MAKING THE MOST OUT OF MEANINGFUL USE.

Vue | THE NEW BENCHMARK IN HEALTHCARE IT.

Carestream

Meaningful Use| A Guide for Radiology

Table of Contents

Carestream

Meaningful Use | A Guide for Radiology

Carestream

Carestream

Chapter 1: Meaningful Use Legislation and its Impact on Healthcare

Meaningful Use (MU) legislation is proving to be a challenge for healthcare facilities nationwide. Today, "meaningful use" is one of the most talked-about initiatives facing healthcare, along with the associated capture and exchange of patient information. The ongoing development of this legislation will have a great impact on healthcare with regard to patient-information access, today and well into the future. Understanding what Meaningful Use means to your organization and how it impacts your business, financially and from a workflow perspective, will be key drivers not only for your continued success, but also for your compliance with this program.

Recognizing the confusion surrounding this initiative, Carestream Health has put together this guide to provide you with a better understanding of MU and how it applies specifically to radiology. It's also intended to demonstrate how using our solutions will help ensure your continued compliance as further stages of MU are rolled out. With over $1.5 billion available in incentive payments to adopt and use meaningful data in the United States, each eligible professional – including over 90% of all radiologists – can participate and receive up to $44,000 in incentive dollars before 2015.

It's also important to understand what's at stake. Whether or not you choose to participate, there will be Medicare penalties and quite possibly commercial payer penalties that could directly impact your organization if you choose not to participate by 2015.

The goal of this guide is to help you to better understand this initiative and overall complexities you will most likely face as you and your personnel deploy Meaningful Use at your facility. It by no means covers every conceivable question you may have, but will lay the groundwork to help you more effectively understand and plan your MU goals. Finally, this guide will focus on the Medicare version of Meaningful Use, not the Medicaid version of the program.

Meaningful Use Defined

The term "Meaningful Use" refers to the use of certified electronic health record technology and the exchange of patient information among healthcare professionals. The Meaningful Use Program was designed to encourage healthcare providers to purchase and implement certified electronic health records (EHR) and demonstrate compliance with their certified EHR technology through a series of measures and quality outcomes. Additionally, incentives were established as part of the program to encourage adoption, as well as penalties starting in 2015 for non-compliance.

Electronic Patient Records

One of President Obama's key healthcare initiatives was to encourage healthcare facilities and providers to capture and share key clinical data on all patients in an overall attempt to improve clinical quality outcomes and ultimately lower the cost of patient care.

Part of the American Recovery and Reinvestment Act (ARRA) of 2009 and the Health Information Technology for Economic and Clinical Health Act (HITECH) offers incentives to eligible providers (EPs) of up to $44,000 for Medicare and $63,750 for Medicaid, providing they can show they are "certified" users of electronic health records within a specified timeframe.

Still in its early phases, Meaningful Use is requiring physicians and healthcare facilities to quickly understand complex legislation and begin to adopt certified technology. The challenge has been for specialists, since the Meaningful Use program in stage 1 does not offer much flexibility for their compliance, yet they are being held to the same penalties as general practitioners.

The Meaningful Use Program is moving ahead, but has been divided into stages with a clear trajectory for its overall implementation. Stage 1 of Meaningful Use focuses on the collection and sharing of patient data; Stage 2 focuses on clinical decision support; and Stage 3 focuses on improving patient outcomes.

We are well underway with Stage 1 of Meaningful Use and in February 2012, the criteria for Stage 2 was released by the CMS for public comment, with the final measures released in August 2012.

Goals of Meaningful Use

One of the primary goals of the Meaningful Use (MU) Program is to not only adopt and implement certified EHR technology, but to also use EHR technology to achieve health and efficiency goals. These five primary healthcare goals are to:

- Improve quality, safety and efficiency while reducing health disparities

- Engage patients and families in their healthcare

Meaningful Use | A Guide for Radiology

- Promote and improve public and population health
- Improve care coordination between providers
- Ensure adequate privacy and security protections for personal health information

To meet MU goals, a user must meet a series of objectives that use EHR's capabilities and are directly related to the improvement of quality, efficiency and patient safety throughout the healthcare system.   [Dreyer, Jonathon L. and Keith J. Dreyer, "Goals of Meaningful Use." *The Radiologist's Guide to Meaningful Use*. Michigan: RMU Press, 2011. 23. Print.]

Medicare and Medicaid Programs

There are two versions of the Meaningful Use Program available to satisfy Medicare and Medicaid providers, but an eligible provider can only choose to participate in one version. Eligibility variances exist for both versions, but most radiologists will fall in the Medicare version of the program. The biggest difference between the programs is the financial incentive available: $44,000 per eligible provider (EP) over five years for Medicare vs. $63,750 per EP over six years for Medicaid.

The table below provides the differences between the two versions of the program:

	Medicare	Medicaid
Eligible Entities	Medical professionals, hospitals, and critical access hospitals Hospital-based professionals are not eligible (90% of services are preformed in a hospital inpatient or emergency setting)	Medical professionals, nurse practitioners, certified nurse-midwives, dentists, and physician assistants
Incentive Payments	Up to $44,000 per EP over 5 years Are 75% of allowed Medicare physician fee charges up to variable yearly limits Only based on professional service charges, not technical fees Participation in only 1 of the 2 eligible programs	Up to $63,750 per eligible provider over 6 years Payment based on patient volume Payments are flat amounts per year 30% of patients must be Medicaid
Timing	Available in 2011 Begin 2012 to receive maximum payments Required by 2015; penalties apply after 2015 Must show 90 consecutive days of meaningful use in first reporting year and report full years thereafter	Begins in 2011, depending on state law Must begin by 2016
Non-participation	Starting in 2015, without hardship exemption, Medicare reimbursements reduced 1% per year to a 5% maximum	No loss of Medicaid reimbursement for non-compliance

Carestream

About Stage 1 Meaningful Use

Stage 1 sets the stage for the Meaningful Use program by setting guidelines for capturing clinical health information and using that data to track and communicate patient conditions. This first phase identifies the measures that are specific to eligible hospitals (EHs) and eligible professionals (EPs).

Radiologists that qualify as EPs under the Medicare version of MU must report against 15 Core Set Objectives, 10 Menu Set Objectives, and 44 Clinical Quality Measures. Each set of measures includes specific objectives, some of which may be excluded based on an eligible provider's scope of practice. [Dreyer, Jonathon L. and Keith J. Dreyer, "Stage 1 Meaningful Use." *The Radiologist's Guide to Meaningful Use*. Michigan: RMU Press, 2011. 24. Print.] (There are eight additional criteria related to data security that software vendors must adhere to in addition to the 25 measures required for EPs.) All criteria can be obtained in a single EHR or other software solution that is classified as a complete EHR for Stage 1 MU; or all criteria can be obtained through multiple solutions that are classified as an EHR module for Stage 1 MU and fulfill the required measures to equal a complete EHR. See the next section for detailed descriptions of these measures.

About Stages 2 and 3

Stage 2 final Meaningful Use criteria was released in August 2012 and contains measures that begin to focus more on specialty practices, including radiology, such as:

- The implementation of medical images into EHRs

- Loosening the requirement to "possess" all measures that you are excluded from

Implementation of Stage 2 is anticipated to begin in 2014. Note that although the measures have relaxed for Stage 2, EPs will still be required to meet the Stage 1 criteria before proceeding to Stage 2. In other words, an EP can't "jump" into Stage 2 in 2012 without first complying with Stage 1. Furthermore, an EP must begin their

Stage 3 will focus more on improved patient outcomes, improvement in data exchange between public health agencies, and build on stage 2.

Chapter 2: Meaningful Use Legislation

A Brief History of How We Got Here

Close to four years ago, President Obama committed to computerizing our nation's healthcare records over a five-year period, with the intent to lower costs, cut medical errors and improve overall patient outcomes. Congress passed the American Recovery and Reinvestment Act of 2009 (ARRA), which is now an $840+ billion piece of legislation signed into law. A significant portion of this legislation created the Health Information and Technology for Economic and Clinical Health (HITECH) Act, which was designed to promote the adoption of electronic health records and to the use of patient data in a meaningful way. About $20 billion was set aside to use as incentives toward modernizing our healthcare informatics systems, which is now being deployed nationwide. [Dreyer, Jonathon L. and Keith J. Dreyer, "The American Recovery And Reinvestment Act (ARRA) and Health Information and Technology For Economic and Clinical Health (HITECH) Act." *The Radiologist's Guide to Meaningful Use*. Michigan: RMU Press, 2011. 30. Print.]

The Continuing Extension Act of 2010 was passed in April 2010,--removing "outpatient" from the hospital-based definition of the legislation. This act is what now classifies the majority of radiologists, as well as other specialists, as eligible participants in the incentive program – but keep in mind this also holds them to the penalties that will begin in 2015 for noncompliance. Final Stage 1 rules were issued in July 2010 along with an initial set of EHR testing and certification groups (Certification Commission for Health IT - CCHIT; Drummond Group - DGI; InfoGard Laboratories; ICSA Labs; SLI Global Solutions; and Surescripts). [Dreyer, Jonathon L. and Keith J. Dreyer, "The Interim Final Rule (IFR) and Notice of Proposed Rulemaking (NPRM)." *The Radiologist's Guide to Meaningful Use*. Michigan: RMU Press, 2011. 31. Print.]

Federal Agencies

Two federal agencies oversee the Meaningful Use legislation and hold joint responsibility for its implementation and development: the CMS - Centers for Medicare and Medicaid Services, and the ONC - Office of the National Coordinator. Both agencies fall under the Department of Health and Human Services.

Carestream

Meaningful Use | A Guide for Radiology

The CMS holds the responsibility for regulating how the technology is used (specifically monitoring the eligible providers) while the ONC is responsible for defining and regulating the technology itself (the vendors and products submitted for certification).

For Stage 1 Meaningful Use, healthcare providers must comply with 25 objectives and measures issued by the CMS. The ONC identified an additional 8 measures beyond the core 25 for a total of 33 certification criteria that all software vendors must certify against (the additional 8 measures adhere to privacy, security, and access capabilities and logging). Compliance of all 33 criteria by a software vendor allows them to be certified as a "complete" EHR, regardless of the solution (in other words, a RIS, lab, or any other IT system that meets all 33 stage 1 criteria, plus can report the minimum required clinical quality measures, and passes certification would be considered a complete EHR). If a vendor submits their software for testing and passes any of the certification criteria, but not all 33 criteria, they would be certified as an "EHR module," meaning the solution satisfies some, but not all, 33 (any vendor obtaining certification must pass the 8 required security and privacy criteria as well to receive modular certification). The table below summarizes what the two agencies regulate:

It should be noted that future public comment, rulemaking, legislation, and overall needs will help shape future stages of Meaningful Use as it continually evolves. One should look at Meaningful Use as not a defined set of standards all healthcare providers will be required to meet but an evolution of a defined path to improving patient outcomes and lowering healthcare costs though technology and access to key patient information.

CMS	ONC
Specifies criteria that eligible professionals (EPs), eligible hospitals (EHs), and critical-access hospitals (CAHs) must meet to demonstrate meaningful use and qualify for incentive payments	Sets standards, implementation guidelines, and criteria required for certification and ongoing certification of EHRs by participating vendors that will be used by EPs and EHs
Sets Core and Menu Set criteria that all providers must meet to receive incentive payments	Coordinates the standards required of EHR systems with the MU requirements that must be met by EPs of EHs
Provides ongoing guidance and establishes rules and criteria to phase in the Meaningful Use Program over time based on available technology today plus overall practice experience	Complying with the established standards, EPs and EHs can be assured that the certified technology they purchase will allow their chosen certified EHR to meet the requirements put forth by the CMS

Carestream

Chapter 3: Incentives and Penalties

Incentives Available for Meaningful Use

One of the key drivers rapidly pushing healthcare facilities and eligible professionals to adopt Meaningful Use is the large incentives in place to help offset the costs involved in the adoption of electronic health records, both at the provider and state levels.

All eligible professionals who comply with certified EHR technology are eligible to receive up to a total of $44,000 in incentive payments over a five-year period, based on the year in which they begin participating in the Medicare EHR Incentive Program. (The facilities or professionals who participate in the Medicaid Incentive Program will be eligible to receive up to $63,750 in incentive payments over a six-year period, based on the year they participate in the Medicaid EHR Incentive Program. As stated earlier, this guide focuses on the Medicare Incentive Program.

For calendar years 2011-2016, eligible professionals who participate in the Medicare Incentive Program must start with reporting **90 days** of consecutive use of meaningful data in order to receive the full incentive payment for the first year. This means a site must be live and collecting the data it will report for **each** eligible professional participating in the program by October 3, 2012 in order to receive full credit for year one of the Medicare EHR Incentive Program). Post year one, reporting must be for the full 12 calendar months.

Eligible professionals who provide at least 50% of their services in a designated Health Professional Shortage Area (HPSA) may qualify for an additional 10% bonus payment for each year of successful program participation. HPSA areas are designated by the US Department of Health and Health Resources and Services Administration (HRSA) due to shortages of primary medical care, dental or mental health providers. These areas may qualify due to geographic or demographic considerations (high poverty, high elderly concentration, high infant mortality rates, or too few primary providers). [Dreyer, Jonathon L. and Keith J. Dreyer, "Meaningful Use Program Incentives" *The Radiologist's Guide to Meaningful Use*. Michigan: RMU Press, 2011. 40. Print.]

The table below shows a summary of the incentive payments available to eligible professionals under the Medicare EHR Incentive Program:

Calendar Year	2011	2012	2013	2014	2015+
2011	Up to $18,000	----	----	----	$0
2012	Up to $12,000	Up to $18,000	----	----	$0
2013	Up to $8,000	Up to $12,000	Up to $15,000	----	$0
2014	Up to $4,000	Up to $8,000	Up to $12,000	Up to $12,000	$0
2015	Up to $2,000	Up to $4,000	Up to $8,000	Up to $8,000	$0
2016	----	Up to $2,000	Up to $4,000	Up to $4,000	$0
Total	Up to $44,000	Up to $44,000	Up to $39,000	Up to $24,000	$0

Source: Centers for Medicare and Medicaid Services

Carestream

The Penalties for Noncompliance

While there are some very attractive incentives available to eligible providers for complying with Meaningful Use criteria, there are also penalties (or payment adjustments) that will take place for failure to comply. The payment adjustments will go into effect in 2015 and will continue through 2019 and possibly beyond. The latest information on these penalties shows they ultimately are significant and could adversely affect the profitability of a practice that relies on a good portion of their revenue from Medicare. What has many providers concerned is whether private payers will also decide to enforce the same level of penalties. Overall, this could be a significant reduction in the amount of revenue a provider receives. The bottom line: most facilities will have little choice but to adopt and adhere to the Meaningful Use Program, and the sooner they get started, the better position they'll be in as the program matures over the next few years. The table below outlines the payment reductions (penalties) in Medicare payments that practices could anticipate for noncompliance with the Meaningful Use Program:

Calendar Year	Payment Reduction
2015	Minus 1% of total Medicare fee schedule compensation
2016	Minus 2% of total Medicare fee schedule compensation
2017	Minus 3% of total Medicare fee schedule compensation
2018	Minus 3%, or minus 4% if > 75% of EPs are not demonstrating meaningful use
2019+	Minus 3%, or minus 5% if > 75% of EPs are not demonstrating meaningful use

Source: Centers for Medicare and Medicaid Services

There are annual hardship exemptions as well, which will be reviewed on a case-by-case basis, and these could relieve some EPs from the payment adjustments for up to five years

but they will also not be eligible for the incentives either. Stage 2 further defines these hardship exemptions.

For all eligible providers, including many radiologists, there are hundreds of millions of dollars at stake if practitioners ignore Meaningful Use legislation. If private payers decide to apply the same penalties, the cumulative amount could be collectively extensive.

Receiving Your Incentive Payment

We'll discuss attestation towards the end of this guide, but once your practice has determined your eligibility and you've decided you will participate in the EHR Incentive Program, each EP needs to do the following:

1. Obtain a National Provider Identifier (NPI).

2. Enroll in the Centers for Medicare and Medicaid Services (CMS) Provider Enrollment Chain and Ownership System.

3. Create an account in the National Plan and Provider Enumeration System.

Once EPs have met the requirements outlined in the Medicare version of the incentive program, they must demonstrate that they are applying Meaningful Use on the CMS online Registration and Attestation System. [Dreyer, Jonathon L. and Keith J. Dreyer, "Meaningful Use Incentive Payments." *The Radiologist's Guide to Meaningful Use*. Michigan: RMU Press, 2011. 43. Print.]

As an EP, you'll use this system to provide your numerators and denominators for each Core, Menu, and Clinical Quality Measure you are tracking. This attestation is your legal obligation to the CMS, which is required prior to receiving your incentive payment.

After successful attestation within the CMS system you will be eligible to receive a single payment each year you participate in the Medicare EHR Incentive Program. In subsequent years, the attestation process will require you to submit your numerators and denominators to the CMS electronically through your certified EHR program. Providers participating in the HPSA program will receive an additional separate payment each year of program participation.

Chapter 4: Meaningful Use Measures for Radiology

Overview

The goals behind Stage 1 of Meaningful Use are to adopt electronic health record (EHR) technology and capture key clinical data on patients. To do this, the CMS has identified 25 Core and Menu Set Objectives to capture as well as 44 specific Clinical Quality Measures to report against. In the next section, we'll explore each of these, their exclusions, and the measures that typically make the most sense for radiologists to comply with. Note that these are provided as guidelines and only your practice can determine which measures make the most sense for you to track and report for your eligible providers (EPs).

Core Set

There's a total of 15 Core Set Measures, which are mandatory for all eligible providers to comply with, regardless of specialty or practice scope. However, there are exclusions you may be eligible for within your practice. Either way, even with the exclusions, recall that you still must "possess" the capability (Note: Certified EHR technology "possession" requirements change beginning in 2014). But since you're reading this, most likely you're installing Carestream's RIS – which means you'll meet full compliance on all Core measures. Below are the 15 Core Measures, their requirements, along with the Measures that are applicable for exclusion:

Objective	Measure	Exclusion
42 CFR §495.6(d)(1) Use computerized provider order entry (CPOE) for medication orders directly entered by any licensed health care professional who can enter orders into the medical record per state, local, and professional guidelines	More than 30% of unique patients with at least one medication in their medication list seen by the EP have at least one medication order entered by CPOE	Any EP who writes fewer than 100 prescriptions during the EHR reporting period
42 CFR §495.6(d)(2) Implement drug-drug and drug-allergy interaction checks	The EP has enabled this functionality for the entire EHR reporting period	N/A
42 CFR §495.6(d)(3) Maintain an up-to-date problem list of current and active diagnoses	More than 80% of all unique patients seen by the EP have at least one entry or an indication that no problems are know for the patient recorded as structured data	N/A
42 CFR §495.6(d)(4) Generate and transmit permissible prescriptions electronically (eRx)	More than 40% of all permissible prescriptions written by the EP are transmitted electronically using certified EHR technology	Any EP who writes fewer than 100 prescriptions during the EHR reporting period
42 CFR §495.6(d)(5) Maintain an active medication list	More than 80% of all unique patients seen by the EP have at least one entry (or an indication that the patient is not currently prescribed any medication) recorded structured data.	N/A

Carestream

Meaningful Use | A Guide for Radiology

Objective	Measure	Exclusion
42 CFR §495.6(d)(6) Maintain active medication allergy list	More than 80% of all unique patients seen by the EP have at least one entry (or an indication that the patient has no known medication allergies) recorded as structured data	N/A
42 CFR §495.6(d)(7) Record demographics: preferred language, gender, race, ethnicity, date of birth	More than 50% of all unique patients age 2 and over seen by the EP have demographics recorded as structured data	N/A
42 CFR §495.6(d)(8) Record and chart changes in vital signs: height, weight, blood pressure. Calculate and display BMI, plot and display growth charts for children 2-20 years (including BMI).	More than 50% of all unique patients age 2 and over seen by the EP have height, weight, and blood pressure recorded as structured data	Any EP who either sees no patients age 2 or older, or who believes that all three vital signs of height, weight, and blood pressure of their patients have no relevance on their scope of practice
42 CFR §495.6(d)(9) Record smoking status for patients 13 years old or older	More than 50% of all unique patients 13 years old and older seen by the EP have smoking status recorded as structured data	Any EP who sees no patients 13 years and older
42 CFR §495.6(d)(10) Report ambulatory clinical quality measures to CMS or the States	For 2011, provide aggregate numerator and denominator, and exclusions through attestation as required by CMS and for 2012, electronically submit the CQMs as required by CMS	N/A
42 CFR §495.6(d)(11) Implement one clinical decision support rule relevant to specialty or high clinical priority along with the ability to track compliance with that rule	Implement one clinical decision support rule	N/A
42 CFR §495.6(d)(12) Provide patients with an electronic copy of their health information (including diagnostic test results, problem list, medication lists, medication allergies) upon request	More than 50% of all patients who request an electronic copy of their health information are provided it within three business days	Any EP that has no requests from patients of their agents for an electronic copy of patient health information during the EHR reporting period

Carestream

Objective	Measure	Exclusion
42 CFR §495.6(d)(13) Provide clinical summaries for patients for each office visit	Clinical summaries provided to patients for more than 50% of all office visits within three business days	Any EP who has no office visits during the EHR reporting period
42 CFR §495.6(d)(14) Capability to exchange key clinical information (for example: problem list, medication list, medication allergies, diagnostic test results) among providers of care and patient authorized entities electronically	Performed at least one test of certified EHR technology's capacity to electronically exchange key clinical information	N/A
42 CFR §495.6(d)(15) Protect electronic health information created or maintained by the certified EHR technology through the implementation of appropriate technical capabilities	Conduct or review a security risk analysis per 45 CFR 164.308(a)(1) and implement security updates as necessary and correct identified security deficiencies as part of its risk management process	N/A

Source: Centers for Medicare and Medicaid Services

Vue RIS and Core Set Measures

Since all core set measures are required and may not be entirely applicable to radiology, they will provide some practice benefits beyond receiving an incentive payment, such as: better structured data capture, improved practice-management capabilities, and better data maintenance within your IT infrastructure. Later in this guide, we'll discuss ways to review your practice to determine your exclusion eligibility for specific Core items, keeping in mind that you still must possess the technology and have the capability to capture the data, even if you opt to exclude capturing some data.

CARESTREAM Vue RIS has the capability to satisfy all of the required Core Set Measures for your practice. Carestream is currently planning our development objectives and market deliverables to continue our certification process as the industry moves from Stage 1 to Stage 2 to make sure we meet our customer's required needs as they continue to implement and deploy their meaningful use strategy. To date, CARESTREAM Vue RIS has obtained complete certification for Stage 1, including e-prescribing, drug/drug, drug formulary, and drug/allergy interaction checks (the

latter uses an integration with the DrFirst e-prescribing solution).

Menu Set

In addition to the 15 Core Set Measures, there are a set of Menu Set Measures that must also be embraced to achieve meaningful use. All EPs are required to report on five out of these additional 10 measures, except when exclusion criteria are met. If EPs meet the exclusion criteria for one Menu Set Measure, they must choose four out of the remaining nine measures; if they qualify for two Menu exclusions, they must select three out of the remaining eight measures, and so on.

Note: Beginning in 2014, Stage 1 Menu Set reporting specifications change. Refer to the CMS Stage 2 Final Rule for more information. [Dreyer, Jonathon L. and Keith J. Dreyer, *The Radiologist's Essentials to Meaningful Use: Essentials for Your First 2 Years*. Michigan: RMU Press, 2012. Print.]

The following table lists the Menu Set Measures and their exclusions:

Carestream

Meaningful Use | A Guide for Radiology

Objective	Measure	Exclusion
42 CFR §495.6(e)(1) Implement drug-formulary checks	The EP has enabled this functionality and has access to at least one internal or external formulary for the entire EHR reporting period	Any EP who writes fewer than 100 prescriptions during the EHR reporting period
42 CFR §495.6(e)(2) Incorporate clinical lab test results into certified EHR technology as structured data	More than 40% 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	An EP who orders no lab tests whose results are either in a positive/negative or numeric format during the EHR reporting period
42 CFR §495.6(e)(3) Generate lists of patients by specific conditions to use for quality improvement, reduction of disparities, research, or outreach	Generate at least one report listing patients of the EP with a specific condition	N/A
42 CFR §495.6(e)(4) Send reminders to patients per patient preference for preventive/follow-up care	More than 20% of all unique patients 65 years or older of 5 years old or younger were sent an appropriate reminder during the EHR reporting period	An EP who has no patients 65 years or older of 5 years old or younger with records maintained using certified EHR technology
42 CFR §495.6(e)(5) Provide patients with timely electronic access to their health information (including lab results, problem list, medication lists, medication allergies) within four business days of the information being available to the EP	More than 10% of all unique patients seen by the EP are provided timely (available to the patient within four business days of being updated in the certified EHR technology) electronic access to their health information subject to the EP's discretion to withhold certain information	Amy EP that neither orders nor creates any of the information listed at 45 CFR 170.304(g) during the EHR reporting period
42 CFR §495.6(e)(6) Use certified EHR technology to identify patient-specific education resources and provide those resources to the patient if appropriate	More than 10% of all unique patients seen by the EP during the EHR reporting period are provided patient-specific education resources	N/A
42 CFR §495.6(e)(7) The EP who receives a patient from another setting of care of provider of care of believes an encounter is relevant should perform medication reconciliation	The EP performs medication reconciliation for more than 50% of transitions of care in which the patient is transitioned into the care of the EP	An EP who was not the recipient of any transitions of care during the reporting period

Objective	Measure	Exclusion
42 CFR §495.6(e)(8) The EP who transitions their patient to another setting of care of refers their patient to another provider of care should provide summary of care record for each transition of care or referral	The EP who transitions their patient to another setting of care or provider of care provides a summary of care record for more than 50% of transitions of care and referrals	An EP who neither transfers a patient to another setting nor refers a patient to another provider during the EHR reporting period
42 CFR §495.6(e)(9) Capability to submit electronic data to immunization registries or Immunization Information Systems and actual submission in accordance with applicable law and practice	Performed 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 none of the immunization registries to which the EP submits such information have the capacity to receive the information electronically)	An EP who administers no immunizations during an EHR reporting period or where no immunization registry has the capacity to receive the information electronically
42 CFR §495.6(e)(10) Capability to submit electronic syndromic surveillance data to public health agencies and actual submission in accordance with applicable law and practice	Performed 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 none of the public health agencies to which an EP submits such information have the capacity to receive the information electronically)	An EP who 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

Source: Centers for Medicare and Medicaid Services

Carestream

Vue RIS and Menu Set Measures

Vue RIS provides the ability for your practice to meet all 10 Menu Set Measures providing your radiology practice better opportunity to meet program requirements. It is important that you analyze your practice to determine what measures you are excluded from and what ones, you will comply with. Even with full exclusion of the Menu Set Measures, you will still be required to submit electronic syndromic surveillance data or immunization records but this capability is supported by Vue RIS, allowing you to comply with the Menu Set requirements.

Clinical Quality Measures (CQMs)

In addition to meeting the Core and Menu Set Measures, your EPs must submit Clinical Quality Measures based on the measures you are tracking. Failure to submit CQMs will demonstrate non-compliance in the incentive program and cause you to not receive your incentive payment. There are a total of 44 CQMs available to track and submit. However, a radiology EP will only need to submit six CQMs: three core/alternate core and three discretionary (a total of 9 CQMs are available to choose from to submit within Vue RIS). Many of the measures have percentage-based requirements you must follow and you'll need to track your numerators (overall population seen by the EP) and denominators (number of patients seen where you are tracking a specific measure). The calculation of the denominator into the numerator allows you to see if you've met the threshold required for compliance with any specific CQM measure you want to submit. If an EP has a zero denominator for a core or alternate core CQM, he or she still meets compliance for that measure by reporting a zero.

What CQMs you submit will be based on the ones your certified EHR solution offers for you and your individual practice. Some may meet all 44 CQMs while some may only offer a handful to choose from. For those solutions that offer only a few CQMs to submit, keep in mind that the vendor has most likely determined these CQMs apply most to the field of radiology and will require the lease amount of disruption to your workflow to capture and track throughout a reporting period.   Based on most diagnostic radiology practices, below is the list of core CQMs you'll most likely track and submit for Stage 1:

- **NFQ 0013 - Hypertension Blood Pressure Measurement:** Percentage of patient visits (over age 18) with a diagnosis of hypertension; seen at least two times with a recorded blood pressure

- **NFQ 0028 - Tobacco Use Assessment and Cessation Intervention:** Percentage of patients (over age 18) seen at least two times who were asked about tobacco use within a 24-month period; or the percentage of patients over age 18 who were known tobacco users and were seen two times within a 24-month period after receiving cessation intervention.

- **NFQ 0421/PQRI 128 - Adult Weight Screening and Follow-up:** Percentage of patients over age 18 with a calculated BMI documented in their medical record, current visit or within the previous six months where the BMI falls outside the standard parameters, and the patients have documented follow-up plans.

The following are some samples of discretionary CQMs you may wish to track due to their simplicity (yes/no responses) and relevance to radiology EPs:

- **NFQ 0043/PQRI 111 - Pneumonia Vaccination Status for Older Adults:** Percentage of patients over age 65 who have ever received pneumococcal vaccine.

- **NFQ 0031/PQRI 112 - Breast Cancer Screening:** Percentage of woman 40-69 who have had a mammogram to screen for breast cancer.

- **NFQ 0034/PQRI 113 - Colorectal Cancer Screening:** Percentage of adults ages 50-75 who have had a screening for colorectal cancer.

Note: CQM reporting requirements will change beginning in 2014, regardless of the stage of meaningful use. [Dreyer, Jonathon L. and Keith J. Dreyer, *The Radiologist's Essentials to Meaningful Use: Essentials for Your First 2 Years*. Michigan: RMU Press, 2012. Print.]

Carestream

Chapter 5: Certified Technology

Certified EHR Technology

As previously mentioned, the use of certified EHR technology is administered by the Office of the National Coordinator for Health IT (ONC). The ONC has established a temporary certification program to authorize organizations to test and certify healthcare IT vendors' technology. The ONC has established the criteria for certification and these testing bodies ensure that EHRs are capable of meeting Stage 1 Meaningful Use criteria for 2011-2012. Recently, the ONC extended the temporary program to allow the Authorized Testing and Certification Bodies (ONC-ATCB) to continue to test and offer EHR certification.

The goal behind this program was to assure that certified technology would be available for EPs and EHs that complied with Meaningful Use and allow EPs to collect their incentive payments, beginning in 2011. [Dreyer, Jonathon L. and Keith J. Dreyer, "Temporary EHR Certification Program." *The Radiologist's Guide to Meaningful Use*. Michigan: RMU Press, 2011. 70. Print.]

Just for reference, the following is the list of Authorized Testing and Certification Bodies you may hear about. A vendor that has been certified by any one of these testing bodies meets the criteria as a modular EHR or complete EHR, based on its testing outcome. A product that has been certified by any of the following bodies has passed the standards set by the ONC and NIST.

- Certification Commission for Health Information Technology (CCHIT)
- Drummond Group
- InfoGard Laboratories
- ICSA Labs
- SLI Global Solutions
- Surescripts (handles e-prescribing, Privacy, and Security modules only)

Complete vs. Modular EHR Certification

As discussed earlier in this guide, there are 25 certification criteria that must be met (plus the 44 CQMs) to provide eligible providers with a complete EHR system. In addition to the 25 certification criteria for eligible professionals, there are also eight additional criteria which vendors of certified

EHR technology must meet in order to address privacy and security. These (plus an optional ninth) criteria are listed below:

- 45 CFR §170.302(o): Access control
- 45 CFR §170.302(p): Emergency access
- 45 CFR §170.302(q): Automatic log-off
- 45 CFR §170.302(r): Audit log
- 45 CFR §170.302(s): Integrity
- 45 CFR §170.302(t): Authentication
- 45 CFR §170.302(u): General encryption
- 45 CFR §170.302(v): Encryption when exchanging electronic health information
- 45 CFR §170.302(w - optional): Accounting of disclosures

Modular certification refers to a vendor that has passed at least one of the 25 required measures – Core or Menu, plus the eight security and privacy measures. Complete certification refers to a vendor that has passed all 25 measures, plus the eight security and privacy measures. If your practice chooses to use modular technology, the CMS has created a tool to help you select your technology and place it in a "basket" (like a shopping cart on any website). Once you add your technology solutions, you can view your cart to see which measures you still need to meet. At that point, you can choose additional modular technology solutions to add to your cart until you meet all required measures as an EP.

Once again, it's important to note that if you choose to use modular technology, you'll be responsible for managing compliance of the criteria you're capturing for Stage 1 Meaningful Use in multiple systems – which means you'll also need a dashboard to help you monitor each one of your EP's compliance with all measures. Don't forget that even if you don't use all the measures in your practice, your solution or solution mix must possess the capability to capture data for those measures you've excluded.

Note: Certified EHR technology requirements change beginning in 2014, consult with your technology solutions provider regarding program-related changes. [Dreyer, Jonathon L. and Keith J. Dreyer, *The Radiologist's Essentials to Meaningful Use: Essentials for Your First 2 Years*. Michigan: RMU Press, 2012. Print.]

Carestream

Chapter 6: Radiologists and Meaningful Use

Eligibility

While there is an incentive program for Medicaid Meaningful Use, most radiologists will choose to participate in the Medicare Meaningful Use Program. Keep in mind that you may qualify for both programs but you can only participate in one. Also important to note: if you choose one but later decide to participate in the other program, you are allowed to switch between the Medicare and Medicaid program, but you can only do this one time.

One of the first things you must do to begin receiving Stage 1 Meaningful Use incentive dollars is to determine whether you're eligible to participate in the EHR incentive program and which one you will participate in. The good news is, most practicing radiologists probably are eligible, providing you are not hospital-based.

It's actually quite simple to determine your eligibility. Check the following criteria, in which you must:

- Treat greater than 90% of your patient volume as outpatient (POS code 22)—over 90% of your practice must be outpatient

- Have a National Provider Identifier (NPI)

- Register with the EHR Incentive Program - https://www.cms.gov/EHRIncentivePrograms/

- Have a National Plan and Provider Enumeration System (NPPES) user ID and password

- Be enrolled in the Provider Enrollment, Chain, and Ownership System (PECOS)

- Provide 50% of your patient encounters at practices or locations using certified EHR technology during the reporting period (one or multiple locations is acceptable but will be a challenge for an EP to track, as it's up to the provider to maintain records that show you're in compliance with this threshold, and you can be audited for up to seven years)

- Fulfill the consecutive reporting requirements (90 days for your first year; 365 days for each subsequent year after year one of your initial participation)

Financial Impact to Your Organization

While the incentive opportunities are quite attractive, keep one very important factor in mind: the money that has been set aside to encourage an EP's participation is just that – an incentive. It's not nearly enough money – nor was it intended to be used – to pay outright for your new EHR system, especially if your organization needs to make IT investments to comply with the program.

However, not complying with the program will most likely force your organization to pay penalties starting in 2015, which could have a significant effect on your organization's long-term operations and profitability.

It's important to review your overall cost of complying vs. not complying with this program early on so that you fully understand the financial impact on your practice.

Before you participate, you may want to use the helpful "practice analyzer" at RadiologyMU.org to sign up and access this tool. In addition, we recommend that you review your costs over a five-year period to understand the full financial investment.

When you review your incentive payment vs. program costs, you should consider the following items in your calculations:

- Overall incentive payment for all EPs in your practice (assuming you are rolling everyone's incentive payment collectively into your practice)

- Software licensing expense for existing certified software

- Software licensing expense for new certified software

- Yearly maintenance charges for all software

- Training costs

- Consulting costs

- Estimated noncompliance penalties starting in year 2015

Incentive Payments and Medicare Thresholds

Your overall incentive payment will be based on your yearly Medicare billings. The amount paid directly to each EP is based on 75% of his or her total allowable Medicare charges as physician fees. (This is based on professional fees only – technical charges are ineligible and these fees must be submitted within two months of the calendar year-end).

Carestream

Below is a sample chart that shows how the maximum incentive payment is achieved based on the threshold you must meet in Medicare physician fee billings per calendar year. As a reminder, in your first year, you only have to report on 90 days of consecutive use of your EHR technology, but you will use your full year Medicare physician billing to determine your maximum payout:

Calendar Year	Incentive Payment	Medicare Threshold
2011/2012*	$18,000	$24,000
2013	$12,000	$16,000
2014	$8,000	$10,667
2015	$4,000	$5,334
2016	$2,000	$2,667

*Only one $18,000 payment is possible, based on start year of 2011 or 2012.

If your Medicare physician-fee charges exceed $24,000 in year one, you will only be eligible for the $18,000 maximum incentive payment. If you fall below $24,000 in year one, you would be eligible for a maximum payout of 75% of your total charges, and so on for each subsequent year, based on each year's Medicare threshold and corresponding maximum incentive payment.

More about Incentive Payments

Incentive payments are typically made four to eight weeks (more likely count on the eight-week timeframe) after your successful attestation (more on attestation later in this guide).

The incentive payments are made to the individual eligible professionals or their assigned designees and will be made in the same form that you receive your Medicare claim payments. Each EP qualified to receive an incentive payment will receive a separate payment, even if you've opted to group those payments together and apply them to your overall organization. Each incentive payment is made as a single sum payment, and because it's treated as income, is subject to any tax implications you may have. Please consult your tax professional for advice about your specific questions and concerns.

Chapter 7: Developing Your Strategy

Where to Begin?

The very first thing you should do before starting on this initiative is to learn as much as possible about the EHR Incentive Program – its overall fundamentals and purpose. Begin by reviewing non-biased sites such as the ACR, RadiologyMU.org, www.CMS.gov, and theMUguide.com. There are also numerous blogs, meetings and workshops available to help you understand this program. The more you understand, the better you'll be prepared to implement certified EHR technology and make it through a successful attestation so that you can receive your incentive payments.

After you arm yourself with some basics of the program, you'll want to designate a champion who is a senior member within your organization. Make sure this person can be available to support and explain "why" you are complying with this program. In addition, you'll want to designate someone on your staff who has researched Meaningful Use fairly extensively and can act as an expert at your facility to funnel questions, comments and concerns from other staff members, patients and referring physicians.

Once you have your champion and expert, verify your organization's eligibility to participate (see the section in *Chapter 6* on determining your eligibility).

After you've determined that your organization is eligible, you'll need to understand the measures, including the Clinical Quality Measures, and how they'll apply to your practice:

- Select the measures you'll track and attest to, and also select which Clinical Quality Measures you'll report against.

- You'll also need to note which measures apply as exclusions for your practice, as you'll have to report these when you attest.

- Once you've determined what measures you'll track, evaluate your current technology.

- Talk to your vendors about their plans and roadmap for complying with Meaningful Use.

- If you find you can't meet your objectives with your current technology, you'll need to select new certified technology, which you can either use to

Carestream

replace your existing technology (most likely a complete certified EHR for Stage 1) or complement your certified technology (most likely a modular certified EHR for Stage 1) .

- Use the CMS website http://oncchpl.force.com/ehrcert to get a better idea of where you stand with your current technology and where you'll need to be in order to comply with the incentive program rules and criteria.

Next, meet with your practice stakeholders and explain why you're participating in this program. Again, use your champion to help everyone understand this is the right thing to do and will ultimately allow you to provide better patient care.

Develop a team to help you implement, track, train and maintain compliance with your Meaningful Use Program over time. This can be one or two individuals or a team, based on your facility mix, infrastructure and overall workload. We suggest that you have a project manager (to assure your site is complying with your target), security specialist (to assure your compliance with security and privacy), a support specialist (to help answer questions as you move through this process), and a reporting and compliance specialist (to perform the attestations and assure each EP is meeting their required thresholds for compliance). Again, this can be one or as many people as you feel you need, but it's important to understand the requirements you will be taking on to comply with this program.

As part of your team-building, remember to meet with your vendors to learn about their roadmap for Meaningful Use and their timelines, to determine how their schedules will fit with your overall plans.

Next, it's very important to review your overall operations and understand how your overall workflow will change once you implement Meaningful Use. You'll need to determine who will enter the additional data when it comes into your office – especially if it applies to measures you'll be tracking and attesting to. Also, will you be capturing some of the data electronically from your referring physician's certified EHR? Will you need to shift staff responsibilities? And the most important thing: you'll need to analyze and then plan your workflow in such a way that it doesn't disrupt your overall patient-care throughput and departmental flow.

If you're taking a modular approach to implementing your Meaningful Use plan, you'll need to develop a strategy and the tools to monitor your measures through a dashboard.

Unless you can validate all the data in a single certified system, you will need to have a dashboard that can track your measures in all the certified systems you use, or one that can aggregate the data and generate the reports you need to run for your attestation.

After reviewing and redesigning your workflow, register with CMS (unless you did this earlier in the process). Each EP must be registered because each EP will receive the incentive payments if they qualify for the payment in each reporting period. You also have an option to have a designee within your facility act on behalf of all your EPs to register and attest for each EP. If your funds will be going into your practice, as a suggestion, you may want to have a legal document drawn up for your EPs to sign so that they're all aware their incentive payments are going back into your organization.

Following registration and during your reporting period (90 consecutive days in the first year you start the program and full-year reporting for each subsequent year), you should regularly monitor your progress and share with your EPs their progress to date. If you are falling short in specific areas, you'll have time to make adjustments so that you can meet the requirements of the measures you're tracking. Good monitoring of your progress is the key to meeting the Meaningful Use objectives and ensuring your incentive payments are approved and paid at the maximum amount allowed by the CMS. One important note on monitoring your measures: if any of your EP's fails at even one measure during your attestation, you must begin the 90-day tracking process again. If you're starting your program in 2012, start as soon as you can prior to the October 3 final date to comply in 2012. That way, if you do need to make some corrections, you can restart your 90-day period and still complete your reporting period in plenty of time to qualify for the 2012 incentive payment.

Finally, you'll attest that you have met the requirements of the CMS Meaningful Use Incentive Program for 2012. The attestation process is your legal statement to the CMS that you have fulfilled the requirements (tracked the required measures using certified technology) of the program. The attestation process takes place on the same website and system that you used to register with the CMS. During attestation, you will need to provide some basic information about each EP, enter answers to Core Measure questions (including exclusions), enter answers to the Menu Set questions (including exclusions), enter your numerators and denominators for your CQMs, and agree to the final set of questions to finish your attestation.

Carestream

Meaningful Use | A Guide for Radiology

As a good rule of thumb, make sure the certified technology you possess, or the dashboard software you're using, has the capability to extract the data for six years, as that is the audit time period. In addition, keep all documentation you generate for your attestation for six years, in case your practice is audited. Use the steps below as a checklist when developing your Meaningful Use strategy.

Suggested Steps to Achieving Meaningful Use

The following "steps" have been adapted from the 10-step approach to meaningful use outlined in *The Radiologist's Guide to Meaningful Use* [Dreyer, Jonathon L. and Keith J. Dreyer, *The Radiologist's Guide to Meaningful Use*. Michigan: RMU Press, 2011. Print.]

Step 1: Educate Yourself

Learn as much as possible about the EHR Incentive Program and its overall fundamentals and purpose. Use sites such as the ACR.org, RadiologyMU.org, and www.CMS.gov. An excellent set of resource books and reference guides can be found at theMUguide.com; other good sources are MU blogs, meetings, and workshops.

Step 2: Identify Your Meaningful Use Champion

Your champion should be a senior member or stakeholder within your organization and will provide support for "why" you are complying with this program. He or she can also provide organization strategy to your employees, patients, and referring physicians. This person will be your expert to funnel questions, comments, and concerns as they arise.

Step 3: Determine Your Eligibility

Verify your eligibility to participate (see the section in Chapter 6 on determining your eligibility).

Step 4: Understand the Measures and CQMs

You need to understand the required measures and Clinical Quality Measures and how they will apply to your practice. You will need to select those measures you will track and attest to as well as select which CQMs you will report against. You will also need to note any measures you can exclude, as you'll have to report these when you attest.

Step 5: Evaluate Your Existing Technology

You will need to evaluate your current technology to verify it is 1) certified for the Meaningful Use measures you are going to track and 2) that you don't need to complement its capabilities with additional certified software. Be sure to talk to your IT vendors about their plans and roadmap for complying with meaningful use, both for Stage 1 and beyond. Use the CMS website http://oncchpl.force.com/ehrcert to help you get a better idea of where you stand with your current technology and where you will need to be to comply with the incentive program rules and criteria.

Step 6: Communicate Your Plan

Meet with your practice stakeholders and explain your participation in this program and why you are doing it. Use your champion to help assure your staff this is the right thing to do for your organization and to improve patient care.

Step 7: Establish Your Project and Rollout Team

Develop a team to implement, track, train and maintain compliance with your Meaningful Use Program. This can be one or two individuals or a team, based on your facility mix, infrastructure and overall workload. Appoint a project manager, security specialist, a support specialist, and a reporting and compliance specialist.

Step 8: Review and Change Workflow as Needed

Review your facility operations to understand how your workflow will change once you implement Meaningful Use. Determine who will enter additional data when it comes into your office; front office staff? Techs? Film/medical records personnel? Establish interfaces with referring EMRs if you will capture some data electronically. Finally, analyze and plan your workflow so that it does not disrupt your overall patient throughput and departmental flow.

Step 9: Monitor Your Program

Monitor your measures via daily reports or via a dashboard. You will need to monitor each EP on a frequent basis and identify deficiencies they may have in one or more of their measures. Troubleshoot and develop a plan to increase their compliance so they meet the numerator thresholds they need to satisfy for their given measures.

Carestream

Step 10: Register with CMS

Register with CMS (unless you did this earlier in the process). Each EP needs to register, as each EP will receive incentive payments if he or she qualifies for payment in each reporting period. You have an option to have a designee within your facility act on behalf of all your EPs to register and attest for each EP.

Step 11: Attestation

Log onto the CMS site and attest that you have met meaningful use requirements for the year you are participating in the program. The attestation process is your legal statement to the CMS that you have fulfilled the requirements (tracked the required measures using certified technology) of the program. During attestation, you will 1) provide some basic EP information; 2) enter answers to Core Measure Questions (including exclusions); 3) enter answers to the Menu Set Questions (including exclusions); 4) enter your numerators and denominators for your CQMs; and 5) agree to the final set of questions and provide your attestation. Be sure to retain all documentation that supports your attestation for six years, in case you are audited.

Chapter 8: Workflow Changes and Considerations

Review and Document Your Current Workflow

Putting together and starting a Meaningful Use Program in most outpatient radiology facilities can seem like a daunting task. However, understanding the program, including the required data to capture, and providing solid communication about how the program works – and how it will benefit patient care – will help ease your transition.

One of the areas that will definitely be affected is your workflow. Your new program will require your site to capture and track a lot more data. For instance, you'll now need to track patient medications and any allergic reactions your patients may have had.

The best place to start is to fully understand what your current workflow is. In other words, document and flowchart what each of your staff members does each week and look at how much time they spend today capturing and entering patient data into your IT systems. It's a good idea to review all steps, methods, processes and/or tasks that each individual performs in your organization.

Once you understand your current processes, consider how each staff member's job and processes will change once you get going with your Meaningful Use measures. Remember, it will be up to your staff to enter the data required for the measures you're tracking for each EP throughout your reporting period. Explaining the reasons for the changes and working with your staff to assure that you'll keep the additional data entry to a minimum will go a long way to keeping you on track with your Meaningful Use goals.

"Seen by the EP"

There may be some confusion about who exactly needs to enter the data the EP will be attesting to. After all, if only radiologists could enter the data required for each study, it would cripple workflow, add undue costs and probably ensure failure with the overall program.

The good news is, the CMS has clarified what it means to "be seen by the EP" for the specialty-practice settings that fall outside the typical "patient/physician" relationship most general practitioners follow. Below are excerpts from the CMS FAQ library to clarify what "seen by the EP" means.

Meaningful Use | A Guide for Radiology

FAQ#10664, published 06/062011

Question: For the Medicare and Medicaid EHR Incentive Programs, how does an eligible professional (EP) determine whether a patient has been "seen by the EP" in cases where the service rendered does not result in an actual interaction between the patient and the EP, but minimal consultative services such as just reading an EKG? Is a patient seen via telemedicine included in the denominator for measures that include patients "seen by the EP"?

Answer: All cases where the EP and the patient have an actual physical encounter with the patient in which they render any service to the patient should be included in the denominator as seen by the EP. Also a patient seen through telemedicine would still count as a patient "seen by the EP." However, in cases where the EP and the patient do not have an actual physical or telemedicine encounter, but the EP renders a minimal consultative service for the patient (like reading an EKG), the EP may choose whether to include the patient in the denominator as "seen by the EP" provided the choice is consistent for the entire EHR reporting period and for all relevant meaningful use measures. For example, a cardiologist may choose to exclude patients for whom they provide a one-time reading of an EKG sent to them from another provider, but include more involved consultative services as long as the policy is consistent for the entire EHR reporting period and for all meaningful use measures that include patients "seen by the EP." EPs who never have a physical or telemedicine interaction with patients must adopt a policy that classifies as least some of the services they render for patients as "seen by the EP" and this policy must be consistent for the entire EHR reporting period and across meaningful use measures that involve patients "seen by the EP" -- otherwise, these EPs would not be able to satisfy meaningful use, as they would have denominators of zero for some measures.

FAQ#10665, published 06/06/2011

Question: For the Medicare and Medicaid EHR Incentive Programs, when a patient is only seen by a member of the eligible professional's (EP's) clinical staff during the EHR reporting period and not by the EP themselves, do those patients count in the EP's denominator?

Answer: The EP can include or not include those patients in their denominator at their discretion, as long as the decision applies universally to all patients for the entire EHR reporting period and the EP is consistent across meaningful use measures. In cases where a member of the EP's clinical staff is eligible for the Medicaid EHR incentive in their own right (NPs and certain physician assistants (PA)), patients seen by NPs or PAs under the EP's supervision can be counted by both the NP or PA and the supervising EP as long as the policy is consistent for the entire EHR reporting period.

For more information about the Medicare and Medicaid EHR Incentive Program, please visit
http://www.cms.gov/EHRIncentivePrograms

Areas Where Workflow May Change

In summary, as long as you apply your methods consistently vs. creating "one-offs," the CMS fully accepts the fact that being "seen by the EP" can also translate to the EP's clinical staff. In other words, being "seen by" the EP can extend to your radiology clinical staff and those exams can be counted in your calculations. The EPs can choose which exams to count or exclude in their calculations, based on this guidance above.

Workflow Considerations

Each of your EP's staff will, in virtually all instances, be responsible for documenting in certified technology the information needed to comply with measures for Meaningful Use. Data captured on paper cannot be included in your calculations unless that data is entered into your certified technology as part of your tracking for that measure. When you're attesting, keep in mind that you're required to provide all numerator and denominator information directly from your certified technology. It's also permissible to

22

include data from an uncertified system, as long as the data is correctly entered into the certified technology and used in your final calculations.

Because every radiology practice is different, there's no single, correct workflow that can be applied to every facility – which is why you need to document and understand your current workflow. You may choose to capture much of the data during scheduling, or maybe scheduling is so fast-paced and busy at your site that you create a callback/reminder program to capture the data. As another alternative, you could capture the data at the time of registration and either enter it then or after each patient leaves.

But even though each facility is unique, these are some general considerations to think about as you plan how you will capture your meaningful data into your certified technology. Some of the following suggestions have been used by outpatient radiology practices that have successfully attested to, and received, their incentive checks for complying with Meaningful Use.

Scheduling

A. If your scheduling department can spend some additional time on the phone with the referring physician office or patient, select which data elements your staff will ask for during scheduling. You may wish to consider having them capture height, weight, immunizations, tobacco use, allergies, medications and ethnicity.

B. If your scheduling department cannot spare additional time on the phone, consider having them ask for one or two additional pieces of information, such as height and weight, or tobacco use and ethnicity.

Obviously, the data you receive is only as good as what the physician's office or patient is willing to provide you at the time you're scheduling each exam.

Appointment Reminders

If your facility has never implemented a schedule-reminder program, you may want to consider it now. If your scheduling department is so busy that they cannot afford extra time to collect additional data, you may want to contact patients in the evening a few days prior to their exam to collect the additional data suggested above. Your patients may also have additional questions about their

exam, so this could also be considered as part of your efforts to provide better patient care.

Registrations

A. If your front office is not too crowded and registrations don't typically back up, you may want to consider having your registration staff collect additional Meaningful Use information about patients when they arrive at your facility. Items to ask would include verification of demographics, immunization history, allergies, tobacco use, medication lists, and e-mail addresses so that you can send copies of their records, as required.

B. If your front office is very hectic and it's a burden for staff to enter additional data (sometimes the medication, allergy, and immunization lists can get rather lengthy for data entry), consider having your staff gather the data suggested in section "A" above but then move the data entry to your film/medical records staff to input. Offloading the information documentation to another department (whose role is most likely changing anyway, with the advent of digital imaging), provides a faster registration process while you also enter the data into your certified technology against your Meaningful Use measures.

Here are some additional suggestions to consider as you change processes for your front office staff or film/medical records staff:

1. Record the date when patients request an electronic copy of their health information, in addition to the fulfillment date.

2. Provide patients with specific education materials or resources.

3. Implement decision-support rules based on patient exams (the MRI rule if a patient has a pacemaker; MRI rule if history of metal in eyes requires orbital X-rays; diabetic rule for CT contrast exams; screening mammo exams one year out for patients over "X" years old, etc.). The rules you choose to implement will be based on the capabilities of your certified technology.

Carestream

Meaningful Use | A Guide for Radiology

Technologists

Your technologists will most likely capture additional data, such as patient vitals and blood pressure. This is typically done for some special-procedure exams but is not a typical task prior to taking general X-rays. This will obviously place another burden on your technologists unless they can get the vital signs from referring physicians or directly from patients.

In addition, if you track lab values, the technologists may be responsible to enter that information into your certified technology. Again, the tech or tech aid can enter this information or you could have your film/medical records staff do so after patients have left. What's very important is to make sure that whatever process you choose, you also add the information to your patients' records. Obviously, if you can send some lab data electronically to your certified technology, it will greatly decrease the burden on your staff.

Physicians

Ideally, you want to keep additional data entry to a minimum for your radiologists to avoid a bottleneck in their overall workflow. There are two areas where they may need to take action to comply with Meaningful Use in your certified technology:

- eRx – radiologists must use certified electronic technology.
- Review allergy and medication alerts – radiologists must review any contraindication alerts.

Both of these should be part of your certified technology. However, if your radiologists write fewer than 100 prescriptions each year, they may choose to be excluded from the eRx measure. Note that while your technology must still possess that capability, you may choose to designate it as one of your exclusions.

Final Considerations

There are a few other measures that may require you to adjust your workflow and consider who will enter that information, and when:

- Medication reconciliations
- Patient summary records (for transition of care)
- Clinical summary records

The above items are episodic, so you'll want to enter these for each patient encounter.

Keep in mind that the overall effects on your workflow will be based on which measures you choose to track and report against. After you've reviewed your workflow, it's a good idea to provide several training sessions to make sure your staff is comfortable with the new changes. Also, we highly recommend that you start your 90-day reporting period (or run a trial) ASAP to get your staff used to the changes in their daily routines. If you need to make adjustments that require you to restart your reporting period, a trial run will give you that extra time. The key is to continually monitor the workflow early in the process and make the necessary adjustments so that you can minimize the extra data-capture burden on your staff.

Carestream

Chapter 9: Meaningful Use and Vue RIS

How Vue RIS Helps You with Meaningful Use

If you're reading this chapter, you've probably purchased the CARESTREAM Vue RIS or are considering purchasing it in the future, and are curious about how it will help you achieve your Meaningful Use objectives and compliance using certified technology.

In fact, the CARESTREAM Vue RIS has a unique certification through the ONC-ATCB. Vue RIS is currently certified as a complete EHR for eligible professionals (EPs) with modular certification for eligible hospitals (EHs). This dual certification can allow Vue RIS to operate in some unique situations.

Certified Health IT Product List
The Office of the National Coordinator for Health Information Technology
HealthIT.HHS.Gov

STEP 2: SEARCH FOR CERTIFIED EHR PRODUCTS

Use the browse all products, search by product name or search by criteria met to search for certified EHR products.

Browse All Ambulatory Products

Browse

Search by Name or CHPL Product Number:
Select search type:
Vendor Name
Search for:
Carestream
Search

Search by Criteria Met

Search

Your Search Results: Showing 1-3 of 3 Products Found

STEP 3: ADD PRODUCTS TO YOUR CART

To add products to your cart, select the "Add to Cart" link in the far-right column. After adding a product to your cart, you will be directed to your cart page. Once on the cart page you can view the criteria met by the product(s) in your cart. Once the product(s) in your cart meet 100% of the required criteria you can obtain a CMS EHR Certification ID.

You can sort on any column in the table below. To sort, click on the column header and the arrow will confirm you are sorting in ascending or descending order.

	Matching Product				See Complete Products Only			
Certifying ATCB	Original Practice Setting	Vendor	Product	Product Version#	Product Classification	Additional Software Required		
CCHIT	Ambulatory	Carestream Health	Carestream Vue RIS	11	Complete EHR	DrFirst, DrFirst Rcopia Web Prescribing/EDA Application, v4.1	Add to Cart	
CCHIT	Ambulatory	Carestream Health	Carestream Vue RIS	11	Modular EHR	Nuance, Speech Magic, 6	Add to Cart	
CCHIT	Inpatient	Carestream Health	Carestream Vue RIS	11	Modular EHR	Nuance, Speech Magic, 6	Add to Cart	

Page 1   Display 25   records per page

Source: oncchpl.force.com/ehrcert/EHRProductSearch

Vue RIS has obtained complete EHR certification for Stage 1 Meaningful Use and Carestream is totally committed to keeping our technology up to date with the various stages of Meaningful Use. We're currently in the process of planning our Stage 2 development and commercialization rollout to meet the 2014 requirements.
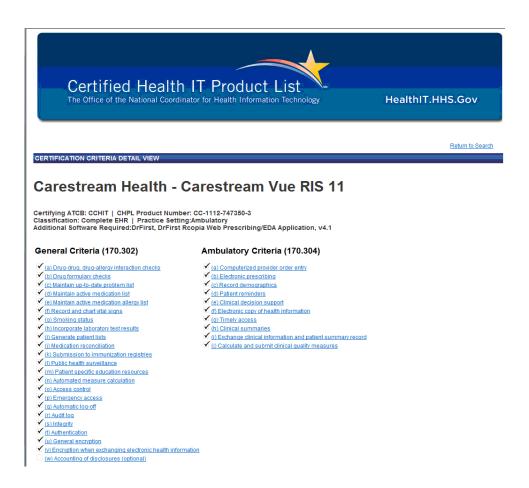
The rest of this chapter will walk you through the various areas where you'll input – manually or electronically (via an HL7 interface) – the Meaningful Use data your site chooses to capture for each of your EPs.

Meaningful Use | A Guide for Radiology

Vue RIS and Measure Certification

Searching for Carestream on the ONC's website will provide you with the measures and CQMs for which we've already received certification. You can also visit: http://oncchpl.force.com/ehrcert
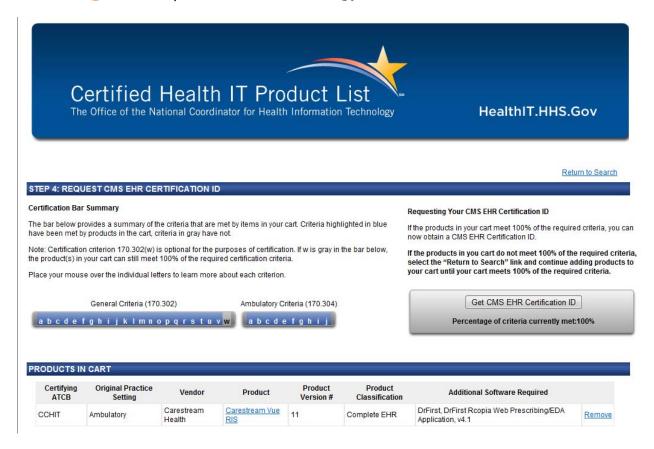

Source: oncchpl.force.com/ehrcert

Ambulatory Clinical Quality Measures

- ☐ NQF 0001 Asthma Assesment
- ☐ NQF 0002 Pharyngitis- Children
- ☐ NQF 0004 Alcohol and Drug Dependence
- ☐ NQF 0012 Prenatal Care: HIV Screening
- ☑ NQF 0013 Hypertension: Blood Pressure Measurement
- ☐ NQF 0014 Prenatal Care: Anti-D immune Globulin
- ☐ NQF 0018 Controlling High Blood Pressure
- ☑ NQF 0024 Youth Weight Assesment
- ☑ NQF 0027 Tobacco Use Cessation
- ☑ NQF 0028 Prevenitive Care: Tobacco Use Assesment and Cessation
- ☑ NQF 0031 Breast Cancer Screening
- ☐ NQF 0032 Cervical Cancer Screening
- ☐ NQF 0033 Chlamydia Screening for Women
- ☐ NQF 0034 Colorectal Cancer Screening
- ☐ NQF 0036 Appropriate Medications for Asthma
- ☑ NQF 0038 Childhood Immunization Status
- ☑ NQF 0041 Influenza Immunization
- ☐ NQF 0043 Pnemonia Vaccination
- ☐ NQF 0047 Asthma Pharmacologic Therapy
- ☐ NQF 0052 Use of Imaging Study: Low Back Pain
- ☐ NQF 0055 Diabetes: Eye Exam
- ☐ NQF 0056 Diabetes: Foot Exam
- ☐ NQF 0059 Diabetes Control: Hemoglobin A1c >9.0%
- ☑ NQF 0061 Diabetic Patients who elevated mmhg V140/90
- ☐ NQF 0062 Nephropathy Screening- Urine
- ☐ NQF 0064 Diabetes Control: LDL < 100mg/dl
- ☐ NQF 0067 Antiplatelet Therapy
- ☐ NQF 0068 Ischemic Vascular Disease: Asparin or other Antithrombotic
- ☐ NQF 0070 Coronoary Artery Disease: Beta Blocker Therapy Post Myocadial Infarction
- ☐ NQF 0073 Blood Pressure Management: Ischemic Valve Disease
- ☐ NQF 0074 Corinary Artery Disease: Lipid Lowering Therapy
- ☐ NQF 0075 IVD: Complete Lipid Panel and LDL Control
- ☐ NQF 0081 Heart Failure: ACE/ ARB Therapy For LVSD (LVEF <40%)
- ☐ NQF 0083 Heart Failure: Beta Blocker for LVSD
- ☐ NQF 0084 Heart Failure: Warfarin Therapy
- ☐ NQF 0086 Primary Open Angle Glaucoma
- ☐ NQF 0088 Diabetic Retinopathy: Macular Edema
- ☐ NQF 0089 Diabetes Management: Retinopathy Screening
- ☐ NQF 0105 Depression Management
- ☐ NQF 0385 Colon Cancer: Chemotherapy
- ☐ NQF 0387 Breast Cancer: Hormonal Therapy
- ☐ NQF 0389 Prostate Cancer: Avoid overuse of Bone Scan
- ☑ NQF 0421 Adult Weight Screening
- ☐ NQF 0575 Diabetes Control: Hemoglobin A1c <8.0%

Source: oncchpl.force.com/ehrcert/

Carestream

Source: oncchpl.force.com/ehrcert/certificationcart

Vue RIS and Data Capture

This section features the data fields available to your site for capturing data in the Vue RIS. If you're a current Carestream customer and are using or are planning to use the Vue RIS, you'll want to refer to your product documentation for any questions related to data entry, layout and reporting that aren't covered here. You can also talk with your applications specialist for additional information.
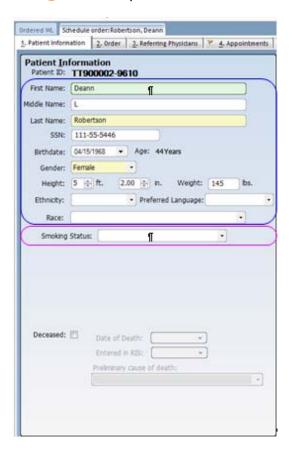
Patient Demographic Data

Vue RIS has the capability to allow your referring physicians to electronically submit order requests for radiology exams to your facility. Providing referring physicians with the screens to enter meaningful data can save your staff a lot of time when it comes to data entry.

While we recognize that many referring physician offices may choose to not use the Vue RIS to enter data, interfaces can be developed between their EMR systems and our RIS, which will allow for electronic capture of the required data for Meaningful Use.

Finally, as will be the case for most sites early on, most of your meaningful data will need to be captured manually by your staff. The Vue RIS screens have been designed to be similar and consistent across all user profiles with access to the core patient demographic data. Your security privileges may or may not allow you to enter and/or change patient demographic data. The figure below shows the patient demographic data fields you'll enter:

The data captured in the figure above satisfies the following Meaningful Use measures:

Ambulatory Criteria 170.304

42 CFR §495.6(d)(7) – Record demographics: preferred language, gender, race, ethnicity, date of birth (required for 50% of all unique patients over the age of 2 in order to comply with this measure).

General Criteria 170.302

42 CFR §495.6(d)(9) – Record smoking status for patients ages 13 and older (required for 50% of all unique patients over 13 years old to comply with this measure).

Although we're not discussing hospital-specific criteria in this guide, note that Vue RIS will prompt users for an advance directive if a patient is over the age of 65, as shown in this next figure:

Lab Data and Vital Signs

As you become familiar with the layout of Vue RIS, you'll notice that data is logically grouped together in tabs to help you find specific data categories. There are two "Clinical History" tabs in Vue RIS. The first is where you'll capture patient lab data and vital signs, and the second is where you record vital signs, as shown in the figure below:

Notice that in both instances, lab data as well as growth charts can be displayed graphically as new data is entered, which allows you to view data across time.

The data captured in the figure above satisfies the following Meaningful Use measures:

General Criteria 170.302

42 CFR §495.6(e)(2) – Incorporate clinical lab test results into certified EHR technology as structured data (more than 40% 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).

42 CFR §495.6(d)(8) – Record and chart changes in vital signs: height, weight, blood pressure. Calculate and display BMI, plot and display growth charts for children ages 2-20 (including BMI). (Record height, weight, and blood pressure

as structured data for more than 50 % of all unique patients ages 2 and older that are seen by the EP.)

Vaccines, All Conditions, Medications, and Allergies

The second clinical history tab ("Clinical History 2") is where you'll enter patients' vaccines, all patient conditions, all medications and all allergies as displayed in the figure below:

Carestream

The data captured in the figure above satisfies the following Meaningful Use measures:

General Criteria 170.302

42 CFR §495.6(d)(3) – Maintain an up-to-date problem list of current and active diagnoses (record at least one entry or an indication as structured data that no problems are known for more than 80% of all unique patients seen by the EP).
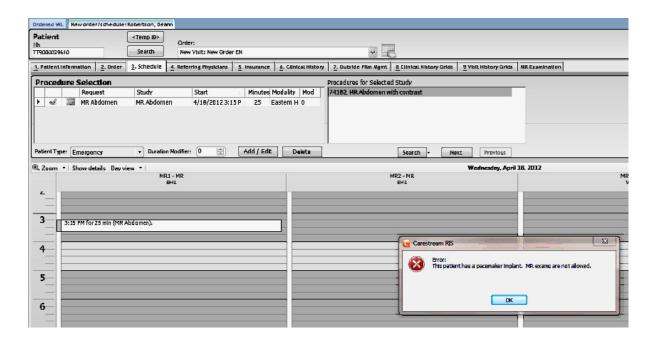
42 CFR §495.6(d)(5) – Maintain an active medication list (record at least one entry or an indication as structured data that more than 80% of all unique patients seen by the EP are not currently prescribed any medication).

42 CFR §495.6(d)(6) – Maintain an active medication-allergy list (record at least one entry or an indication as structured data that more than 80% of all unique patients seen by the EP have no known medication allergies).

Decision-Support Rule

As you'll recall, you may select or create one decision-support rule to implement at each EP's discretion, based on your scope of practice. While there are many rules you can use within radiology, the following is an example of a decision-support rule that is launched when the user orders an MRI exam on a patient with a pacemaker:
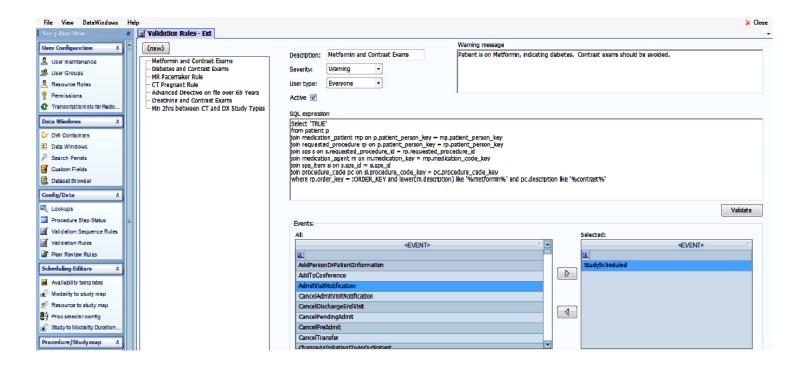
Carestream

The rule in the figure above would satisfy measure:

Ambulatory Criteria 170.304

42 CFR §495.6(d)(11) – Implement one clinical decision-support rule relevant to your specialty or high clinical priority along with the ability to track compliance with that rule (implement one clinical decision-support rule).

Vue RIS incorporates several decision-support rules that are standard and were used as part of our ONC certification with CCHIT. A limited number of additional rules can be created as part of your implementation (based on your current statement of work). They can also be purchased and implemented, based on your site needs. The following figure shows a list of the rules that come standard with Vue RIS:

Carestream

Additional Measures

Vue RIS has been certified for a total of nine CQMs. However, the rest of the measures are difficult to show with screen captures. These include privacy and security measures, access to electronic information, CQMs (three core plus three alternate), public surveillance, immunization-submission capabilities, automated measurements, data-exchange encryption and patient-list generation.

e-Prescribing, Drug-Drug, and Drug-Allergy

Vue RIS has embedded the DrFirst application into our RIS to satisfy the requirements for e-Prescribing, drug-drug and drug-allergy interaction checks. DrFirst partners with more than 200+ healthcare IT vendors and is a very mature, ONC-certified product that works quite easily with other third-party EHR and RIS solutions.

You can find out more about the capabilities of this application via the DrFirst website: www.drfirst.com.

Other Measures

You can also use Vue RIS to submit syndromic information to other certified systems, when needed. And after your first year of attestation, Vue RIS has the capability to send your numerator, denominator and CQM information directly to the CMS to help you meet your annual attestation requirements.

Finally, you can share access to patient results and education materials with patients – all from within Vue RIS. This means it's the only solution you need in order to comply and sustain Meaningful Use measures at your outpatient imaging facility.

Carestream

Chapter 10: Attestation

Attestation

After you've followed all the steps we've outlined here – decided to participate in the CMS incentive program for Meaningful Use, analyzed your organization's certified technology and workflow, trained your staff, implemented your solution, and captured your data – you're ready to attest to the CMS that you've fulfilled the requirements to meet Stage 1 Meaningful Use. This section explains a bit about that process and what you can expect.

Before You Begin

Remember that before you attest to anything, the data you will be attesting to must come from certified technology, not paper records. However, if you do have some paper records, you may enter that information into your certified technology to fulfill some requirements (such as patients supplying you with their medication lists). Either way, you must have the data keyed into your certified technology and the data you enter must meet the reporting-period time requirements (90 days of consecutive use in year one and 365 days for each subsequent year).

You'll use your certified technology to enter the requested data during the attestation process. Once you enter the required data, the system will show you a summary of your results and accept or reject your results. If your data are rejected, contact your Regional Extension Center for guidance.

Attestation Steps

The following screens will briefly walk you through the steps required to attest. For more information, please review the attestation process and use the online tutorials, etc. at the CMS website: http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/EducationalMaterials.html

Carestream

Meaningful Use | A Guide for Radiology

Step 1: Log on to the Registration and Attestation System

The CMS has created a special website for the EHR incentive program registration and attestation. The web address is: https://ehrincentives.cms.gov/hitech/login.action

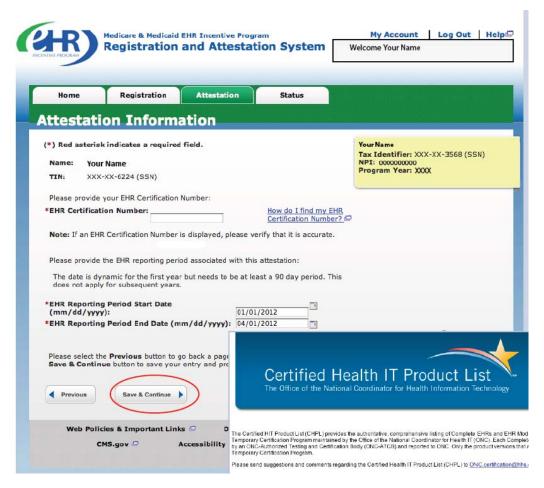**Step 2: Assemble the data from your certified technology**

You'll need your numerator and denominator information from your certified technology to complete this process for each EP you are attesting for. Make sure you have all that ready and available to help speed you through the attestation process.

Step 3: Enter your basic information

You'll need to enter the following information to begin the attestation process:

- EHR certification number (note that this is different than the number the ONC issues to the EHR vendor)
- Reporting-period start date
- Reporting-period end date

Source: *CMS Attestation User Guide for Eligible Professionals* (01.01.12 Ver3)
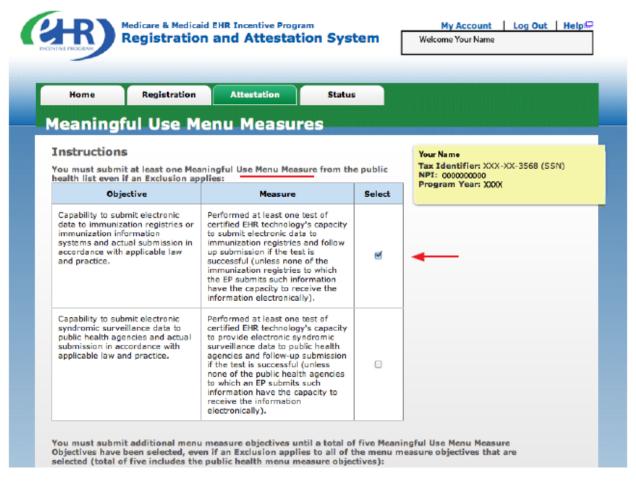
Step 4: Enter your Meaningful Use Core Measures

The next section includes 15 questions related to your Meaningful Use Core Measures. Be sure to indicate if you have exemptions to any of the Core measures. Important: for question number 10, you must specify that you're reporting your CQMs in the manner the CMS has requested – if you answer "no" to question 10, you won't receive your incentive payment.
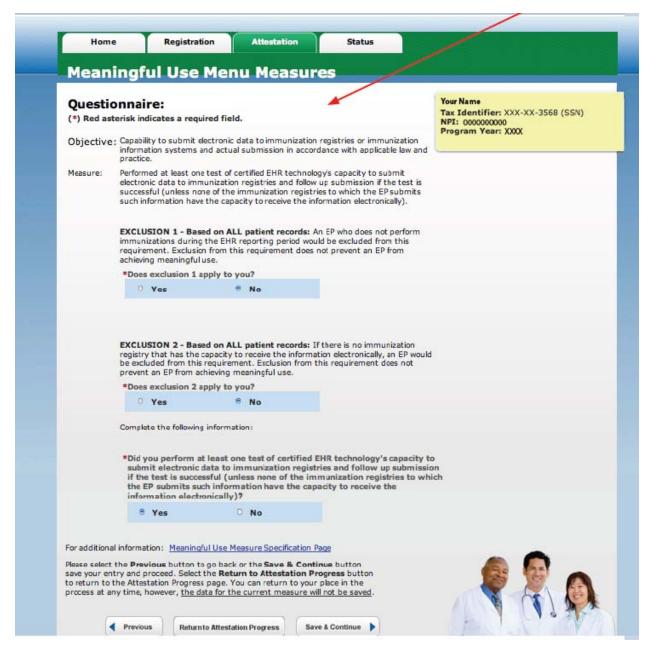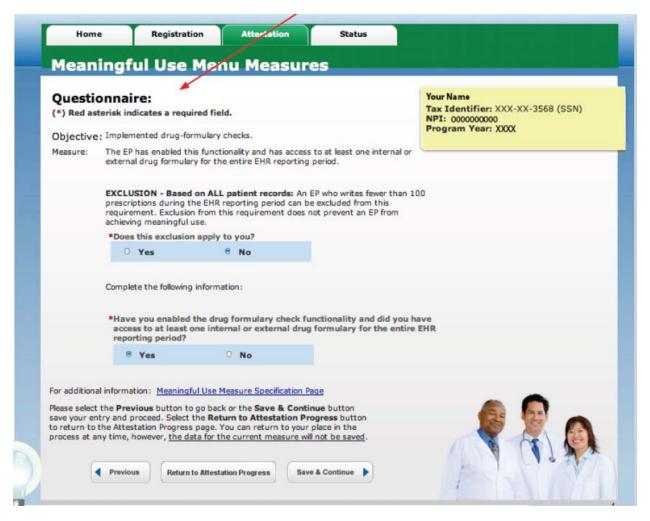

Source: *CMS Attestation User Guide for Eligible Professionals* (01.01.12 Ver3)

Carestream

Meaningful Use | A Guide for Radiology

Step 5: Enter your Meaningful Use Menu Measures

The next section covers the comprehensive list of 10 Meaningful Use Menu Set items. Select the five you will report against, and be sure to indicate if you have any exclusions for those you have chosen not to report. Remember – you must include one public-health measure plus four others, even if you have an exclusion. The next three figures show the 10 items from the Men Set list, one of the public health questions, and one of the Menu-Set questions:
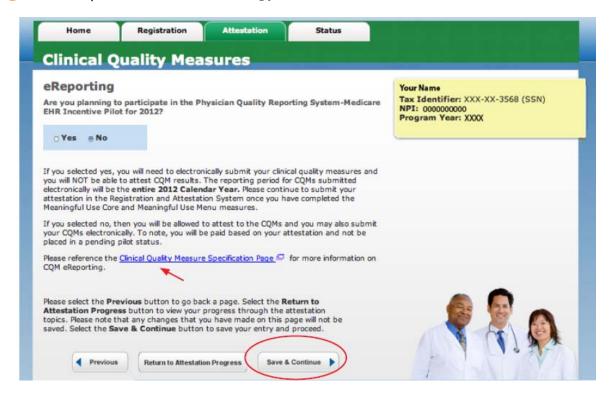

Source: *CMS Attestation User Guide for Eligible Professionals* (01.01.12 Ver3)

Source: *CMS Attestation User Guide for Eligible Professionals* (01.01.12 Ver3)

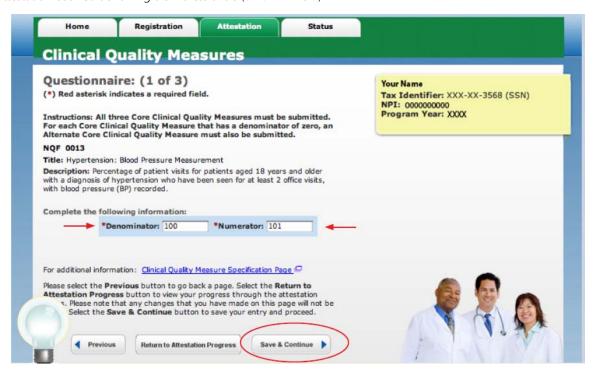Source: *CMS Attestation User Guide for Eligible Professionals* (01.01.12 Ver3)

Step 6: Enter your CQM data

The next section instructs you to input data from your three Core or Alternate Core CQMs. After entering this data, you'll also need to select three additional CQMs for which you'll enter numerator and denominator information.
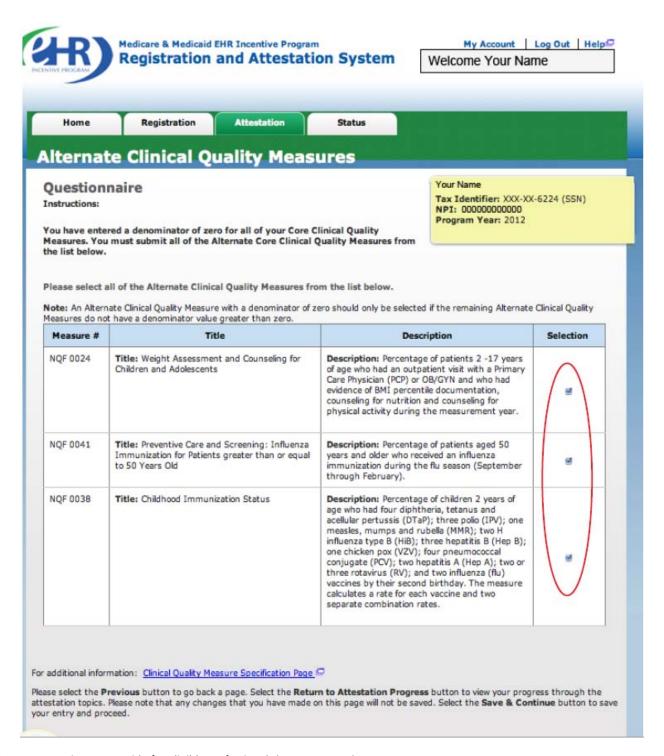
You have the option to submit this information electronically; however, using this guide and during your first reporting year using Vue RIS, you'll most likely want to enter your CQMs manually. The next few figures show what you can expect to see during this part of the attestation process:
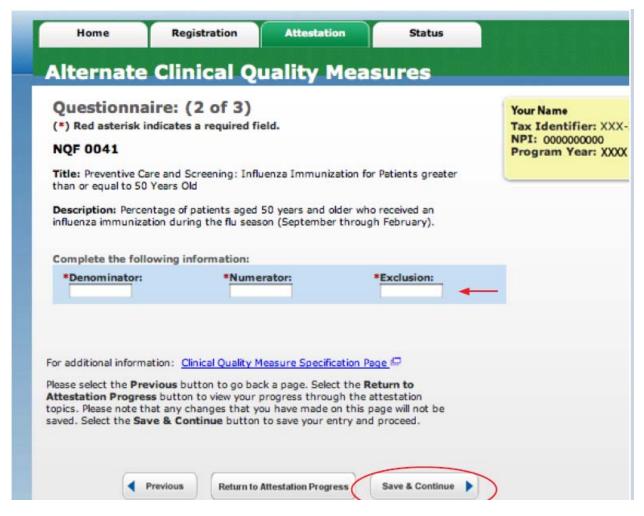
Carestream

Source: *CMS Attestation User Guide for Eligible Professionals* (01.01.12 Ver3)

Source: *CMS Attestation User Guide for Eligible Professionals* (01.01.12 Ver3)

Carestream

Source: *CMS Attestation User Guide for Eligible Professionals* (01.01.12 Ver3)

Source: *CMS Attestation User Guide for Eligible Professionals* (01.01.12 Ver3)

Meaningful Use | A Guide for Radiology

Source: *CMS Attestation User Guide for Eligible Professionals* (01.01.12 Ver3)
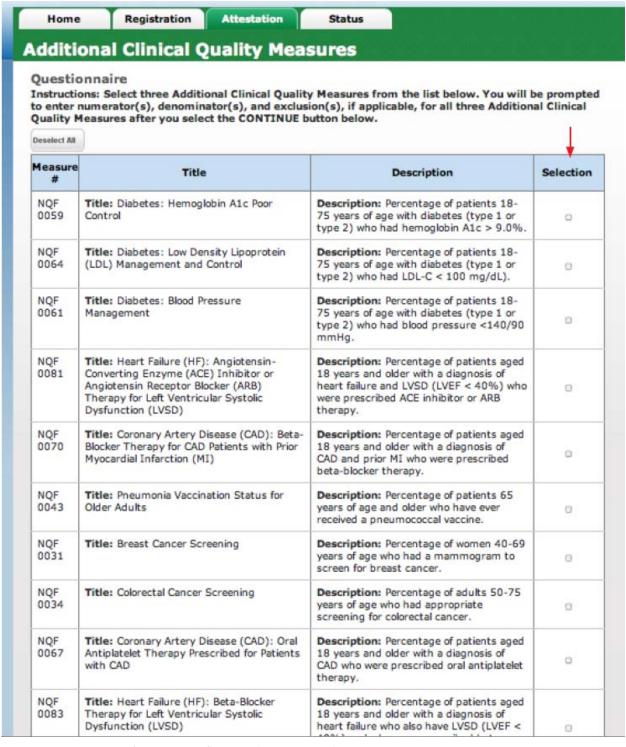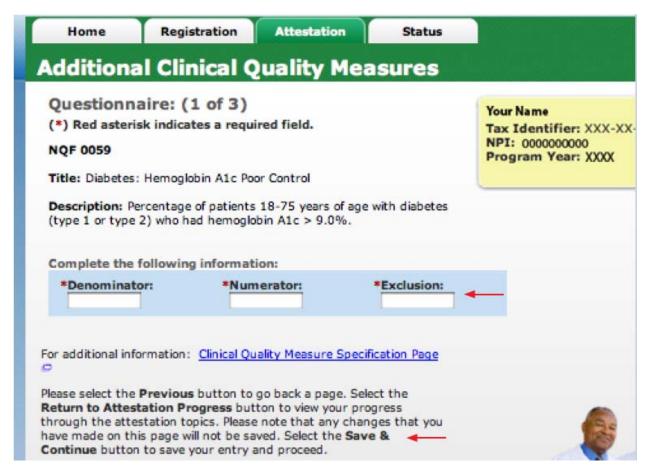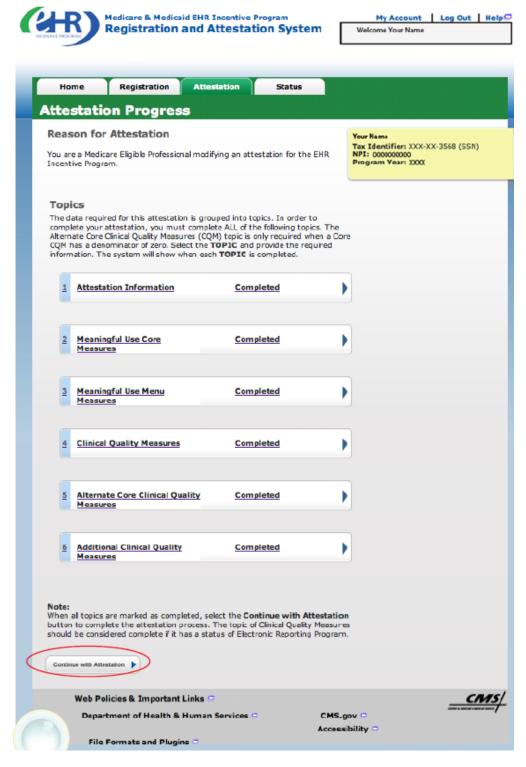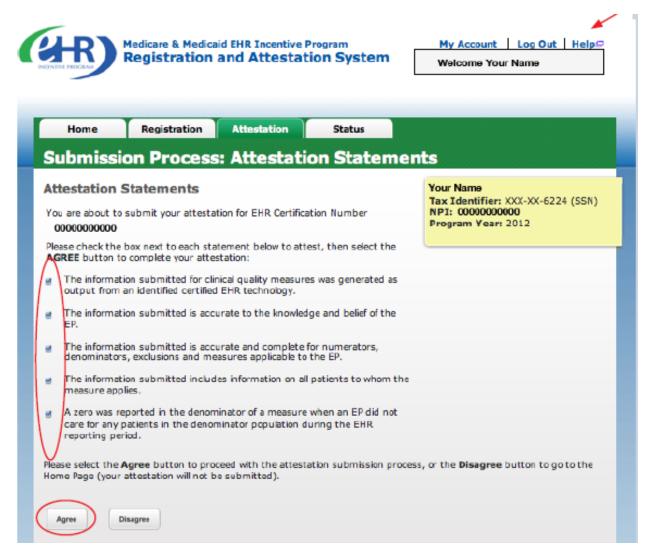
Meaningful Use | A Guide for Radiology

Source: *CMS Attestation User Guide for Eligible Professionals* (01.01.12 Ver3)
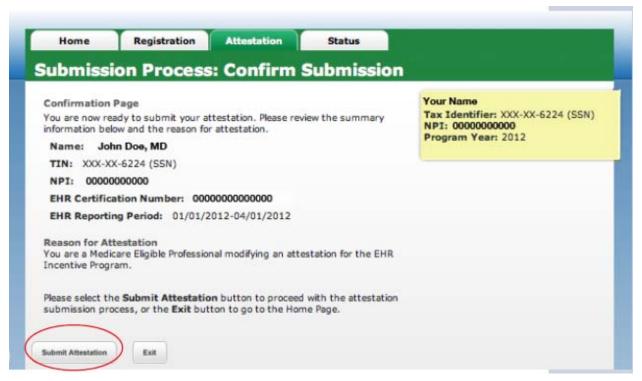
Step 7: Confirm your attestation

After successfully entering all your information in the attestation system, you'll review what you've entered, verify your status is complete for all areas, submit your attestation, and receive a confirmation or rejection of your attestation. The figures below are a subset of the screens you'll see as you complete these final steps in the attestation process:

Meaningful Use | A Guide for Radiology

Source: *CMS Attestation User Guide for Eligible Professionals* (01.01.12 Ver3)

Meaningful Use | A Guide for Radiology

Source: *CMS Attestation User Guide for Eligible Professionals* (01.01.12 Ver3)

Source: *CMS Attestation User Guide for Eligible Professionals* (01.01.12 Ver3)

Step 8: Receive your incentive payment

Following submission of your attestation, you can expect to receive your check in four to eight weeks (closer to eight weeks is more likely). After this point, please remember to keep all supporting data you used for your attestation for at least six years in case you are audited.

For complete information about the attestation process, what to do if your claim is rejected, and up-to-date comprehensive tutorials on the attestation process, please download the CMS Attestation User Guide for Eligible Professionals at the following site: http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/downloads//EP_Attestation_User_Guide.pdf

Note that there's a separate guide for Eligible Hospitals during their attestation process.

Chapter 11: What's Next?

Looking Forward to Stage 2

In February 2012, the CMS released the Stage 2 Notice of Proposed Rule Making (NPRM) and in March, the ONC released the standards for Stage 2 certification, which were published in the Federal Register.

Stage 2 criteria and proposed changes were reviewed for a specified public period, which ended May 7, 2012. The CMS released the final rules for Stage 2 in August 2012. One of the bright spots that the CMS has added is a menu set measure (with exclusion) to include imaging in certified EHRs, as well as additional radiology specific CQMs were incorporated as well. The key to these new measures is the cooperation that the CMS and ONC are trying to achieve with specialty practices. The Meaningful Use program will still be a one-size-fits-all program but the additional measures in future stages will begin to address the specialty practices.

Stage 2 High-Level Overview

The following details, at a high level, are the changes that have been proposed as the country moves toward Stage 2 Meaningful Use (Keen, Cynthia E. "Deadline Looms for Comment on Stage 2 MU Proposals," AuntMinnie.com, 13 Apr. 2012. Web. 20 Apr. 2012. <http://www.auntminnie.com/index.aspx?sec+sup>):

- Extend the time by one year for EPs who in 2011 attested they were meeting Stage 1 final rule requirements. CMS is proposing that each EP spend two years in each stage but is also recommending that those who attested in 2011 would remain in that category until 2014.

- Stage 1 requirements will be updated so that they are more consistent with the plan's overall strategic direction. Most, but not all, of the proposed Stage 1 revisions can be adopted in 2013 and will be required in 2014.

- The complexity of Stage 2 measures is greater than those of Stage 1; many have multiple parts.

- It will not be necessary to use a Health Information Exchange (HIE) to exchange information. However, sharing of health data will force real-time, high-quality data capture, from other providers and from patients. Patients will begin to participate during Stage 2.

- A change in the payment-adjustment policy would mean that providers who attested in 2011 or 2012 would need to achieve Stage 1 Meaningful Use in 2013 to avoid a payment adjustment in 2015.

- Providers may need to continue to demonstrate increasingly complex stages of Meaningful Use to avoid penalties.

- Imaging has been added as one of the menu objectives for more than 40% of all exams.

- The "must possess" capability has been removed from measures where you claim exclusions; however, any site implementing Meaningful Use measures prior to 2014 will still need to purchase software that covers their exclusions.

- The CMS is setting up some hardship exemption levels to allow physicians more time to participate in Meaningful Use in order to delay penalties that begin in 2015.

- There will be 15-16 CQMs that apply to radiology, but again, this may change, based on the final ruling.

- Ten percent (10%) of patients must download or view their medical information.

- Radiology orders will be considered as part of the computerized provider order entry (CPOE) requirement.

- Menu Set Measures that promote cancer registry and specialty society registration and participation will be added.

In Summary

We hope this guide has provided you with some clear, easy-to-understand information about the road to Meaningful Use. The program's sole intent is to foster better exchange of patient information between caregivers, which will ultimately lower healthcare costs through the use of technology.

Stage 1 "sets the table" for capturing patient data, clarifies which data is important to capture and specifies how to store it. Stage 2 will explore how to use that data in a meaningful way. And Stage 3 will focus primarily on decision support and better outcomes.

We understand that the Meaningful Use journey can at times be confusing, but experts predict it will also serve as one of the greatest advances to the U.S. healthcare system. Continue to read and stay informed about the Meaningful Use Program as it grows – because it will certainly impact your organization, now and in the future.

Carestream

Appendix 1: Resources

Overview of the CMS EHR Incentive Programs:	https://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/index.html?redirect=/EHRIncentivePrograms/01_Overview.asp
ONC Certified Health IT Product List:	http://oncchpl.force.com/ehrcert
RadiologyMU.org:	http://radiologyMU.org
Meaningful Use Books and CMS EHR Incentive Program Reference Guides:	http://theMUguide.com
Radiology and HIT Blog:	http://radiologyandhealthit.com
Meaningful Use Monitor Requirements Community:	http://www.everythinghitech.com/mum_requirements
HITECHAnswers:	http://www.hitechanswers.net
HIMSS.org:	http://himss.org/ASP/index.asp

Appendix 2: Works Cited

Dreyer, Jonathon L., and Keith J. Dreyer. *The Radiologist's Guide to Meaningful Use: A step-by-step approach to the Stage 1 CMS EHR Incentive Programs*. First ed. Highland: RMU, 2011. Print.

Dreyer, Jonathon L., and Keith J. Dreyer. *The Radiologist's Essentials to Meaningful Use: Essentials for Your First 2 Years*. First ed. Highland: RMU, 2012. Print.

"EHR Incentive Program." CMS.gov. Web. 17 Apr. 2012. <https://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/index.html>.

Keen, Cynthia E. "Radiology, Community Home." *AuntMinnie.com*. AuntMinnie.com, 13 Apr. 2012. Web. 20 Apr. 2012. <http://www.auntminnie.com//index.aspx?sec=sup>.

"RadiologyMU.org." *RadiologyMU.org*. RadiologyMU.org, 2010-2012. Web. 23 Apr. 2012. <http://www.healthmu.org/radiology/index.php>.

"Using the CHPL Website." *Certified Health IT Product List*. ONC HIT, 2010. Web. 23 Apr. 2012. <http://oncchpl.force.com/ehrcert>.