoaned the perceived need to ‘jump through hoops’ to participate, but in many cases, providers haven’t been shown why they are required to document their care in certain ways. Data sharing is the ‘why.’ Meaningful Use ensures that the data will be in a standardized format that can be

coordination of care of a glaucoma patient. On the other hand, a Registry might collect data on glaucoma management that allows providers to compare their data to benchmarks and assist in reporting data for pay-for-performance programs.”

Rewards and Penalties

Payers are using both the carrot and the stick to encourage practitioners to first adopt the use of EHRs and then eventually integrate with Registries and HIEs to facilitate greater coordination of care and improve the quality of patient outcomes. Among the carrots being used are payments from the Centers for



Registries: Big Data From Patient Information

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tive. There were scientifically controlled studies that gave general guidelines, but these were in very controlled studies that didn't necessarily represent many of the patients they were treating.

"The Registry gathered the data and analyzed the outcomes for each treatment. Some approaches and treatments seemed to get better results than others. Many providers using the less effective treatments changed to the ones that appeared to have better outcomes.

"Outcomes data began showing that certain approaches worked better for different patients, and by studying the variation in patients (age, sex, other comorbid conditions, other medications, etc.), the study eventually showed what approaches seemed to work most effectively for which patients. It also allowed the study to look at the effect of other issues such as what it took to get patient compliance, etc.

"By providers being able to compare the choices they were making against the outcomes of the choices other providers were making, they modified practice patterns and adopted new treatment strategies. The incidence of remission increased to 85 percent by 2012 just by tracking the clinical outcomes that

were resulting from the decisions that participating providers were making."

Replicating this model in other specialties can help determine the most effective care protocol for any given conditions within those specialties. For example, in eyecare, Registries could help determine the best practices for treating glaucoma, macular degeneration, even cataracts, and much more, simply by aggregating the results of specific treatments.

While the EyeCare Registry just launched at the end of 2014, it already has about 200 subscribers signed up to submit data as well as to provide revenue to the self-funded entity.

The AOA's Registry

So new it had yet to be named at *VM*'s press time, the Registry due this year from the American Optometric Association (AOA) will be in alpha and beta testing over the next few months in preparation for a full launch at Optometry's Meeting in Seattle this June.

Already in the works for more than four years, the AOA's Registry will be open to all of the organizations' nearly 34,000 members when it launches in June after alpha testing with about 20 practices and then beta testing with another 15 to 20 practices across the

country. At first integrating with RevolutionEHR, Compulink and MaximEyes optometry-focused electronic health records software, the goal of the Registry is to eventually "integrate with all" EHRs over time, according to Jeffrey C. Michaels, OD, of Family Vision Care of Richmond, in Sandy Hook, Va., who chaired the committee to launch the AOA's Registry.

"With a paradigm shift occurring in health care, Registries are becoming more and more important as an essential tool," Michaels told *VM*. "The emphasis of the Registry is to integrate with EHRs, allowing optometrists to seamlessly and automatically submit data, so they can spend more time being optometrists not data typists."

The aggregated patient data can then be used by optometrists "to be able to see the effect their care is having on their own patients," said Michaels, and "for some outcomes they would also be able to benchmark themselves in comparison to other optometrists across the country." In addition, the aggregated results will also enable practitioners to adhere to quality measures to help improve reimbursements. "With Medicare and other insurance providers putting such an emphasis on quality, the Registry is another tool allowing optometrists to provide the best health care possible." ■

Comparing and Understanding the Stages of Meaningful Use

While the deadline to receive financial incentives for implementing the Meaningful Use of certified electronic health records (EHRs) has past, ECPs still need to start using EHRs to avoid reductions in reimbursement (see page 46). The Meaningful Use of EHRs is being rolled out in stages, broadly defined as Stage 1 requiring the electronic storing and sharing of patient data, Stage 2 achieving advanced clinical process through the interoperability of databases, and Stage 3 resulting in improved patient outcomes.

While Stage 3 has yet to be defined, Stages 1 and 2

have specifically defined requirements that those attesting to the Meaningful Use of EHRs must report. To demonstrate Stage 1, eligible professionals must meet a total of 18 objectives composed of 13 required core objectives and five menu objectives from a list of nine. To attest to Stage 2, providers must demonstrate a total of 20 objectives composed of 17 core objectives and three menu objectives selected from a list of six.

Among the core objectives of Stage 1 are recording demographics, recording chart changes and vital signs, recording smoking status, providing patients with an electronic copy of their health information, reporting

clinical quality measures to CMS, and protecting electronic health information created or maintained by the certified EHR.

Core objectives for Stage 2 that differ from those for Stage 1 include providing patients the ability to view online, download and transmit their health information within four business days of the information being available to the EP; using clinically relevant information to identify patients who should receive reminders for preventive/follow-up care; and using secure electronic messaging to communicate with patients on relevant health information. Go to CMS.gov.



HIE: Action and Entity

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ly with another as being similar to texting, which requires you to know the number of the person you are contacting.

He then compared being a part of a trusted HISP (Health Information Service Provider) serving as an HIE in which patient data is shared and accessed by multiple providers as being similar to using Skype. As long as the provider knows the name of the person whose information they would like to access, they are able to find that information within the HIE. They don't need to know the contact information for communicating directly with another provider. Instead, they can simply query the HIE to request that particular patient's data.

To help facilitate the formation of HIEs in every state throughout the country, the Health Information Technology for Economic and Clinical Health Act (HITECH), as part of the American Recovery and Reinvestment Act of 2009, budgeted over \$540 million to be allocated among all 50 states so they could each establish their own health information exchange for the sharing of patient data.

(To clarify, these health *information* exchanges differ from the health *insurance* exchanges established to sell health insurance to individuals in each state as a result of the Patient Protection and Affordable Care Act of 2010, both of which differ from private exchanges established by independent companies to also sell health insurance to individuals.)

Establishing HIEs in each state turned out to be easier said than done, however. "The problem was that they didn't use the concept of standards first but gave out the money and told each state to put together an HIE with no specific guidelines," said Jim Grue, EyeCare Registry director of analytics. "Some states created 10 or 11, some did one, and some did 15 to 20 HIEs to cover their whole state, but there was no interoperability plan that was consistent throughout the whole country. Every state, every HIE, made their own decisions, which didn't result in

their ability to share information between the different ones."

By 2014, with all the money spent by mandate, some HIEs survived while others floundered and failed. Grue suggests that it is those that incorporated self-funding that remain sustainable.

Brett M. Paepke, OD, of First View Eye Care Associates in Plattsburgh, N.Y., agreed: "For HIEs to be self-sustaining continues to be important. HIEs were assisted in the beginning by federal funding/grants designed to get them on solid footing and establish revenue streams to help them survive. The ones who failed to do that have ceased to exist."

Still, "there remains 'a fledgling number of emerging state HIEs in the market, but each of those state HIEs stands as a silo in and of itself that doesn't share data across state borders with other HIEs," said Jens. This resulted in unconnected islands of data with no connection to each other.

Data Islands

"HIEs are controlled at the state level, and each state has implemented theirs somewhat differently, which makes it difficult for patients, especially if they are moving across state lines," said Brian Thorell, CIO of software provider, ManagementPlus.

Because establishing a standardized electronic language was not a priority, sometimes information is only available within that HIE, where it remains stranded on a data island unable to connect with other HIEs in other states.

David M. Anderson, OD, of Miamisburg Vision Care in Miamisburg, OH, and trustee of the Ohio Optometric Association, described why he believes HIEs have stalled: "A good start has somewhat slowed due to barriers, real or perceived. They require ECPs and other providers to cooperate and work together, and this has stalled some of the progress. The concept of HIEs and integration of all EHRs seems like many different cities with different laws, different structures

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OcuHub: A Private Eyecare HIE

OcuHub is a "national private health information exchange for eyecare that includes elements of data exchange, data analysis and care coordination," according to its CEO, Barry Barresi, OD, PhD, "

Created as part of AOAExcel when Barresi was still executive director of the American Optometric Association, OcuHub is now owned by TearLab, which purchased the entity in 2014. OcuHub was designed to help grow ECPs' referral volume. "We are a health IT company that helps you grow your practice through referral management, with MDs trying to get more volume from ODs, vice versa, and also from primary care providers," said Barresi.

OcuHub provides essential ingredients for care collaboration and referral management through secure messaging and its ability to transmit patients' continuity of care documents (CCDA) that are a requirement

"The path to independence is integration."

—Barry Barresi, OD, PhD

of Meaningful Use (see sidebar, page 48). In addition to transmitting patient health information, it also allows practitioners to share business documents that "help you create the glue and integrity among collaborating doctors," said Barresi.

Finally, OcuHub allows for making appointments directly between doctors. For example, a primary care provider who is not even an OcuHub subscriber can access its scheduler to set up an appointment with an eye doctor for a patient with diabetes, for example, explained Barresi, thereby simplifying the referral process.

He also explained that using OcuHub to share data among a large group of ECPs, such as 30 ophthalmologists and hundreds of optometrists being all part of the same information system, will then enable that group to approach medical groups and other payers as an aggregate entity while still staying independent. "The path to independence is integration," he said.





Health Information Exchanges: A Roadmap to Standardization

Continued from page 50

and different people, but no way to connect to each other. We are all still waiting on the highways, but each still believes what we have and need in our own isolated city is either better or unique. The providers, in general, still see the short view of helping that patient that day, not the long view of helping all providers help those patients for their lifetimes."

Despite significant progress in establishing standards and services to support health information exchange and interoperability, it is not the norm that electronic health information is shared beyond groups of health care providers who subscribe to specific services or organizations. This frequently means that patients' electronic health information is not shared across organizational, vendor and geographic boundaries. Electronic health information is also not sufficiently standardized to allow seamless interoperability, as it is still inconsistently expressed with vocabulary, structure, and format, thereby limiting the potential uses of the information to improve health and care.

Will a National Standard Result?

There is talk that a national standard will eventually be established to enable state and other HIEs to communicate. The HHS on its HealthIT.gov website does allude to a national standard: "We must learn from the important lessons and local successes of previous and current health information exchange infrastructure to improve interoperability in support of nationwide exchange and use of health information across the public and private sector."

In fact, on Jan. 30, 2015, the HHS Office of the National Coordinator for Health Information Technology (ONC) released "Connecting Health and Care for the Nation: A Shared Nationwide Interoperability Roadmap Version 1.0," a "draft roadmap" to deliver better care and result in healthier people through the safe and secure exchange and use of electronic health information.

The document outlines steps "that will enable a

majority of individuals and providers across the care continuum to send, receive, find and use a common set of electronic clinical information at the nationwide level by the end of 2017."

The draft Roadmap identifies critical actions to achieve success in sharing information and interoperability and outlines a timeframe for implementation. It builds on the vision paper, "Connecting Health and Care for the Nation: A 10-Year Vision to Achieve an Interoperable Health IT Infrastructure," issued in

best available technical standards for core interoperability functions, delivering on this action with the release of the Draft 2015 Interoperability Advisory. This "Standards Advisory" represents ONC's assessment of the best available standards and implementation specifications for clinical health information interoperability as of December 2014.

The public comment period for the draft Roadmap closes April 3, 2015. The public comment period for the Standards Advisory closes May 1, 2015.

With a national standard, HIEs will be able to communicate with other HIEs and across state lines. As Steve Baker, president of technology provider, Eyefinity, put it: "Each new piece of information can connect with the other pieces of information, so local roads can meet up with regional roads and eventually all the national roads."

In some cases, this is

already happening, according to Lee Stevens, director of state health information exchange policy for the ONC. "States are starting to exchange data, across state lines, in California and Oregon, Florida and Alabama, and other states, states have been fantastic partners in all of this," he said.

Anderson said, "I see roads slowly being built, some challenges with data integration ahead, but big benefits to patient care. I see this again like cities. The water systems in both areas are in place. The cities chose different sized pipes, now we just need to adapt them to each other, and the water will flow. It will require some give and take, but once we begin to recognize the true value of our own EHR, we will soon fully recognize the value of all EHRs, and of course, interoperability will be the end result." ■



The development of clear standards for the secure electronic exchange of patient information remains a roadblock that HHS hopes to correct with a recently released 'Roadmap.'

June 2014. Months of comment and feedback from hundreds of health and health IT experts from across the nation through ONC advisory group feedback, listening sessions and an online forum aided in the development of the Roadmap.

HHS Secretary Sylvia M. Burwell, said, "Great progress has been made to digitize the care experience, and now it's time to free up this data so patients and providers can securely access their health information when and where they need it. A successful learning system relies on an interoperable health IT system where information can be collected, shared, and used to improve health, facilitate research, and inform clinical outcomes. This Roadmap explains what we can do over the next three years to get there."

The draft Roadmap calls for ONC to identify the



Thousands of ODs Have Received Incentive Payments for Using EHRs

Active EHR Meaningful Use Registrations as of October 2014		Medicare Provider Count and Payment Summary by EHR Meaningful Use Stage Number			
Program-to-Date (Oct. 2014)		Stage 1 Program-to-Date		Stage 2 Program-to-Date	
		Unique Providers	Payments	Unique Providers	Payments
Medicare Eligible Optometrists	15,662				
All Medicare Eligible Professionals	335,964	11,986	\$261,678,886	24	\$152,880
Medicaid Eligible Optometrists	270				
All Medicaid Eligible Professionals	164,912	268,686	\$6,502,440,566	3,655	\$23,551,360

Notes: Active Registrations are all eligible professional registrations that have been fully completed.

Source: Centers for Medicare & Medicaid Services (CMS)

Medicare EHR Incentive payments began in May 2011. To be included in Medicare Provider Count and Payment Summary by Stage Number, providers must successfully demonstrate Meaningful Use and meet all program requirements.

Source: Centers for Medicare & Medicaid Services (CMS)

EHR Meaningful Use Incentive Program Provider Summary					
	Unique Providers Paid 2011 Program Year	Unique Providers Paid 2012 Program Year	Unique Providers Paid 2013 Program Year	Unique Providers Paid 2014 Program Year	Unique Providers Paid Program to Date (as of Oct. 2014)
Medicare Eligible Optometrists	2,576	8,590	10,162	120	11,967
All Medicare Eligible Professionals	58,406	188,357	231,327	10,385	268,010
Medicaid Eligible Optometrists	-	-	58	16	74
All Medicaid Eligible Professionals	49,916	68,729	74,320	5,011	132,412

Medicaid EHR Incentive payments began in January 2011 Medicare EHR Incentive payments began in May 2011 Source: Centers for Medicare & Medicaid Services (CMS)

EHR Meaningful Use Incentive Program Payment Summary					
	Amount Paid 2011 Program Year	Amount Paid 2012 Program Year	Amount Paid 2013 Program Year	Amount Paid 2014 Program Year	Amount Paid Program to Date (as of Oct. 2014)
Medicare Eligible Optometrists	\$39,019,045	\$116,869,519	\$104,661,362	\$1,281,840	\$261,831,766
All Medicare Eligible Professionals	\$979,684,454	\$2,878,904,362	\$2,565,408,630	\$101,994,480	\$6,525,991,926
Medicaid Eligible Optometrists	-	-	\$1,110,667	\$340,000	\$1,450,667
All Medicaid Eligible Professionals	\$1,046,577,200	\$1,197,558,777	\$1,037,254,854	\$79,298,954	\$3,360,689,785

Medicaid EHR Incentive payments began in January 2011 Medicare EHR Incentive payments began in May 2011 Source: Centers for Medicare & Medicaid Services (CMS)



Making Electronic Health Records Meaningful

Continued from page 46

cesses, with the ultimate goal of improved patient outcomes expected to be achieved in Stage 3 (see graphic, page 46). Stages 1 and 2 have already been defined (see sidebar, page 48), while the requirements of Stage 3 have yet to be released.

To meet these requirements, HIEs were created to facilitate the exchange of patient data among caregivers, and Registries can be instrumental in advancing clinical processes to help practitioners' quality reporting requirements while working toward the ultimate goal of improved patient outcomes.

This is not to say that Meaningful Use, like health care reform itself, has not been without controversy. Some providers see using EHRs as coming between the doctor and the patient by requiring that the caregiver spend more time entering data instead of communicating with the patient. There is also the concern

of data breaches. Just last month, over 30 medical societies, led by the American Medical Association, sent a letter urging federal regulators to make major changes to the EHR Meaningful Use program.

This was followed by CMS indicating a potential willingness to make it easier to adhere to Meaningful Use by shortening of 2015 reporting requirements in a proposed new rule expected by spring 2015.

In a Jan. 29, 2015, blog post, Patrick Conway, MD, chief medical officer at CMS, said "Since the first year of the EHR Incentive Programs in 2011, the United States has seen unprecedented growth in the adoption and Meaningful Use of EHRs. To date, more than 400,000 eligible providers have joined the ranks of hospitals and professionals that have adopted or are meaningfully using EHRs. This means that millions of patients across the nation are benefiting from the potential of better coordinated care among professionals, more accurate prescribing, and improved communication. The new rule, expected this spring, would be intended to be responsive to provider concerns about software implementation, information exchange readiness, and other related concerns in 2015."

Still, while at times delayed and subject to controversy, the EHR Meaningful Use program continues, as health care moves closer and closer toward the universal electronic storage and sharing of patient data.

"After going from paper to electronic, the big change now is going from electronic to standardized," said Eduardo Martinez, development

"The concept of HIEs and integration of all EHRs seems like many different cities with different laws, different structures and different people, but no way to connect to each other."

-David M. Anderson, OD

manager of software provider, MyVision Express, referring to the next step in the transition in which data will be exchanged using a standardized language that enables disparate EHRs to communicate.

Quality Counts

Other carrots being used to encourage the Meaningful Use of EHRs include increased payments for those practitioners who can show that they are improving the quality of patient care by coordinating with other caregivers. For example, the Physician Quality Reporting System (PQRS) provides an incentive payment to practices that satisfactorily report data on quality measures.

PQRS also includes a stick to discourage bad quality care. Beginning in 2015, the program applies a negative payment adjustment to eligible providers who do not satisfactorily report data on quality measures for covered professional services. In some cases, reporting the necessary PQRS data can be achieved by participating in Registries that aggregate thousands or millions of pieces of patient data to determine which diagnostic devices and treatment procedures achieve the best results.

While it will take time to build a fully interoperable infrastructure of coordinated care and communication across health care providers, patients, and public health entities that improves health care quality, lowers health care costs, and improves population health, the impact has begun with millions of incentive dollars already paid to practitioners and reimbursement penalties on the horizon. ■