Electronic Health Records: A Guide to EHR Selection, Implementation and Incentives

Medicare EHR – Meaningful Use Incentive Payment Process and how to prepare for selecting/implementing an EHR system.

The ASCRS/ASOA Guide to EHR is a centralized, one stop source of information about EHR, Meaningful Use, the Medicare EHR Incentive Payment Process, and how to prepare for selecting/implementing an EHR system.

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For timely updates on the incentive programs and other important issues affecting your practice and your patients, visit the ASCRS Government webpage and continue to read the Washington Watch Weekly, published every Friday. Questions can be directed to Jenny Liljeberg, associate director of regulatory affairs, at jililjeberg@ascrs.org
5 STEP GUIDE TO EHR IMPLEMENTATION

Introduction

If you are reading this, you are taking a step in the right direction when it comes to implementing Electronic Health Records (EHR). 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 EHR selection and implementation.

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

1. EHR software isn’t or 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, training, system development or equipment upgrades
6. Underestimating initial cost of going electronic
7. Lack of measurable goals
8. Doctor’s use of EHR 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 EHR 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 EHR 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 EHR to do for you, your patients and your practice?

   - Reduction of paper
   - Reduction in transcription expenses
   - Better access to charts
   - More legible data
   - Improved tracking and reporting capabilities
   - Achieve the efficiencies by carefully planned implementation and use of the EHR system
   - Meaningful Use - using certified EHR 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 EHR 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](https://www.ascrs.org) and [ASOA](https://www.oag.org) in helping you determine what kind of EHR might be the best fit for your practice size/type/location.
4. MAP OUT YOUR WORKFLOW PROCESSES

- List daily, weekly, and monthly tasks and duties (rank them by complexity).
- Calculate completion times for each task; understand which tasks could easily become electronic.
- Practice mock clinics or at a minimum, 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, template development, workflow redesign, etc.)
- Additional implementation expenses such as scanning, space redesign, room set ups and viewing stations
- 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:

• EHR must be certified for all stages of meaningful use by certified technology vendors, particularly if you plan to participate in a federal EHR 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 EHR?
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 EHR?
6. How many did you see after?
7. Approximately how much more time do you devote to entering exam data into your EHR now compared to how you documented exams before you began using an EHR?
8. How do you like the quality of the EHR-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 EHR completely eliminated the paper charts in your practice?
11. Given your practice’s experience with your EHR, 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, and 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.

• Consider doing your own independent site visits to observe clinic workflow and system performance.

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. It also ensures that you have the performance speed and reliability you need in order to go live and operate efficiently.

**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 set up 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 EHR 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 and practice 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 EHR 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 EHR vendor) to easily customize all parts of the software.

Once your EHR 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 EHR software by taking the following steps:

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

- All exam layouts
- All drop-down lists, libraries and pop-up’s
- The optional “EHR Notes” sections where additional information can be entered such as Optical Recommendations, Test Findings, etc.
- Assessment & Plan pick lists
- Complaints and HPI list
- Templates for all testing procedures
- Any other information generated by your EHR 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 EHR 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 INFRASTRUCTURE

- 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? Does your network infrastructure meet the system requirements? Do you need to add resources due to increased demand on network and servers?

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 EHR 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 EHR 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 EHR 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.
• Keep in mind that implementing EHR is a work in progress and improved processes will continue to evolve as you gain experience.

Step 4: Training/Maintenance

Many practices will encounter problems with:
1) Lack of planning or lead time.
2) Not enough training.
3) Not enough time for training.
4) Resistance to change.

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 EHR 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 EHR 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 EHR records.
- Improve speed and accuracy.

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

- Go through your complete patient flow using a simulated patient and real data. This step is going beyond entering the data into the EHR, 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

EHR 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 EHR 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 EHR right from the start.

- Have a contingency plan when problems occur with the EHR or something else that you haven’t planned for. Try to avoid falling back on paper charts if you can, but if you must, enter data on paper and then complete the EHR 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 EHR 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.
• Post training schedules and encourage participation.

CONCLUSION

The Goal of a Successful EHR 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 EHR 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 EHR implementation will fail.

**A temporary drop in patient volume during EHR implementation is no reason to avoid EHR technology, especially with government incentives for adoption and looming penalties for non-compliance. More importantly, ICD 10 is around the corner. And with some careful planning of the implementation, training and workflows, the impact on physician productivity at go live can be mitigated.**
### QUESTIONS TO ASK WHEN SELECTING A VENDOR:

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<tr>
<th>Ophthalmology Specific Customization and Support?</th>
<th>Vendor 1</th>
<th>Vendor 2</th>
<th>Vendor 3</th>
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<tr>
<td>Is your EHR system designed specifically for ophthalmologists and is it an identifiable area of focus for your company?</td>
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<td>How many ophthalmologists use your system?</td>
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<td>Do you employ support staff that are trained and certified in ophthalmology?</td>
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<td>What certification/education/training do they have?</td>
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<tr>
<td>Describe the training and support you offer to ensure that our practice will be successful?</td>
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<td>How many trainers will I have available for implementation, Going Live and follow up? Is there and extra charge? (Two trainers preferred - one for front office and one for back office)</td>
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<td>Can I add data fields?</td>
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<td>• Patient Demographics</td>
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<td>• Medical Records</td>
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<td>• Eyewear orders</td>
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<td>• Contact Lens Orders</td>
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<td>• Claim information</td>
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<td>Can I add objects to the screens?</td>
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<td>• Check boxes</td>
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<td>• Data entry fields with pick lists</td>
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<td>• Memo fields that hold an unlimited amount of documentation</td>
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<td>Can I attach rules to those objects that will automatically perform functions for me, including:</td>
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<td>• Make sure the data is correct</td>
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<td>• Limit pick list options based on conditions or findings</td>
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<td>• Populate one or more other fields to save me time and key strokes</td>
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<td>• Perform a calculation</td>
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<td>• Launch a website</td>
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<td>• Create a report</td>
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<td>• Write a letter</td>
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<td>Can I define my own audit report?</td>
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<td>• Charts with missing information</td>
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<td>• Information entered incorrectly</td>
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<td>• Bonus opportunities</td>
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<td>Can I customize patient documents?</td>
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<tr>
<td>• Examination reports</td>
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<tr>
<td>• Patient letters</td>
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- Referring physician letters
- Education materials

Can I create my own reports, including:
- Financials
- Appointments
- Staff Productivity
- Doctor Productivity
- Trend Analysis

Does it allow different screens based on job responsibility?

What level of expertise is needed to maintain EHR templates and how user friendly is the process?

**Certified for EHR and eRx Incentive Programs?**

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 at what stage of beta testing is your company?

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?

**General Questions**

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:
- 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?

- What are your customer support hours?
- Is there an added cost for after hours?

**IMAGING CONSIDERATIONS FOR OPHTHALMOLOGY**

Planning for EHR includes consideration of how your practice will handle image management. The EHR 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.

To begin, assess how important quick access and manipulation of imaging is to your practice. Consider what portion of your visits includes 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 health 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 EHR and imaging systems must work together to support the workflow. Vendor discussions should include interoperability industry standard HL7 messaging, DICOM transactions and workflow support.

Establish a baseline with an inventory of the instruments and equipment that are installed at the practice. Develop a plan to connect each instrument to the EHR or imaging system. 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
Selection and Implementation:

Do you want to have your EHR vendor handle your imaging process? This approach focuses your selection on EHR 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 EHR and specialized imaging product.

Considerations include:
1. Vendor Background and Strategy & Experience in working with EHR
2. Vendor Implementation of how images are captured, viewed, stored, and accessed
3. Infrastructure recommendations for fast and reliable access
4. Obtaining and checking references for practices of similar size and scope

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

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

The Medicare EHR Incentive Program started in 2011 and will continue through 2016. 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.

- To be eligible to receive the maximum incentive payment ($44K), EPs must have begun participation by October 1, 2012, and be meaningful users for 90 consecutive days.
- The incentive is 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.

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

Overview

REGISTER - 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 will be 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 demonstrate meaningful use for a consecutive 90-day period your first year.

ATTESTATION
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

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.

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

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.
**PAYMENT**

Incentives are based upon the individual physician’s Tax ID (TIN) number. The incentive payment follows the provider. During the registration process, you must provide one TIN under which you would like the incentive payment to be made. *Incentive payments will be made approximately 4 to 8 weeks after an EP successfully attests that they have demonstrated meaningful use of certified EHR. Payments will be held until the EP meets the $24,000 threshold in allowed charges.* EPs have 60 days following the reporting period to submit claims for allowed charges.

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.”

**EP’S WORKING IN MULTIPLE GROUPS**

In cases where the EP is associated with more than one practice, EPs must select one TIN to receive any applicable EHR incentive payment.

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 PAYMENT ADJUSTMENTS/REDUCTIONS -**

*Payment Reductions Begin in 2015*

- 2015—1% reduction for not meeting meaningful use requirements
- 2016—2% reduction for not meeting meaningful use requirements
- 2017 and each subsequent year—3% reduction for not meeting meaningful use requirements *(subject to increase annually at the discretion of CMS.)*

- To avoid the -1% 2015 payment reduction, the EP must attest no later than October 1, 2014 (must begin 90 day EHR reporting period no later than July 1, 2014.)
- **EPs must continue to demonstrate meaningful use every year to avoid payment adjustments in subsequent years.**
**REPORTING PERIODS AND INCENTIVE PAYMENTS**

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td></td>
<td>TOTAL PAYMENT</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>Stage 1 (90 days) $18,000</td>
<td>Stage 1 (Full Year) $12,000</td>
<td>Stage 1 (Full Year) $8,000</td>
<td>Stage 2 (90 days) $4,000</td>
<td>Stage 2 (Full Year) $2,000</td>
<td>Stage 3 (Full year) $0</td>
<td>$44,000</td>
</tr>
<tr>
<td>2012</td>
<td>-</td>
<td>Stage 1 (90 days) $18,000</td>
<td>Stage 1 (Full Year) $12,000</td>
<td>Stage 2 (90 days) $8,000</td>
<td>Stage 2 (Full Year) $4,000</td>
<td>Stage 3 (Full Year) $2,000</td>
<td>$44,000</td>
</tr>
<tr>
<td>2013</td>
<td>-</td>
<td>-</td>
<td>Stage 1 (90 days) $15,000</td>
<td>Stage 1 (90 days) $12,000</td>
<td>Stage 2 (Full Year) $8,000</td>
<td>Stage 2 (Full Year) $4,000</td>
<td>$39,000</td>
</tr>
<tr>
<td>2014</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Stage 1 (90 days) $12,000</td>
<td>Stage 1 (Full Year) $8,000</td>
<td>Stage 2 (Full Year) $4,000</td>
<td>$24,000</td>
</tr>
<tr>
<td>2015</td>
<td></td>
<td></td>
<td></td>
<td>Stage 3 (90 Days) $0</td>
<td></td>
<td>Stage 3 (Full Year) $0</td>
<td>$0</td>
</tr>
</tbody>
</table>

**INCENTIVE PAYMENTS**

Maximum Total Amount of EHR Incentive Payments for a Medicare EP

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>First CY EP Receives an Incentive Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2011</td>
</tr>
<tr>
<td>2011</td>
<td>$18,000</td>
</tr>
<tr>
<td>2012</td>
<td>$12,000</td>
</tr>
<tr>
<td>2013</td>
<td>$8,000</td>
</tr>
<tr>
<td>2014</td>
<td>$4,000</td>
</tr>
<tr>
<td>2015</td>
<td>$2,000</td>
</tr>
<tr>
<td>2016</td>
<td>$2,000</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$44,000</td>
</tr>
</tbody>
</table>
**HARDSHIP EXCEPTIONS**

1. **Infrastructure** - EPs must demonstrate that they are in an area without sufficient internet access or face insurmountable barriers to obtaining infrastructure (e.g., lack of broadband).
2. **New EPs** - Newly practicing EPs who would not have had time to become meaningful users can apply for a 2-year limited exception to payment adjustments.
3. **Unforeseen Circumstances** - Examples may include a natural disaster or other unforeseeable barrier.
4. **EPs** must demonstrate that they meet the following criteria:
   a. Lack of face-to-face or telemedicine interaction with patients
   b. Lack of follow-up need with patients
5. **EPs who practice at multiple locations** must demonstrate lack of control over availability of CEHRT for more than 50% of patient encounters

**Deadline:** Applications need to be submitted no later than July 1 for EPs of the year before the payment adjustment year; however, CMS encourages earlier submission.

**ELECTRONIC PRESCRIBING (ERX) AND EHR**

If a physician chooses to participate in the Medicare EHR Incentive Program, they cannot receive an incentive payment for participation in the Medicare eRx Incentive Program simultaneously in the same program year.
STAGE 1 MEANINGFUL USE REQUIREMENTS
FOR ELIGIBLE PROVIDERS USING CERTIFIED EHR 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 2012 and 2013 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.
   - Most ophthalmologists are excluded for both of the public health measures.
   - Still need to select 1 of the public health measures and note the exclusion.
   - Must report on 4 other measures.

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 CQM:
  - Primary Open Angle Glaucoma – Optic Nerve Head Evaluation (PQRS Measure 12)
  - Diabetic Retinopathy – Documentation of Presence or Absence of Macular Edema and Level of Severity of Retinopathy (PQRS Measure 18)
○ Diabetic Retinopathy – Communication with the Physician Managing Ongoing Diabetes Care (PQRS Measure 19)
○ Diabetes – Eye Exam (PQRS Measure 114)

- Often 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.

**Reporting Menu Measures:**
- EPs must report on a total of 5 Meaningful Use Menu Measures.
- At least one of the 5 measures must be from the public health menu measures.
- If an EP meets the criteria for and can claim an exclusion for both of the public health menu measures, the EP must still select one public health menu measure and attest that the EP qualifies for the exclusion.
  - The EP must then select any other four measures from the menu measures, which can be any combination of the remaining public health menu measures or from the additional Meaningful Use Menu Measures in the list below.
  - CMS encourages EPs to select menu measures that are relevant to their scope of practice and to claim an exclusion for a menu measure only in cases where there are no remaining menu measures for which they qualify or if there are no remaining menu measures that are relevant to their scope of practice.
  - You must submit at least one Meaningful Use Menu Measure from the public health list even if an Exclusion applies to both.

**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.

**Additional Information:**

**Exclusions:**
- If you declare exclusion and later it is determined you were not excluded, you lose the entire incentive payment for that year.

**Public Health Measures: Public health agency is not able to receive my data?**

- CMS Final Rule states:
  - “We agree that many areas of the country currently lack the infrastructure to support the electronic exchange of information. As meaningful use seeks to ensure certified EHR technology has the capability to submit electronic data to public health agencies, we only require a single test if a receiving entity is available and follow up submission only if that test is successful.” (75 FR Page 44360)
# Stage 1 Meaningful Use

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

<table>
<thead>
<tr>
<th>15 Core Set Objectives and Measures (all are required)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Use computerized physician order entry (CPOE) for medication orders</td>
</tr>
<tr>
<td>2. Implement drug-drug and drug-allergy check</td>
</tr>
<tr>
<td>3. Generate and transmit permissible prescriptions electronically (e-Rx)</td>
</tr>
<tr>
<td>4. Record patient demographics (preferred language, gender, race, ethnicity, date of birth)</td>
</tr>
<tr>
<td>5. Maintain up-to-date problem list of current and active diagnoses</td>
</tr>
<tr>
<td>6. Maintain active medication list</td>
</tr>
<tr>
<td>7. Maintain active medication allergy list</td>
</tr>
<tr>
<td>8. Record and chart vital signs (height, weight, blood pressure)</td>
</tr>
<tr>
<td>9. Record smoking status for patients 13 years or older</td>
</tr>
</tbody>
</table>
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. *Exclusion: Any EP who writes fewer than 100 prescriptions during the EHR 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 EP's 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. **Exclusion: EP who neither transfers a patient to another setting nor refers a patient to another provider during the EHR reporting period.**

9. **Public Health Measure***
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. **Exclusion: EP administers no immunizations during the EHR reporting period or where no immunization registry has the capacity to receive the information electronically.**

10. **Public Health Measure***
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. **Exclusion: EP does not collect any reportable syndromic information on their patients during the EHR reporting period or does not submit such information to any public health agency that has the capacity to receive the information electronically.**

<table>
<thead>
<tr>
<th>Core Clinical Quality Measures (all are required)*</th>
<th>Alternate Core Clinical Quality Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>NQF 0013 Hypertension: Blood Pressure Measurement</td>
<td>NQF 0024 Weight Assessment and Counseling for Children and Adolescents</td>
</tr>
<tr>
<td>NQF 0028 Preventive Care and Screening Measure Pair: Tobacco Use Assessment Tobacco Cessation Intervention</td>
<td>NQF 0041/PQRS110 Preventive Care and Screening: Influenza Immunization for Patients less than or equal to age 50</td>
</tr>
<tr>
<td>NQF 0421/PQRS 128 Adult Weight Screening and Follow-up</td>
<td>NQF 0038 Childhood Immunization Status</td>
</tr>
</tbody>
</table>
**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.**

### Ophthalmology-Specific Additional Clinical Quality Measures (CQM)

<table>
<thead>
<tr>
<th>Measure</th>
<th>Description</th>
<th>Calculation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PQRS Measure 12:</strong> Primary Open Angle Glaucoma – Optic Nerve Head Evaluation</td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td><strong>PQRI Measure 18:</strong> Diabetic Retinopathy: Documentation of Presence or Absence of Macular Edema and Level of Severity of Retinopathy</td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td><strong>PQRS Measure 19:</strong> Diabetic Retinopathy – Communication with the Physician Managing Ongoing Diabetes Care</td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td><strong>PQRS Measure 117:</strong> Diabetes – Eye Exam</td>
<td>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.</td>
<td></td>
</tr>
</tbody>
</table>
MEANINGFUL USE STAGE 2 REQUIREMENTS
FOR ELIGIBLE PROVIDERS USING CERTIFIED EHR TECHNOLOGY

On August 24, 2012 the Centers for Medicare & Medicaid Services (CMS) posted the final rule for Stage 2 of meaningful use of EHR.

NEW FOR STAGE 2

- EPs must meet or qualify for an exclusion to 17 core objectives
- EPs must meet 3 of the 6 menu measures.
- EPs must report on 9 out of 64 total CQMs.
- Two years of reporting time for each stage
- Increased thresholds for many measures
- Increased patient engagement requirements
- Changes to exclusion for Vital Signs – can report on blood pressure and exclude height/weight
- October 1, 2014 as the latest date by which an EP can attest for the first time and avoid a 1% payment adjustment in 2015.
- For 2014 only, all providers regardless of their stage of meaningful use are only required to demonstrate meaningful use for a three-month EHR reporting period.

TIMELINE FOR IMPLEMENTATION

- CMS is pushing back the start date for Stage 2 compliance to January 1, 2014.
- Those that attested to meaningful use first in 2011 must meet Stage 2 criteria in 2014 and Stage 3 in 2016. All others will be required to demonstrate 2 years at Stage 1, 2 years at Stage 2 and then 2 years at Stage 3 (assuming the cut-off date for the program’s payments have not passed).
- Providers attesting to Year 1, Stage 1 criteria, regardless of when they start, will continue to use a 90-day reporting period.
- 3 Month Reporting Option for providers attesting to either Stage 1 or Stage 2 in 2014 in order to allow time for EPs to implement newly certified EHR (Allows EP flexibility in the first year of meeting Stage 2, to avoid delay in reporting for Stage 3, which CMS is proceeding with implementing by 2016.)

BATCH REPORTING

Starting in 2014, groups will be allowed to submit attestation information for all of their individual EPs in one file for upload to the Attestation System, rather than having each EP individually enter data.
STAGE 2 MEANINGFUL USE CRITERIA

The charts below list the measures (and specialty exclusions) that eligible providers must demonstrate to become a Stage 2 meaningful user to qualify for Medicare or Medicaid incentives.

EPs must report:

1.) All 17 of the Core Set Objectives and Measures
2.) 3 out of 6 of the Menu Set Objectives and Measures
3.) A minimum of 9 Clinical Quality Measures (CQM)

STAGE 2 MEANINGFUL USE

17 Core Measures + 3 Menu Measures + 9 Clinical Quality Measures = Stage 2 Meaningful Use

The following are charts of Stage 2 meaningful use objectives that must be met, and applicable exclusions:

<table>
<thead>
<tr>
<th>MEASURE</th>
<th>STAGE 2 REQUIREMENT</th>
<th>EXCLUSION</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPOE</td>
<td>More than 60% of unique patients with a medication in their medication list have at least one medication order entered using CPOE [up from 30 percent]</td>
<td>Any EP who writes fewer than 100 medication, laboratory, and radiology orders during the EHR reporting period.</td>
</tr>
<tr>
<td>ERX</td>
<td>More than 50% of all permissible prescriptions written by the EP are compared to at least one drug formulary and transmitted electronically using Certified EHR Technology [up from 40 percent of medication orders]</td>
<td>Any EP who writes fewer than 100 prescriptions during the EHR reporting period or does not have a pharmacy within their organization and there are no pharmacies that accept electronic prescriptions within 25 miles of the EP’s practice location at the start of his or her EHR reporting period.</td>
</tr>
<tr>
<td>3</td>
<td>DEMOGRAPHICS - Record patient demographics (preferred language, gender, race, ethnicity, date of birth)</td>
<td>More than 80% of patients have demographics recorded and can use them to produce stratified quality reports. <em>[up from 50 percent and includes more granular categories]</em></td>
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<tr>
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</tbody>
</table>
| 4 | VITAL SIGNS - Record and chart vital signs (height, weight, blood pressure) | More than 80% of patients have vital signs recorded during the reporting year. *[up from 50 percent; BP age increased from 2 years to 3 years]* | Any EP who --
(A) Sees no patients 3 years or older is excluded from recording blood pressure;
(B) Believes that all three vital signs of height/length, weight, and blood pressure have no relevance to their scope of practice is excluded from recording them;
(C) Believes that height/length and weight are relevant to their scope of practice, but blood pressure is not, is excluded from recording blood pressure; or
(D) Believes that blood pressure is relevant to their scope of practice, but height/length and weight are not, is excluded from recording height/length and weight |
| 5 | SMOKING STATUS - Record smoking status for patients 13 years or older | More than 80% of unique patients over 13 years old have smoking status recorded as structured data *[up from 50 percent]* | Any EP who sees no patients 13 years old or older. |
| 6 | CLINICAL DECISION - Implement one clinical decision support rule | Use clinical decision support to improve performance on high-priority health conditions *[up from implement one rule]* | A. Implement five clinical decision support interventions related to five or more clinical quality measures, if applicable, at a relevant point in patient care for the entire EHR reporting period;
B. The EP has enabled the functionality for drug-drug and drug-allergy interaction checks for the entire EHR reporting period. |
<p>| 7** | CLINICAL LAB RESULTS - Incorporate lab information as structured data | More than 55% of all clinical lab tests results ordered by the EP during the EHR reporting period whose results are either in a positive/negative or numerical format are incorporated in Certified EHR Technology as structured data. | Any EP who orders no lab tests whose results are either in a positive/negative or numeric format during the EHR reporting period. |</p>
<table>
<thead>
<tr>
<th>8</th>
<th><strong>PATIENT LISTS</strong> - Generate lists of patients by specific conditions to use for quality improvement, reduction of disparities, research, or outreach.</th>
<th>Generate at least one report listing patients of the EP with a specific condition.</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td><strong>PATIENT REMINDERS</strong> - Send reminders for preventive, follow-up care</td>
<td>10% of all unique patients who have had an office visit with the EP within the 24 months, per patient preference <em>[threshold decreased from 20 percent to 10 percent, but scope expanded from “patients 65 years or years or older or 5 years or younger” to “all active patients”]</em></td>
<td>Any EP who has had no office visits in the 24 months before the beginning of the EHR reporting period.</td>
</tr>
<tr>
<td>10*</td>
<td><strong>PATIENT ACCESS to HEALTH INFO</strong> - Provide patients with an electronic copy of their health information (including diagnostic test results, problem list, medication lists, allergies) upon request.</td>
<td>50% have access and 10% of patients have used the capability to access and download their information (available to the patient within 4 business days after the information is available to the EP).</td>
<td>Any EP who neither orders nor creates any of the information listed for inclusion as part of this measure is excluded.</td>
</tr>
<tr>
<td>11</td>
<td><strong>PATIENT ACCESS to CLINICAL SUMMARIES</strong> - Provide clinical summaries for patients for each office visit</td>
<td>50% of all visits within 24 hours (pending information, such as lab results, should be available to patients within 4 days of becoming available to EPs) <em>[up from “more than 50 percent of all visits within 3 business days”]</em></td>
<td>Any EP who has no office visits during the EHR reporting period.</td>
</tr>
<tr>
<td>12</td>
<td><strong>EDUCATIONAL RESOURCES</strong> - Identify patient-specific education resources and provide those resources to the patient if appropriate.</td>
<td>More than 10% of patients are provided with EHR-enabled patient-specific educational resources <em>[threshold unchanged but “If appropriate” removed]</em></td>
<td>Any EP who has no office visits during the EHR reporting period.</td>
</tr>
<tr>
<td>13</td>
<td><strong>TRANSITIONS IN CARE</strong> - Perform medication reconciliation for a patient from another care setting or provider of care</td>
<td>Medication reconciliation performed for more than 50% of transitions in care when the EP or hospital was the receiving provider.</td>
<td>Any EP who was not the recipient of any transitions of care during the EHR reporting period.</td>
</tr>
<tr>
<td>14</td>
<td><strong>SUMMARY of CARE RECORD</strong> - Summary of care record transmitted between providers at transitions in care</td>
<td>Required for 65% of care transitions <em>[up from 50 percent]</em>; must be electronic for 10% <em>[Stage 1 was one test]</em></td>
<td>Any EP who neither transfers a patient to another setting nor refers a patient to another provider during the EHR reporting period is excluded from both measures.</td>
</tr>
<tr>
<td>Measure</td>
<td>Description</td>
<td>Exclusion</td>
<td></td>
</tr>
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<tr>
<td><strong>Menu #1</strong></td>
<td>Imaging</td>
<td>More than 20% of imaging results are accessible through Certified EHR Technology</td>
<td>Any EP who does not perform diagnostic interpretation of scans or tests whose result is an image during the EHR reporting period.</td>
</tr>
<tr>
<td><strong>Menu #2</strong></td>
<td>Family History</td>
<td>Record family health history for more than 20%</td>
<td>Any EP who has no office visits during the EHR reporting period.</td>
</tr>
</tbody>
</table>
| **Menu #3** | Syndromic Surveillance | Successful ongoing transmission of syndromic surveillance data | A. The EP is not in a category of providers who collect ambulatory syndromic surveillance information on their patients during the EHR reporting period.  
B. The EP operates in a jurisdiction for which no public health agency is capable of receiving electronic syndromic surveillance data in the specific standards required for Certified EHR Technology at the start of their EHR reporting period.  
C. The EP operates in a jurisdiction for which no public health agency is capable of accepting the version of the standard that the EP's Certified EHR Technology can send at the start of their EHR reporting period. |
### Menu #4**
**SUBMISSION OF CANCER CASE INFORMATION**
Successful ongoing transmission of cancer case information

A. Does not diagnose or directly treat cancer; or
B. Operates in a jurisdiction for which no public health agency is capable of receiving electronic cancer case information in the specific standards required for Certified EHR Technology at the start of their EHR reporting period.

### Menu #5**
**SPECIALIZED REGISTRY (New)**
Successful ongoing transmission of data to a specialized registry

A. Does not diagnose or directly treat any disease associated with a specialized registry; or
B. Operates in a jurisdiction for which no registry is capable of receiving electronic specific case information.

### Menu #6**
**PROGRESS NOTES (New)**
Enter an electronic progress note for more than 30% of unique patients

A. Does not diagnose or directly treat any disease associated with a specialized registry; or
B. Operates in a jurisdiction for which no registry is capable of receiving electronic specific case information.

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**CRITERIA FOR REPORTING CLINICAL QUALITY MEASURES (CQM)**

### 2013 (STAGE 1)

An EP must report 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:
  - Primary Open Angle Glaucoma – Optic Nerve Head Evaluation (PQRS Measure 12)
  - Diabetic Retinopathy – Documentation of Presence or Absence of Macular Edema and Level of Severity of Retinopathy (PQRS Measure 18)
  - Diabetic Retinopathy – Communication with the Physician Managing Ongoing Diabetes Care (PQRS Measure 19)
  - 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.
There are two reporting methods available for reporting the Stage 1 measures that began in 2012 and are continuing into 2013:

- **Attestation** - [https://ehrincentives.cms.gov/](https://ehrincentives.cms.gov/)
- **Physician Quality Reporting System EHR Incentive Program Pilot for EPs**

### 2014 and Beyond (STAGE 2 and Beyond)

- **EPs must report on 9 of the 64 approved CQMs**
  - Selected CQMs must cover at least 3 of the National Quality Strategy domains (See “Measure Selection Process” below.)
- **Beginning in 2014, all Medicare-eligible providers beyond their first year of demonstrating meaningful use must electronically report their CQM data to CMS.**

#### Measure Selection Process

Providers must select CQMs from at least 3 of the 6 HHS National Quality Strategy domains:

- Patient and Family Engagement
- Patient Safety
- Care Coordination
- Population and Public Health
- Efficient Use of Healthcare Resources
- Clinical Processes/Effectiveness

A complete list of 2014 CQMs and their associated National Quality Strategy domains will be posted on the CMS EHR Incentive Programs website ([www.cms.gov/EHRIncentivePrograms](http://www.cms.gov/EHRIncentivePrograms)) in the future.
RESOURCES AND LINKS

ASCRS EHR/meaningful Use Webpage
http://ascrs.org/government-relations/emrmeaningful-use

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

Meaningful Use Attestation Calculator
http://www.cms.gov/apps/ehr/

Meaningful Use Core Measures

EHR Incentive Program Electronic Specifications

Guide for Reading the EHR Incentive Program EP Measures

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.