

Electronic Medical Records

A Guide to EMR Selection, Implementation, and Incentives



ASCRS · **ASOA**

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An Eligible Professional's Soliloquy by Wayne Singer

How Soon Can I Attest?

To attest, or not to attest: that is the question:

Whether 'tis nobler in the mind to attempt

The slings and arrows of MU Core and Menu measures,

Or to take arms against a sea of Clinical Quality Measures,

And by documenting end them?

To purchase an EHR: to use paper;

No more; and by an attestation to say we end

The heart-ache and the thousand patient encounters That we cannot read, 'tis a consummation devoutly to be wish'd.

To use an EHR, to document;

To document: perchance to qualify: ay, there's the rub;

For in that documentation of patient encounters what rewards may come

When we have attested off this Meaningful Use,

Must give us pause: there's the respect That makes going digital of so much for concern;

For who would bear the burden of when I meet the \$24K

Threshold and maximize my incentive,

CMS will, they will hold the payments until the proud EP meets the threshold,

The pangs of concerns over when to attest, The answer, I need not delay, And thus as soon as I have used the certified EHR for 90 days,

And meet the thresholds for each measure,

The attesting of my numerators and denominators can begin.

Be all my incentives achieved.

I. 5 Step Guide to EMR Implementation

Introduction

If you are reading this, you are taking a step in the right direction when it comes to implementing Electronic Medical Records (EMR). Doing so properly can lead to improvements in practice efficiency, reductions in manual processing costs, increases in revenue, and help raise the level of care you provide to your patients. However, failing to plan ahead and go through a step by step process can produce a frustrating and costly experience. Gathered here are steps that practices must consider to help facilitate successful EMR selection and implementation.

It is important to plan ahead and understand exactly what you intend to achieve with health IT.

10 COMMON EMR IMPLEMENTATION PITFALLS

- 1. EMR software can't be customized to meet practice needs***
- 2. Lack of 100% buy-in by doctors or unrealistic expectations***
- 3. Electronic workflows not well-defined in advance***
- 4. Not enough practice time for staff & doctors***
- 5. No plan for continuous investment in software updates or equipment upgrades***
- 6. Underestimating initial cost of going electronic***
- 7. Lack of measurable goals***
- 8. Doctor's use of EMR is not made mandatory***
- 9. Lack of thorough investigation and analysis of software applications, imaging capabilities or equipment interfaces***
- 10. If doctors don't use it, nothing else matters!***

A physician-focused, specialist-oriented,

efficient EMR will be key to a physician's ability to meet the increased reporting demands, satisfy patient needs, and run a financially successful practice.

Step 1: Advance Preparation

Do not underestimate the time and resources required to implement an EMR system. Evaluate your daily practice operations that will be affected:

- Provider workflow
- Front desk workflow
- Impact on IT infrastructure
- Billing
- Revenue/expense mix

To best deal with the inevitable changes, begin by:

1. DEFINE YOUR NEEDS

What do you want EMR to do for you, your patients and your practice?

- Reduction of paper
- Reduction in transcription expenses
- Better access to charts
- More legible data
- Achieve the efficiencies by carefully planned implementation and use of the EMR system
- Meaningful Use - using certified EMR in ways that can be measured significantly in quality and in quantity.
- Seamless communication: All activity about the "patient" is centralized.

What are your constraints?

- Cost
- IT resources
- Clinical/practice staff support
- Project management skills/ Internal expertise

2. DETERMINE PRACTICE READINESS

- Are the physicians and staff supportive of EMR adoption?
- Is there a **physician leader** committed to making health IT work for your practice?
- Is there an **office administrator** committed to making health IT work for your practice?
- How does EHR implementation fit with other practice priorities?

3. TALK TO YOUR PEERS

Take advantage of resources offered by [ASCRS](#) and [ASOA](#) in helping you determine what kind of EMR might be the best fit for your practice size/type/location.

4. MAP OUT YOUR WORKFLOW PROCESSES

- Make Lists: Daily tasks and duties (rank them by complexity).
- Master List of everything your practice currently does on a daily, weekly and monthly basis; use this list to evaluate the software.
- Calculate completion times for each task; understand which tasks could easily become electronic.
- Conduct a few model patient visits. Identify snags and slowdowns—walk the charts through each handoff and document where modifications are needed.

5. PERSONNEL ROLES

Depending on practice size and skill sets, one person may fulfill more than one role, but generally key roles include:

- **Physician/Executive leader**—defines and sells vision; identifies requirements and selects health IT system; helps build and enhance health IT; resolves conflicts.
- **Project Manager**—assists with health IT system selection; manages coordination of software, hardware, special projects and training activities; helps train and troubleshoot.
- **IT analyst** (may be subcontracted)—builds and supports health IT network, deploys hardware (servers, PCs, printers, scanners, electronic faxing, etc.); performs software configuration,

hardware configuration, special projects such as interfaces.

If you have multiple locations, ensure that members of those office teams are represented, so the broader practice needs are taken into consideration.

6. BUDGET

To minimize surprises, develop a detailed budget outlining expenses in each category:

- Health IT software and related services (includes interface, necessary software updates/upgrades)
- Hardware/network and related services
- Internal labor expenses (time spent on training, data-entry, etc.)
- Temporary decline in provider productivity
- Financing expense
- Equipment upgrades

Step 2: System Selection and Installation

There are many choices of hardware that you'll need to make throughout the office: hardwired desktop computers, mobile notebooks, touch screens or tablet devices at the workstations. Look and test the latest models. Compare the advantages and disadvantages with each set up. Also consider who will be using them and how they will be used:

Consider the following when selecting an EHR vendor:

- EMR must be certified for meaningful use by certified technology vendors, particularly if you plan to participate in a federal EMR incentive program.
- Research and create a **short** list of vendors that meet your technical requirements.

ASK COLLEAGUES THE RIGHT QUESTIONS:

1. When did you install your EMR?
2. How long was the installation/implementation process?
3. How would you describe the installation/implementation process?
4. Was the system as user friendly as the demonstration by the salesperson?
5. How many patients per hour/per day did you (and your partners) see before the installation/implementation of your EMR?
6. How many did you see after?
7. Approximately how much more time do you devote to entering exam data into your EMR now compared to how you documented exams before you began using an EMR?
8. How do you like the quality of the EMR-generated exam notes?
9. Have you had to hire scribes to enter data for you? If so, how many and what is their annual cost?
10. Has your EMR completely eliminated the paper charts in your practice?
11. Given your practice's experience with your EMR, would you recommend it to a similar practice?

- Prepare technical requirements from your workflow analysis and other practice needs and match them to the products and services a vendor(s) offers.
- Develop evaluation criteria to maintain consistency when ranking vendors (e.g., cost, usability, integration with current technology, depth of training and technical support).
- Involve representatives from all areas of your practice in the decision process.
- Prepare for health IT vendor demonstrations with detailed questions and requirements.

- Ask for—and follow up on—referrals, testimonials and recommendations from vendors.

Additional questions and concerns to consider during this step:

- Evaluate your network (wired vs. wireless) to make sure the new devices can actually connect to the new system. Tablets and mobile devices are very useful, but only if they are able to readily connect to the network.
- Will you need ergonomic arms? These allow monitors, keyboards and mice to be clamped onto a desk top or mounted to a wall to enable them to swing out or tilted to a more convenient surface.
- Will you use scribes? What is the best equipment for them to use?
- What is the imaging functionality? Does it allow the user to manipulate or view multiple images?

To help you manage and become more familiar with all of the new hardware (and software) you will be adding to your office, do what most IT companies do:

- Set up a test environment to test the use of all of the products and peripherals together; server, workstation, printer and scanner. You can also use this set up to view and practice on the software.
- Finally, install all of the hardware you're going to be deploying about a month prior to going live. This will give you and your staff the opportunity to become accustomed to computer use and the technology.

Security: As you setup your EHR system, carefully consider who on your staff should have access to which data and who maintains it. This will allow you to setup the appropriate login rights to maintain security.

Equipment Interfaces: How do you want data transferred from equipment? Are you utilizing

interfaces? There are a number of equipment interfaces available that facilitate paperless entry. Do you want to replace equipment that is too old to interface? Or do you want to continue with data entry?

Backup System: Have multiple methods of backup and recovery. Test your backup system several times before going live.

Step 3: Implementation/Right Fit

You will work closely with your health IT vendor during the implementation phase to determine your implementation strategy and schedule.

- Plan your exam room and office setup according to your office workflow. Make a diagram and change, or accommodate the flow of information from task-base to task-base.
- Create a plan for how to handle paper charts and a system for archiving records

Paperless timeline examples include:

- No scanning—plan to pull paper charts three times after full use of EMR is accomplished. Date stamp each time used and after the third pull, file it.
- Have the provider identify key portions of chart to scan during patient’s first electronic visit, scan it and file.
- Pull next week’s appointments and scan key portions before patient’s first electronic visit, give chart to provider for first visit only, then file.
- Prepare a business continuity plan in case of a natural disaster or power outage.
- Determine how you will work with your staff and your patients in implementing a new process.
- Consider how long you may need vendor-provided technical support and trainers on-site after implementation. Plan financially to use them for an additional period of time, if you believe your practice will need it.

MAKE SURE IT IS THE RIGHT FIT:

One of the certain roads to EMR failure is to try and force your practice to adapt to software designed to support the “average practice.” As you evaluate systems, seek out solutions which are flexible and allow you (not just your EMR vendor) to easily customize all parts of the software.

Once your EMR software is installed, and before you go much further down the path installing it on everyone’s computers, **have your Implementation Team evaluate what customization will be required to your EMR software by taking the following steps:**

Thoroughly review your software exam screen setup. It’s essential that all stakeholders spend time going through all parts of the EMR software, including reviewing:

- All exam layouts
- All drop-down lists, libraries and pop-up’s
- The optional “EMR Notes” sections where additional information can be entered such as Optical Recommendations, Test Findings, etc.
- Assessment & Plan pick lists
- Complaints and HPI list
- Any other information generated by your EMR software, including printouts, exam summaries, and letters

PATIENT & STAFF AREAS:

- Have a good understanding of what the patient and staff flow will be when the EMR system is functioning in your existing space. This is essential for planning where to place the new EHR equipment.

COMPUTER PLACEMENT:

- Computers will need to be in a convenient location in the office so that staff can easily look up or enter data into the record. Some practices find it helpful to have two monitors. Also, consider if you need printers where staff members will be handing printed materials to patients.

ADDITIONAL POWER & NETWORK WIRING:

- Depending on where the hardware needs to be placed, will you need to run any additional electrical and network wiring? Will other work areas need to be created? Exam room considerations – how will the computer be located to maintain eye contact with the patient?

PERFORM A DETAILED ANALYSIS OF YOUR CURRENT PROCESSES:

- Pay attention to and look for steps, actions, and sub-processes that you would ordinarily take for granted.
- Analyze the flow of data, paper documents, and patients. These are all interrelated and lead to either an efficient or a sloppy practice.
- Look for opportunities for improved efficiency. Use the tools available in your EMR system to design new work flows and develop a plan to transition to them.
- Spend the time to actually shadow patients through the practice. Do this for a number of different appointment types.
- Be detailed in your analysis and document every action or process.
- Watch for peripheral hardware or systems that might have to interact with your new system, including bar code printers, bar code readers, printers and external data transfer.
- The next step is to create new processes which take advantage of the things you do well and incorporate new processes, (or altered processes) to help improve efficiency and allow you to incorporate electronic data flow:.
- Let one of your goals be to handle things only once and input data only once.
- Accept that your staff WILL have to do things differently, and it will take time for them to get comfortable with the changes.
- Consider making changes to your physical facility to best accommodate EMR and electronic data flow (see further facility considerations in the next section).

- Now is a good time to consider upgrading diagnostic equipment. This is especially important if your current equipment does not support some level of integration with your EMR software.
- Think about physical changes in your exam lanes to accommodate computers / monitors.
- Since the data is now going to be electronic, you might need to make computers available in more places and available to personnel who might not have needed their own computer in the past, a small investment compared to the efficiency gains.

Step 4: Training/Maintenance

Most practices will encounter problems with:

- 1) Lack of planning or lead time
- 2) Not enough training.
- 3) Not enough time for training.

CREATE A COMPREHENSIVE TRAINING PLAN:

- Who needs to be trained?
- Who will be posting and coding the exam visits?
- Is your clinical staff trained to do this?
- Who will do the training?

Doctors and staff should practice familiarizing themselves with the program from their home PCs or before or after hours on the office computers using vendor-supplied online and tutorial training. It is also suggested that the office have several computers available so that staff can practice, using actual patient charts. It is helpful to have some space dedicated for ongoing EHR training.

SCHEDULE PRACTICE SESSIONS:

Once you've customized your EMR system, you can then begin to have all clinical staff practice with real patient data. A good method is to meet in the afternoons and use paper charts generated during the

day as examples for your practice sessions. The practice sessions accomplish several things:

- Identify problems or areas of confusion, and then implement necessary changes.
- Become proficient with the use of the EMR module without the added pressure of having a patient sitting in front of you in the exam chair.
- Get real medical record info loaded into the EMR records.
- Improve speed and accuracy.

For detailed application-specific training, it is well worth the investment to ***bring your EMR vendor in to train.***

- Go through your complete patient flow using a simulated patient and real data. This step is going beyond entering the data into the EMR, and taking it to the point of practicing through the entire patient visit.
- You should also simulate different kinds of visits, especially if your practice has a number of specialists – go through a glaucoma visit, a retina evaluation, a new patient general visit, etc.

Step 5: Go Live

EMR is an Ongoing Process, Not an Event

- Have your vendor trainer, the in-house trainer or power user, and project manager present at your go live day.
 - Schedule lightly for the first week or so allowing for more time between patients. Some practices choose to use EMR initially only for new patient visits or some other sub-set of their full patient load; but this isn't necessarily the best method. If you've gone through all the considerations in this document, planned accordingly, practiced appropriately, and lightened your schedule, you should have few problems entering all patients' visits into the EMR right from the start.
 - Have a contingency plan when problems occur with the EMR or something else that you haven't planned for. Try to avoid falling back on paper charts if you can,
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but if you must, enter data on paper and then complete the EMR at the end of the day.

- Display signage in the office to explain the use of a new computer system.

OTHER RECOMMENDATIONS FOR MANAGING YOUR EHR PROJECT INCLUDE:

- Clearly define the goals for what you want the EMR to do and make decisions based on these goals. Be realistic. If the physicians are not computer "savvy" it will take time.
- Take small steps.
- Ensure your Project Manager sets aside the specific time to: coordinate pre-implementation decisions, schedule regular meetings with the implementation team and perform all of the other tasks needed to keep the project moving forward.
- Consider visiting other practices with the software of choice to discuss their implementation experience.
- Welcome staff and physicians to voice their concerns and fears about the implementation process so that they can be taken into consideration.
- Create a positive environment and get everyone excited about the implementation.
- Develop a timeline that everyone can access, so that everyone knows where you are in the process and everyone knows what they're supposed to be doing.
- Maintain ongoing training and development activities to gain maximum performance from your investment.

Conclusion

The Goal of a Successful EMR Implementation:

To achieve "meaningful use", but also:

Revenue, profitability, productivity, efficiency, data management capabilities, improving quality of care and patient satisfaction.

A workflow analysis and redesign plan is the apex of data migration from paper charts to an EHR system. This redesign strategy begins by analyzing how information in your medical practice moves between departments to ensure operational and clinical tasks are completed and documented. Everyone's role is IMPORTANT on both the paper and EMR side. A workflow analysis ensures that key information will be transferred into the EHR and available to the providers and professionals in a secure and manageable format.

EHR can be successfully implemented ONLY when physicians are totally committed to the task. Moving from a career of practicing medicine using paper charts to documenting everything on a computer isn't a small change. It is a sea of change! The physicians have to be the driving force behind it, or the EMR implementation will fail.

A temporary drop in patient throughput during EMR implementation is no reason to avoid EMR technology, especially with government incentives for adoption and looming penalties for non-compliance. More importantly, ICD 10 is around the corner. According to several industry studies, practices that deploy an EMR can expect to enhance the quality of patient care as well as provide more cost-effective care delivery. And with some careful planning of the implementation, training and workflows, the impact on physician productivity at go-live can be mitigated.

II. QUESTIONS TO ASK WHEN SELECTING A VENDOR:	Vendor 1	Vendor 2	Vendor 3
<u>Ophthalmology Specific Customization and Support?</u>			
Is your EHR system designed specifically for ophthalmologists and is it an identifiable area of focus for your company?			
How many ophthalmologists use your system?			
Do you employ support staff that are trained and certified in ophthalmology?			
What certification/education/training do they have?			
Describe the training and support you offer to ensure that our practice will be successful?			
How many trainers will I have available for implementation, Going Live and follow up? Is there an extra charge? (Two trainers preferred - one for front office and one for back office)			
Can I add data fields? <ul style="list-style-type: none"> • Patient Demographics • Medical Records • Eyewear orders • Contact Lens Orders • Claim information 			
Can I add objects to the screens? <ul style="list-style-type: none"> • Check boxes • Data entry fields with pick lists • Memo fields that hold an unlimited amount of documentation 			
Can I attach rules to those objects that will automatically perform functions for me, including: <ul style="list-style-type: none"> • Make sure the data is correct • Limit pick list options based on conditions or findings • Populate one or more other fields to save me time and key strokes • Perform a calculation • Launch a website • Create a report • Write a letter 			
Can I define my own audit report? <ul style="list-style-type: none"> • Charts with missing information • Information entered incorrectly • Bonus opportunities 			
Can I customize patient documents? <ul style="list-style-type: none"> • Examination reports • Patient letters • Referring physician letters • Education materials 			

Can I create my own reports, including: <ul style="list-style-type: none"> Financials Appointments Staff Productivity Doctor Productivity Trend Analysis 			
Does it allow different screens based on job responsibility?			
QUESTIONS TO ASK WHEN SELECTING A VENDOR:	Vendor 1	Vendor 2	Vendor 3
<u>Certified for EHR and eRx Incentive Programs?</u>			
Are you ONC ATCB CCHIT Meaningful Use Certified for all Stages? (satisfies EHR system requirements for Medicare/Medicaid incentives)			
Will your EHR system satisfy all stages of Meaningful Use (Stages 1, 2, 3 and beyond)?			
Will your staff be readily available to interpret and properly process all reports with regard to Meaningful Use and EHR incentive program requirements?			
Will your EHR system convert to ICD-10, and what stage of beta testing is your company at?			
Is your e-Prescribing system completely integrated with the EHR? For example, can it send and receive patient medications & allergies to the prescribing system? Can Rx refill requests be received electronically?			
<u>General Questions</u>			
How many years of EHR implementation experience do you have?			
Will your system support my ASC?			
Do you offer integrated patient web registration? (Patient Portal)			
Do you offer a comprehensive hosted solution? "ASP/Cloud" based or is your system "server" based?			
What financing options can you offer me to help minimize cost?			
Do you offer complete revenue cycle management to accelerate my cash flow, including: <ul style="list-style-type: none"> Direct electronic claims Automated remittance posting Real-time insurance eligibility verification Collection analysis 			
What type of image management system does your software include or does it require a third party vendor to effectively manipulate and manage images?			

III. Imaging Considerations for Ophthalmology

Planning for the electronic medical record includes consideration of how your practice will handle image management. The electronic medical record products may handle imaging, although you will want to closely scrutinize the sophistication of the software application which is included, or they may work with a partner product that the practice will need to purchase

A starting point is an assessment of how important quick access and manipulation of imaging is to your practice. Consider what portion of your visits include images that are part of your patient evaluation, or history and treatment plan? What is your current equipment inventory and how is it used? Is any of your equipment outdated and unable to be integrated? Is your infrastructure and network ready for images? With the use of digital radiology images in practices, patients are familiar with digital imaging as part of a modern practice.

There are industry standards for imaging- DICOM (Digital Imaging and Communications in Medicine) and IHE (Integrated Healthcare Enterprise). These standards are being adopted in the area of ophthalmology. The image standards and the IHE interoperability standards are core to having your electronic medical record system and imaging services work together and your practice workflow efficient. By selecting products which are compatible with your equipment purchases that use these standards, you are protecting your investment for ongoing development and improvements.

The instruments, along with practice management EMR and imaging systems must work together to support the workflow. It begins with patient registration, through the image request, schedule, testing, performance, storage, routing and presentation for the ophthalmologist to view, interpret results, diagnosis and include it in a treatment decision. This entire process must be considered in planning for EMR systems. Vendor discussions include interoperability industry standard HL7 messaging, DICOM transactions and workflow support.

A baseline starting point is an inventory of the instruments and equipment that are installed at the practice. A plan to connect each instrument to the EMR or imaging system will be needed. There are various technical tactics to accomplish this objective.

Items to be included in the instrument inventory are:

- Equipment Name
- Equipment Location
- Volume of use per day
- Manufacturer
- Model Number
- Software Version
- Network Connection
- Print output

Considerations include:

- Planned upgrades,
- Age
- Replacement life cycle,
- Location changes.

Selection and Implementation:

Do you want to have your EMR vendor handle your imaging process? This approach focuses your selection on EMR and Imaging products that can effectively do both. The findings from your assessment about the volume and kind of imaging you do will be a key factor in your strategy choice. Large volume practices will likely want to have an EMR and specialized imaging product.

Considerations include:

- Vendor Background & Strategy & Experience in working with Electronic medical records.
- Vendor Implementation of how Images are captured
- Vendor Implementation of how Images are viewed
- Vendor Implementation of how Images are Stored and accessed.
- Infrastructure recommendations for fast and reliable access
- Obtaining and checking references for practices of similar size and scope

Industry Changes are occurring

Moving To	From
Viewing all the data gathered from <i>all</i> the different types of devices & instruments at one viewing station. Fundus Imaging, OCT, Corneal Topography, Perimetry, HRT, etc.	Printed reports from each instrument or separate viewing of imaging.
Ability to interpret and annotate. Flexible viewing capabilities. Provider preferences are anticipated by the systems.	Interpretations are printed on paper reports or results re-entered in the EMR. Manual entry and matching of instrumentation and electronic reporting for EMR.
Ability to access and utilize instrument software from the imaging system anywhere, anytime	Hands on at the instrument only
Ability to compare prior images- central database identifies each image, and knows where it is stored. Storage is in the protected “data center” with professional data management. Images available anywhere, anytime	Image archive and history is at each instrument. Image storage is has protected health information at each instrument. Little back up. No central listing.
Once a patient is registered, all the appropriate procedures are scheduled, at the instrument, with accurate patient information	Staff key in patient identification at each instrument. Patient ,mismatches or spelling errors must be corrected.
Legacy electronic instruments (non DICOM standard) require an integration technical strategy.	Legacy instruments are islands.
Standards reduce propriety & expensive custom software upgrades	Interface development for every type of instrument
Charge Capture and chart documentation are tied together for accurate revenue capture.	Charges for image services may be missed or incomplete.
Technical Support – software upgrades will not break interfaces, vendor to vendor specifications and testing process is in place.	Instruments are managed separately from your IT systems.
Secure seamless access to both systems	Separate security log in and tracking for each system

Sample Functional Check list for Product Evaluation
How is the image directly (electronically) identified/matched to the patient in the EMR?
How is the image labeled to match the patient in the EMR if not done electronically?
Is there a patient list shared with the EMR?
Is there a work list for the tech (at the equipment)?
Does the work list status tie to the EMR (order)?
How is the labeling of the image handled?
How does that labeling tie/appear in the EMR?
How do changes in the image labeling move between the Image System and the EMR?
Can notes or comments be made on the image? By the tech or provider?
Can you draw or add pointers to the image? By the tech and provider?
Are the notes or comments about the image stored with the image or with the report? Is there an associated audit log?
Are the notes or drawings carried forward to that the drawing displays changes from previous drawings?
How is the interpretation report handled in the Image system?
How is the interpretation report handled in the EMR system?
Can the images be easily reviewed with the patient?
How are images available for any referring doctor reports or consultations?
Viewing- Does the tech need to arrange the images for the doc?
Viewing- Are the images automatically arranged and easily accessible for the provider?
Viewing-Are there individual provider/user preference settings available for each provider?
Viewing-Preferences follow provider user to all locations
Viewing-How will images from prior visits be available?
Viewing- How will images from prior visits at other locations be available?
Viewing- Side by side comparisons of images
How will images be accessed and utilized in the surgical centers?
Photos of a surgical patient taken with a camera?
Charge capture- Matching of Instrument testing performed to charges
Interpretation stored where?
Interpretation Report completion tracking?
How do I search to find an image?
Where is the image stored?
Image accessibility from all locations and by remote access?
Is the image compressed?
Is the viewer considered "web friendly?"
Is there remote access?
Security/Log in Audit features
Customer service/support hours – local/national?

IV. THE MEDICARE EHR INCENTIVE PROGRAM

The Medicare EHR Incentive Program started in 2011 and will continue through 2016. The last year to begin participation is 2014. The program will provide incentive payments to eligible professionals (EPs) who demonstrate [Meaningful Use of Certified EHR technology](#).

To qualify for Medicare EHR incentive payments, EPs must successfully demonstrate and attest to meaningful use for each year of participation in the program.

The reporting period for an EP who started by October 3, 2011 or 2012 is 90 continuous days. The reporting period for all subsequent years is the entire calendar year.

- An EP can receive up to \$44,000 over 5 years under the Medicare EHR Incentive Program.
- To get the maximum incentive payment, EPs must begin participation and be meaningful users of EHR by 2012.

Eligible Professionals

- Doctor of medicine or osteopathy
- Doctor of dental surgery or dental medicine
- Doctor of podiatry
- Doctor of optometry
- Chiropractor

Overview

[REGISTER](#) - as soon as possible Note: You can register before having an EHR system installed.

Make sure you have enrollment records in the appropriate systems. You'll need:

- A National Provider Identifier (NPI)
- An enrollment record in the Provider Enrollment, Chain and Ownership System (PECOS) ** Register for the EHR Program even if you do not have an enrollment record in PECOS (which is required for all Medicare eligible professionals).

[CERTIFIED TECHNOLOGY](#) - Use certified EHR technology. To receive incentive payments, make sure the EHR technology you're using or are considering buying has been certified for all stages of meaningful use by the Office of the National Coordinator for Health Information Technology.

[MEANINGFUL USE](#) - Be a Meaningful User. You have to successfully demonstrate "meaningful use" for a consecutive 90-day period if your first year is 2012 (and for a full year in each subsequent year) to receive EHR incentive payments.

[ATTESTATION](#) - Attest for incentive payments. To get your EHR incentive payment, you must attest (legally state) through Medicare's secure Web site that you've demonstrated "meaningful use" with certified EHR technology.

PAYMENT – The Medicare EHR Incentive Payment will be made approximately 4 to 8 weeks after an EP meets the program requirements and successfully attests they have demonstrated meaningful use of certified EHR technology.

Registration

A step by step registration guide is available on the [ASCRS EHR webpage](#) under Government Relations/Hot Topics and via this link:

http://www.cms.gov/EHRIncentivePrograms/Downloads/EHRMedicareEP_RegistrationUserGuide.pdf

Third Party Registration Designation:

EPs are now permitted to allow a practice manager, administrator, or any third party to register in their place. *Users registering or attesting on behalf of an EP must have an Identity and Access Management System (I&A) web user account (User ID/Password) and be associated with the EP's NPI.*

Certified Technology

EHR technology must be tested and certified for meaningful use by an Office of the National Coordinator (ONC) Authorized Testing and Certification Body (ATCB) in order for a provider to qualify for EHR incentive payments.

ASCRS has a dedicated [EHR/Meaningful Use webpage](#) with resources to assist you, including a portal to the **ONC Certified HIT Product List (CHPL)** a comprehensive listing of [Complete EHRs and EHR Modules](#) that have been tested and certified by an ONC-Authorized Testing and Certification Body (ONC-ATCB). Whether you just want to browse various types of Meaningful Use certified EHR systems or are ready to select or implement a system, ASCRS can provide you with the resources to help guide you through the process.

Meaningful Use of EHR – Stage 1

Meaningful use of certified EHR is key to receiving incentive payments. Defined by CMS as:

- The use of a certified EHR in a meaningful manner, such as e-prescribing
- The use of certified EHR technology for electronic exchange of health information to improve quality of health care
- The use of certified EHR technology to submit clinical quality and other measures

“Meaningful use” means providers need to show they're using certified EHR technology in ways that can be measured significantly in quality and in quantity. CMS is phasing in MU objectives in Stages 1, 2 and 3.

STAGE 1 MEANINGFUL USE:

- Electronically capturing health information in a coded format
- Using that information to track key clinical conditions
- Communicating that information for care coordination purposes
- Initiating the reporting of clinical quality measures and public health information

EPs must report on the following:

1.) Core Measures - all 15 of the core measures

Scope of Practice Exclusion - Core Measure 8 - Record and chart vital signs (height, weight, blood pressure) - it is not relevant to ophthalmology.

2.) 5 out of 10 of the menu set objective measures; at least 1 public health measure*** must be selected.

3.) A sum total of up to 9 Clinical Quality Measures (CQM); 3 core, up to 3 alternate core, and 3 additional CQMs. If an EP reports a denominator of 0 for any of the 3 core measures, the EP must record for an alternate core CQM to supplement the core measure. Therefore, an EP may report a minimum of 6 and a maximum of 9 CQMs depending on the resulting values in the denominators for the core measures as reported from their certified EHR.

Quality Measures

- EP's must report 3 Core Clinical Quality Measures, substituting from the list of 3 Alternate Core Measures, if needed. 3 additional measures out of the list of 38 are also required. 4 measures are ophthalmology specific.

Public Health Measures***

- When selecting the 5 meaningful use menu measures on which to report—from the list of 10 possibilities you must include at least one of the two measures from the “public health” category:
 - Perform a test of the EHR’s capacity to submit electronic data to immunization registries
 - Perform a test of the EHR’s capacity to report electronic syndromic surveillance data to public health agencies.

(Note that none of the public health measures are applicable to ophthalmology, resulting in a ‘0’ in the denominator.)

Meaningful Use - Stages 2 and 3

Stage 2: Delayed until 2014; In addition to continuing to use all functionality from stage 1, physicians will be required to use an EMR to send and receive information such as lab orders and results. Proposed stage 2 criteria are currently out for public comment.

Stage 3: Estimated to begin in 2015; Continue fulfilling criteria from stages 1 and 2 plus clinical decisions support for priority public health conditions, accessing comprehensive patient data and improving population health. Stage 3 criteria have not yet been defined in detail.

Reporting Period

For the first year an EP applies for and receives an incentive payment, the EHR reporting period will be 90 days for any continuous period beginning and ending within the calendar year.

For every year after the first payment year, the EHR reporting period will be for the entire calendar year. CMS cannot definitively state that if the first year is 2013 or after that the reporting period would be 90 days and through attestation. It is also possible that the definition of Stage 1 will change for 2013 to take into account revised standards and new capabilities.

If a physician achieves “meaningful use” in one year, but does not achieve it the subsequent year, that “skipped” year counts toward the maximum program years allowable. For example, if a physician achieves Year 1 meaningful use in 2011, but not in 2012, CMS considers 2012 the physician’s second year of program participation. Therefore, 2013 is Year 3 for the physician.

Attestation

To attest for the Medicare EHR Incentive Program in your first year of participation, you will need to have met meaningful use for a consecutive 90-day reporting period. If your initial attestation fails, you can select a different 90-day reporting period that may partially overlap with a previously reported 90-day period.

During attestation, CMS requires each eligible professional provide a CMS EHR Certification ID or Number that identifies the certified EHR technology being used to demonstrate meaningful use. This unique CMS EHR Certification ID or Number can be obtained by entering the certified EHR technology product information at the Certified Health IT Product List (CHPL) on the ONC website: <http://healthit.hhs.gov/chpl>

Reporting in Subsequent Years

Reporting for the Medicare EHR Incentive Program in subsequent years will require having met meaningful use standards for a full year. Please note the reporting period for eligible professionals must fall within the calendar year.

CMS will continue attestation for most of the meaningful use objectives but plans to initiate the electronic submission of the Clinical Quality Measures.

EP’s Working in Multiple Groups

In cases where the EP is associated with more than one practice, EPs must select one taxpayer identification number (TIN) to receive any applicable EHR incentive payment. Only one payment under a single TIN will be made. Incentives are based upon the individual physician’s Tax ID (TIN) number. During the registration process, you must provide one TIN which you would like the incentive payment to be made.

In the case of a qualifying EP who furnishes covered professional services in more than one practice, estimated allowed charges are determined based on claims submitted for the EP’s covered professional services across all such practices.

Medicare Incentive Payment

Incentives are based upon the individual physician’s Tax ID (TIN) number. During the registration process, you must provide one TIN under which you would like the incentive payment to be made. If you begin by 2012, an EP can qualify for up to \$44,000 over five years under the Medicare program.

EPs who are meaningful EHR users, are eligible for incentives based on an amount equal to 75% of their allowed Medicare Part B charges for covered professional services based on claims submitted no later than two months after the end of the payment year. For example, Wednesday, February 29, 2012 is the deadline for EPs to submit any pending Medicare Part B claims from CY2011. Therefore, EPs have 60 days in 2012 to submit claims for allowed charges incurred in 2011.

Incentive payments will be made electronically on a rolling basis by a single payment contractor as they determine that an EP has demonstrated meaningful use for the applicable reporting period, and has reached the threshold for maximum payment. CMS will deposit payment in the first bank account on file. It will appear on your bank statement as "EHR Incentive Payment."

Maximum Total Amount of EHR Incentive Payments for a Medicare EP						
		First CY EP Receives an Incentive Payment				
		2011	2012	2013	2014	2015 and later
Calendar Year	2011	\$18,000				
	2012	\$12,000	\$18,000			
	2013	\$8,000	\$12,000	\$15,000		
	2014	\$4,000	\$8,000	\$12,000	\$12,000	\$0
	2015	\$2,000	\$4,000	\$8,000	\$8,000	\$0
	2016		\$2,000	\$4,000	\$4,000	\$0
	Total	\$44,000	\$44,000	\$39,000	\$24,000	\$0

Electronic Prescribing (eRx) and EHR

If a physician chooses to participate in the Medicare EHR Incentive Program, they cannot participate in the Medicare eRx Incentive Program simultaneously in the same program year.

Payment Reductions Begin in 2015

- 2015—1% reduction in Medicare physician fee schedule covered amount
- 2016—2% reduction in Medicare physician fee schedule covered amount
- 2017 and each subsequent year—3% reduction in Medicare physician fee schedule covered amount

Resources and Links

ASCRS EMR/Meaningful Use Webpage

<http://www.ascrs.org/meaningfuluse-emr/index.cfm>

CMS EHR Incentive Program Main Page

<https://www.cms.gov/ehrincentiveprograms/>

CMS Attestation Webpage

https://www.cms.gov/EHRIncentivePrograms/32_Attestation.asp#TopOfPage

Contact Information for EHR Incentive Program Inquiries

https://www.cms.gov/EHRIncentivePrograms/Downloads/Regional_Point_Of_Contacts_10-12-10.pdf

List of Certified EHR Technology (CHPL)

<http://onc-chpl.force.com/ehrcert>

EHR INFORMATION CENTER

1-888-734-6433. Hours of Operation: 7:30 a.m. – 6:30 p.m. (Central Time) Monday through Friday, except federal holidays.



Demonstrating Meaningful Use

Stage 1 Requirements for Eligible Providers Using Certified EMR Technology

The chart below lists the measures (and specialty exclusions) that eligible providers must demonstrate to become a Stage 1 meaningful user to qualify for Medicare or Medicaid incentives. The reporting periods for 2011 (if you began by October 3) and 2012 require eligible providers to document meaningful use for 90 consecutive days through attestation.

Stage 1 Meaningful Use Overview for Ophthalmology

EPs must report:

1.) All 15 of the Core Set Objectives and Measures

- ***Scope of Practice Exclusion - Core Measure 8 - Record and chart vital signs (height, weight, blood pressure) - all three vital signs have no relevance to the scope of the EPs practice.***

2.) 5 out of 10 of the Menu Set Objectives and Measures; at least 1 public health measure*** must be selected.

3.) A minimum of 6 Clinical Quality Measures (CQM) starting with the 3 Core Clinical Quality Measures. If your EHR reports zero in the denominator on one of the Core Clinical Quality Measures, replace it with one of 3 Alternate Core Clinical Quality Measures. Choose 3 Additional Clinical Quality Measures (from list of 38) that are relevant to your scope of practice.

Clinical Quality Measures

- CQM do not have thresholds that you have to meet—you simply have to report data on them.
- Certified EHR will produce a report with clinical quality measure data, and you must enter that data exactly as the certified EHR produced it.
- Ophthalmology-Specific Additional Clinical Quality Measures:
 - 12. Primary Open Angle Glaucoma – Optic Nerve Head Evaluation (PQRS Measure 12)
 - 13. Diabetic Retinopathy – Documentation of Presence or Absence of Macular Edema and Level of Severity of Retinopathy (PQRS Measure 18)
 - 14. Diabetic Retinopathy – Communication with the Physician Managing Ongoing Diabetes Care (PQRS Measure 19)
 - 22. Diabetes – Eye Exam (PQRS Measure 114)

- Which will often be the case for ophthalmology; if all three of the core/alternate core CQMs have zeros for the denominators (this would imply that the physician’s patient population is not addressed by these measures) then the EP is still required to report on the three additional clinical measures.

Public Health Measures*** (Note that none of the public health measures are applicable to ophthalmology, resulting in a ‘0’ in the denominator.)

- When selecting 5 out of the 10 Menu Set Objectives and Measures on which to report—you must include at least one of the two measures from the “public health” category:
 - Perform a test of the EHR’s capacity to submit electronic data to immunization registries
 - Perform a test of the EHR’s capacity to report electronic syndromic surveillance data to public health agencies.

Stage 1 Meaningful Use

15 Core Measures + 5 Menu Measures + 6 Clinical Quality Measures = Meaningful Use

The following are charts of meaningful use objectives that must be met:

15 Core Set Objectives and Measures (all are required)

1. Use computerized physician order entry (CPOE) for medication orders	More than 30% of all unique patients with at least one medication in their medication list have at least one medication order entered using CPOE. Exclusion: EPs who write fewer than 100 prescriptions in reporting period.
2. Implement drug-drug and drug-allergy checks	Enable drug-drug and drug-allergy checking features for entire reporting period
3. Generate and transmit permissible prescriptions electronically (e-Rx)	More than 40% of all permissible prescriptions are transmitted electronically using certified EHR technology. Exclusion: EPs who write fewer than 100 prescriptions in reporting period.
4. Record patient demographics (preferred language, gender, race, ethnicity, date of birth)	More than 50% of all unique patients have demographics recorded as structured data.
5. Maintain up-to-date problem list of current and active diagnoses	More than 80% of all unique patients have at least one entry recorded as structured data or an indication that they have no problems.
6. Maintain active medication list	More than 80% of all unique patients have at least one entry recorded as structured data or an indication that patient is not currently prescribed any medication.

7. Maintain active medication allergy list	More than 80% of all unique patients have at least one entry recorded as structured data or an indication that the patient has no known medication allergies.
8. Record and chart vital signs (height, weight, blood pressure)	More than 50% of all unique patients age 2 years or older have height, weight and blood pressure recorded as structured data. Exclusion: All three vital signs have no relevance to the scope of the EPs practice; those who see no patients age 2 or older.
9. Record smoking status for patients 13 years or older	More than 50% of all unique patients age 13 years or older have smoking status recorded as structured data. Exclusion: EPs who see no patients age 13 years or older.
10. Implement one clinical decision support rule	Implement one clinical decision support rule relevant to specialty or high clinical priority along with the ability to track compliance with that rule.
11. Report ambulatory clinical quality measures to CMS and the States	For 2011: provide aggregate numerator, denominator and exclusions through attestation; for 2012: electronically submit the clinical quality measures. *Exclusion: Specialists can report zeroes for both the numerator and denominator of the required quality measures if none are appropriate to the scope of their practice.
12. Provide patients with an electronic copy of their health information (including diagnostic test results, problem list, medication lists, allergies) upon request	More than 50% of all patients who request an electronic copy of their health information are provided it within 3 business days.
13. Provide clinical summaries for patients for each office visit	Provide clinical summaries to patients for more than 50% of all office visits within 3 business days.
14. Capability to exchange key clinical information (problem list, medication list, allergies and diagnostic test results) among providers of care and patient authorized entities, electronically	Perform at least one test of certified EHR technology's capacity to electronically exchange key clinical data.
15. Implement systems to protect privacy and security of patient data maintained by certified EHR technology	Conduct or review a security risk analysis, implement security updates as necessary, and correct identify security deficiencies as part of the risk management process.

10 Menu Set Objectives and Measures (must meet 5)

1. Implement drug-formulary checks	Drug formulary check system is implemented and has access to at least one internal or external drug formulary for the entire reporting period.
2. Incorporate clinical lab-test results into certified EHR	More than 40% of all clinical laboratory tests ordered during EHR reporting period whose results are either in a positive/negative or numerical format are incorporated in certified EHR as structured data. Exclusion: EPs who order no lab tests in reporting period.
3. Generate lists of patients by specific conditions	Generate at least one report listing patients of the EP with a specific condition to use for quality improvement, reduction of disparities, research or outreach.

4. Send patient follow-up/preventive care reminders	Send reminders for preventive/follow-up care to more than 20% of all patients 65 years or older or 5 years old or younger.
5. Provide patients with timely electronic access to their health information, including lab results, problem list, medication lists and allergies	Provide more than 10% of all patients timely (within 4 business days of being updated in the EHR) electronic access to their health information; subject to the EPs discretion to withhold certain information. Exclusion: If no patient asks for electronic access to EHR during reporting period.
6. Identify patient-specific education resources and provide those resources to the patient if appropriate	Identify and provide patient-specific education resources to more than 10% of all unique patients seen.
7. Perform medication reconciliation for a patient from another care setting or provider of care	Perform medication reconciliation for more than 50% of transitions of care in which the patient is transitioned in the care of the eligible provider.
8. Provide summary of care record for each transition of care and referral	Provide a summary of care record for more than 50% of patient transitions or referrals.
9. <i>Public Health Measure***</i> Submit electronic immunization data to immunization registries or Immunization Information Systems	Perform at least one test of certified EHR technology's capacity to submit electronic data to immunization registries and follow-up submission if the test is successful (unless the immunization registry cannot accept electronic submissions).
10. <i>Public Health Measure***</i> Submit electronic syndrome surveillance data to public health agencies	Perform at least one test of certified EHR technology's capacity to provide electronic syndromic surveillance data to public health agencies and follow-up submission if the test is successful (unless the public health agency cannot accept electronic submissions).

***Public Health Measures

Core Clinical Quality Measures (all are required)*	Alternate Core Clinical Quality Measures
NQF 0013 Hypertension: Blood Pressure Measurement	NQF 0024 Weight Assessment and Counseling for Children and Adolescents
NQF 0028 Preventive Care and Screening Measure Pair: Tobacco Use Assessment Tobacco Cessation Intervention	NQF 0041/PQRS110 Preventive Care and Screening: Influenza Immunization for Patients less than or equal to age 50
NQF 0421/PQRS 128 Adult Weight Screening and Follow-up	NQF 0038 Childhood Immunization Status
<i>*If an EP reports a denominator of 0 for any of the 3 core measures, the EP must record for an alternate core CQM to supplement the core measure. For ophthalmology, likely all 6 will have '0' in the denominator.</i>	

Ophthalmology-Specific Additional Clinical Quality Measures (CQM)

PQRS Measure 12: Primary Open Angle Glaucoma – Optic Nerve Head Evaluation	Percentage of patients aged 18 years and older with a diagnosis of POAG who have been seen at least two office visits who have an optic nerve head evaluation during one or more office visits within 12 months.
PQRI Measure 18: Diabetic Retinopathy: Documentation of Presence or Absence of Macular Edema and Level of Severity of Retinopathy	Percentage of patients aged 18 years and older with a diagnosis of diabetic retinopathy who had a dilated macular or fundus exam performed which included documentation of the level of severity of retinopathy and the presence or absence of macular edema during one or more office visits within 12 months.
PQRS Measure 19: Diabetic Retinopathy – Communication with the Physician Managing Ongoing Diabetes Care	Percentage of patients aged 18 years and older with a diagnosis of diabetic retinopathy who had a dilated macular or fundus exam performed with documented communication to the physician who manages the ongoing care of the patient with diabetes mellitus regarding the findings of the macular or fundus exam at least once within 12 months.
PQRS Measure 117: Diabetes – Eye Exam -	Percentage of patients 18-75 years of age with diabetes (type 1 or type 2) who had a retinal or dilated eye exam or a negative retinal exam (no evidence of retinopathy) by an eye care professional.

Additional Clinical Quality Measures (Must Report 3 of 38)

1. Diabetes: Hemoglobin A1c Poor Control
2. Diabetes: Low Density Lipoprotein (LDL) Management and Control
3. Diabetes: Blood Pressure Management
4. Heart Failure (HF): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy for Left Ventricular Systolic Dysfunction (LVSD)
5. Coronary Artery Disease (CAD): Beta-Blocker Therapy for CAD Patients with Prior Myocardial Infarction (MI)
6. Pneumonia Vaccination Status for Older Adults
7. Breast Cancer Screening
8. Colorectal Cancer Screening

9. Coronary Artery Disease (CAD): Oral Antiplatelet Therapy Prescribed for Patients with CAD
10. Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)
11. Anti-depressant medication management: (a) Effective Acute Phase Treatment, (b) Effective Continuation Phase Treatment
12. Primary Open Angle Glaucoma (POAG): Optic Nerve Evaluation
13. Diabetic Retinopathy: Documentation of Presence or Absence of Macular Edema and Level of Severity of Retinopathy
14. Diabetic Retinopathy: Communication with the Physician Managing Ongoing Diabetes Care
15. Asthma Pharmacologic Therapy
16. Asthma Assessment
17. Appropriate Testing for Children with Pharyngitis
18. Oncology Breast Cancer: Hormonal Therapy for Stage IC-IIIC Estrogen Receptor/Progesterone Receptor (ER/PR) Positive Breast Cancer
19. Oncology Colon Cancer: Chemotherapy for Stage III Colon Cancer Patients
20. Prostate Cancer: Avoidance of Overuse of Bone Scan for Staging Low Risk Prostate Cancer Patients
21. Smoking and Tobacco Use Cessation, Medical Assistance: a) Advising Smokers and Tobacco Users to Quit, b) Discussing Smoking and Tobacco Use Cessation Medications, c) Discussing Smoking and Tobacco Use Cessation Strategies
22. Diabetes: Eye Exam
23. Diabetes: Urine Screening
24. Diabetes: Foot Exam
25. Coronary Artery Disease (CAD): Drug Therapy for Lowering LDL-Cholesterol
26. Heart Failure (HF): Warfarin Therapy Patients with Atrial Fibrillation

27. Ischemic Vascular Disease (IVD): Blood Pressure Management
28. Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antithrombotic
29. Initiation and Engagement of Alcohol and Other Drug Dependence Treatment: a) Initiation, b) Engagement
30. Prenatal Care: Screening for Human Immunodeficiency Virus (HIV)
31. Prenatal Care: Anti-D Immune Globulin
32. Controlling High Blood Pressure
33. Cervical Cancer Screening
34. Chlamydia Screening for Women
35. Use of Appropriate Medications for Asthma
36. Low Back Pain: Use of Imaging Studies
37. Ischemic Vascular Disease (IVD): Complete Lipid Panel and LDL Control
38. Diabetes: Hemoglobin A1c Control (<8.0%)

Resources

Meaningful Use Attestation Calculator

<http://www.cms.gov/apps/ehr/>

Meaningful Use Core Measures

<http://www.cms.gov/EHRIncentivePrograms/Downloads/EP-MU-TOC.pdf>

EHR Incentive Program Electronic Specifications

http://www.cms.gov/QualityMeasures/03_ElectronicSpecifications.asp

Guide for Reading the EHR Incentive Program EP Measures

<https://www.cms.gov/QualityMeasures/Downloads/QMGuideForReadingEHR.pdf>