November 4, 2010

Health Care Access for All

Synopsis of CMS Final Rule on Stage 1 Meaningful Use

Information that has been added or updated is marked by *New:*

The nation's healthcare system is undergoing a transformation in an effort to improve quality, safety and efficiency of care, from the upgrade to ICD-10 to information exchanges of electronic health record (EHR) technology. To help facilitate this vision, the Health Information Technology for Economic and Clinical Health Act, or the "HITECH Act" established programs under Medicare and Medicaid to provide incentive payments for the "meaningful use" of certified EHR technology. The Medicare and Medicaid EHR incentive programs will provide incentive payments to eligible professionals and eligible hospitals as they adopt, implement, upgrade or demonstrate meaningful use of certified EHR technology. The programs begin in 2011. These incentive programs are designed to support providers in this period of Health IT transition and instill the use of EHRs in meaningful ways to help our nation to improve the quality, safety and efficiency of patient health care. (Excerpted from CMS website)

*** This synopsis focuses primarily on the Medicaid EHR Incentive Program, rules and eligibility, which are different than that of the Medicare Program. The meaningful use objectives and measures are the same for the Medicare and Medicaid program.*

*** Appendix A (pg. 26) contains a list of acronyms.*

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Background: Federal

- The final rule for Stage 1 of meaningful use was released July 13. It was published in the Federal Register on July 28. The rule became effective September 27, 2010.
- There will be a Stage 2, and most likely a Stage 3.
- The Medicare and Medicaid EHR incentive programs are similar, but have markedly different timelines and eligibility allowances. Medicaid is generally more expansive in eligibility criteria and there is more money to be earned in the Medicaid incentive program.
- The Centers for Medicare and Medicaid Services (CMS) is not accepting additional comment on this rule. There will be future comment periods for later stages of meaningful use. Future changes to the original statute outlining the EHR Incentive Program can also result in changes to these regulations.
- CMS has created a website on the EHR Incentive Program: http://www.cms.gov/ehrincentiveprograms/

- A PDF version of the Final Rule can be found at http://www.gpo.gov/fdsys/pkg/FR-2010-07-28/pdf/2010-17207.pdf

Background: State

- The state of California Department of Health Care Services, Office of Health Information Technology (http://www.dhcs.ca.gov/Pages/DHCSOHIT.aspx) will be leading the Medi-Cal EHR incentives program.
- States must submit a State Medicaid HIT Plan in order to begin sending incentives to providers.
- CMS is funding states to implement the program with a separate source of funding than is being used for the direct incentive payments to providers.
- *NEW:* No payments will go out to providers until after April 1, 2011 because it will take until that time for CMS to have the necessary processes and technology in place. However, the state of California intends to have the state level registry ready to accept provider enrollment in the Medi-Cal incentive program by January 1, 2011.

Certified EHR

- In order to receive incentive payments the eligible professional (definition below) must use certified EHR technology.
- Certification is defined by the Office of the National Coordinator (ONC) and is required in the HITECH Act.
- The ONC has specified the capabilities required in a certified product (See Final Rule on Standards, Implementation Specifications, and Certification of EHRs released 8/2010).
- The requirements outlined as Stage 1 meaningful use (e.g. the functional and clinical objectives and measures) are all functionalities required of certified EHR technology.
- For expediency, the ONC developed a temporary and permanent certification program.
    - The temporary program will involve the ONC designating temporary authorized testing and certification bodies. This program will run through the fall of 2010 to 12/2011.
    - The permanent program will involve the ONC establishing authorized certification bodies, and separate accrediting bodies. This program is anticipated to begin 2012.
- *NEW:* The ONC has a website listing all certified EHR technologies once certification begins. The website address: http://onc-chpl.force.com/ehrcert.
- There are no certification criteria for electronic dental records at this time.

Qualifying Medicaid Eligible Professionals (EPs)

- Eligible Professionals (EPs) may participate in either the Medicare or Medicaid incentive program. An EP will be allowed to make a one-time switch between the Medicare and Medicaid EHR incentive programs (but it has to be before calendar year (CY) 2015).
- An Eligible Professional in the Medicaid program is one of the following classes of providers:
    - Non-hospital based

    - Physicians- a doctor of medicine or osteopathy, and optometrists (notably not as broad as the definition of physicians for the Medicare program)
    - Dentists,
    - Certified nurse-midwives,
    - Nurse practitioners, and
    - Physician assistants (PA) who are practicing in a Federally Qualified Health Center (FQHC) or Rural Health Clinic (RHC) led by a physician assistant.
        - When a PA is the primary provider in the clinic (for example, when there is a part-time physician and full-time PA, CMS would consider the PA as the primary provider)
        - When a PA is a clinical or medical director at the clinical site of practice
        - When a PA is an owner of a RHC

- In order to participate in the EHR Incentive Program, an EP must meet the following encounter thresholds:[1]
    - EPs must have 30% of their encounters attributable to Medicaid over any continuous 90-day period within the most recent calendar year prior to reporting.
    - Or, if an EP practices predominantly at a FQHC or RHC, then the EP must have 30% of his/her encounters attributable to "needy individuals"
        - *Needy individuals:* Medi-Cal, Healthy Families, 1115 Waiver individuals, sliding fee scale, and uncompensated care.
        - *Practices predominantly:* Clinical location for over 50 percent of his/her patient encounters over a period of 6 months in the calendar year prior to reporting occurs at a FQHC or RHC.
- Pediatricians are eligible if 20% of their encounters are attributable to Medicaid or for an EP that practices predominantly at a FQHC or RHC, 20% of their encounters to needy individuals; however, they are only eligible for 2/3 of the incentive amount. If the pediatrician can reach the 30% threshold he/she is eligible for the full incentive amount.
- *NEW:* CMS will allow clinics and group practices to use the practice or clinic Medicaid patient volume (or needy individual patient volume, insofar as it applies) and apply it to all EPs in their practice under the following conditions:

    (1) The clinic or group practice's patient volume is appropriate as a patient volume methodology calculation for the EP (i.e. the clinic doesn't have some EPs only serving Medicare patients).

    (2) There is an auditable data source to support the clinic's or group practice's patient volume determination.

    (3) All EPs in the group practice or clinic must use the same methodology for the payment year.

    (4) The clinic or group practice uses the entire practice or clinic's patient volume and does not limit patient volume in any way.

    (5) If an EP works inside and outside of the clinic or practice, then the patient volume calculation includes only those encounters associated with the clinic or group practice, and not the EP's outside encounters.
- Full or part-time status is of no consequence to the EHR incentive program. Both a full time and a part time provider could receive the full incentive amount. Eligibility is based on encounters, not work hours.

[1] See Appendix B for definition of encounters

Medicaid Incentive Payments

- Payment Schedule for Meaningful Use

	Incentive Payments for Adoption and Meaningful Use of Certified EHR											
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total
2011	$21,250	$8,500	$8,500	$8,500	$8,500	$8,500	$0	$0	$0	$0	$0	$63,750
2012		$21,250	$8,500	$8,500	$8,500	$8,500	$8,500	$0	$0	$0	$0	$63,750
2013			$21,250	$8,500	$8,500	$8,500	$8,500	$8,500	$0	$0	$0	$63,750
2014				$21,250	$8,500	$8,500	$8,500	$8,500	$8,500	$0	$0	$63,750
2015					$21,250	$8,500	$8,500	$8,500	$8,500	$8,500	$0	$63,750
2016						$21,250	$8,500	$8,500	$8,500	$8,500	$8,500	$63,750

- The payment schedule captures the maximum amount an EP may receive for the meaningful use of an EHR. An EP must attest to adoption, implementation, or upgrade of an EHR or attest to meaningful use to receive the first year of payment, and then in the years following must report on meaningful use in order to receive payment.
- An EP can receive a maximum of $63,750 from the EHR incentive program.
  - EPs cannot receive more than 85% of $25,000 ($21,500) in payment year one, and 85% of $10,000 ($8,500) in the five subsequent payment years. Or if the EP is a pediatrician 85% of $16,667 ($14,167) in payment year one, and 85% of $6,667 ($5,667) in the five subsequent payment years.
  - EPs must show proof that he/she is contributing the remaining 15%. If the community clinic or health center provides the technology to the provider, that can count as the 15% contribution.
  - Payment years do not have to be consecutive.
- Funds the employer (e.g. CIP funds for the purchase of an EHR) received for health information technology or an EHR do not count against the funds an EP could receive.
- *NEW:* To receive the incentive payment, an EP must register via a CMS designated website known as the National Level Registry (NLR) and submit the following:
  - Name of EP
  - National Provider Identifier (NPI)
  - Business address and phone number
  - Taxpayer and Identification Number (TIN), which may be the EP's Social Security Number (SSN), to which the EP's incentive payment should be made.
    - EPs are permitted to reassign their incentive payments to their employer or to an entity with which they have a contractual arrangement allowing the employer or entity to bill and receive payment for the EP's covered professional services.
    - EPs may also assign their incentive payments to a TIN for an entity promoting the adoption of EHR technology.[2]
  - State of participation
  - Participation year
  - Program selected (Medicare or Medicaid)

[2] The entities promoting the adoption of EHR technology will be defined and designated by the State. As of the date of this publication, the state has not yet designated such entities.

    - Certified EHR technology code (most likely to be required at the federal level, but if not will be required at the state level eligibility process)
- EPs must then register on the state eligibility site as well. Information required will include:
    - License number
    - Information on provider practice if in multiple states
    - Medicaid or needy encounter data
    - Total encounter data
    - FQHC or RHC Practice information (if choosing to use needy encounter data)
    - Specialty
    - Contact name, phone number and email address
- At the state level, if the EP is choosing to have his/her employer or group practice register on his/her behalf, there will be a process for a group practice (i.e. community clinic or FQHC) to apply on behalf of their EPs.
- EPs can receive or assign payment to only one location, even if they work at multiple locations.

<u>Reporting and Payment Years for the Medicaid Program</u>

- In the *first year of payment* in the Medicaid EHR incentive program an EP may choose to either...
    a) Attest to adopting, implementing or upgrading (A/I/U) EHR technology
        - Adopting: acquire, purchase or secure access to certified EHR technology (signed contract counts)
        - Implementing: install or commence utilization of certified EHR technology capable of meeting meaningful use requirements
        - Upgrading: expand the available functionality of certified EHR technology capable of meeting meaningful use requirements at the practice site, including staffing, maintenance, and training, or upgrade from existing EHR technology to certified EHR technology per the ONC EHR certification criteria.
    - If the EP chooses A/I/U, then there is no 90 day attestation/reporting period in that first payment year. To receive the second year of payment, the EP would have to electronically report on meaningful use objectives and clinical quality measures for a continuous 90-day period in a following year. In the 3rd through 6th years, an EP must report on a full year of meaningful use objectives and clinical quality measures to receive the incentive payment.

    b) Or Attest to meaningful use criteria for a continuous 90 day period.
    - If the EP chooses to report on meaningful use for the first payment year he/she will have to attest to meeting the meaningful use objectives and criteria over on any continuous 90 day period in the first calendar year (2011), but no later than 90 days prior to the end of CY 2011.
    - In the second year of participation, the EP will be required to electronically report on a full year of meaningful use, so the EP wouldn't receive the payment until after submitting the report. In all years following, a full year of reporting is required in order to qualify for meaningful use incentive payments.
- An EP must capture and report on all meaningful use objectives and measures required, and at the percentages required in order to receive an incentive payment. If he/she fails to do so, even just missing one measure by a percentage point, the EP will not receive

the incentive payment for that year. Meaningful use objectives and measures described below.

- If an EP practices at multiple sites:
  - The EP must have 50% or more of his/her patient encounters during the EHR reporting period at a practice/location or practices/locations equipped with certified EHR.
  - An EP who doesn't conduct 50% of his/her encounters in one practice/location that is equipped with an EHR must then aggregate all of his/her encounters at locations equipped with an EHR, and report on the aggregate.
  - CMS does not believe it will benefit the program for an EP to only report meaningful use at the location receiving the EP's incentive payment.
- CMS requires that states make payments to EPs within 45 days of completing all eligibility verification checks. Note that the 45 days does not begin until all verification checks have been done which could take at least one month.
- Payments to EPs will be in alignment with the calendar year, not fiscal year.

Meaningful Use Objectives and Clinical Quality Measures

- The Final Rule issued by CMS is for Stage 1 of meaningful use. There will be a Stage 2 and Stage 3.
- Explanation of the Stages
  - Stage 1: Electronic capture of health information in a coded format; tracking key clinical conditions and communicating outcomes for care coordinating; implementing clinical decision support tools to facilitate disease and medication management; and reporting outcomes for public health purposes.
  - Stage 2: Expands on Stage 1. Encourages the use of health IT to enhance computerized provider order entry; transitions in care; electronic transmission of diagnostic test results; and research.
  - Stage 3: Expands on Stage 2. Focus on promoting improvements in quality, safety, and efficiency leading to improved health outcomes, focusing on decision support for national high priority conditions, patient access to self management tools, access to comprehensive patient data through robust, patient-centered health information exchange and improving population health.

Stages of Meaningful Use

First Payment Year	Payment Year				
	2011	2012	2013	2014	2015
2011	Stage 1	Stage 1	Stage 2	Stage 2	TBD
2012		Stage 1	Stage 1	Stage 2	TBD
2013			Stage 1	Stage 1	TBD
2014				Stage 1	TBD

- While an EP may reassign payment to an entity and may use the entity's encounter rate to qualify, meaningful use objectives and measures must be tracked and reported by the individual EP, as determined by unique National Provider Identifier (NPI), participating in the program.

- All measures are limited to actions taken at practices/locations equipped with certified EHR technology.
- EPs have two years in each stage of meaningful use.
- If the EP is in a group practice, two or more EPs (for example, both the Physician and the Nurse Practitioner) can report data on the same patient (e.g. demographic information). However, each EP must report based on his/her own encounters.
- Meaningful use objectives and clinical quality measures can be captured/reported from any certified EHR technology, and do not have to solely be captured /reported from one certified EHR.
- Meaningful use measures and objectives must be reported from a certified EHR, however, products that feed into the certified EHR do not have to be certified.
- Functional Measures
  - EPs must report on 15 core functional meaningful use criteria and 5 additional measures from the menu set of 10 measures. One of the five additional must be a public health measure. See table 2 on page 9.
  - CMS has identified objectives and measures that may have exclusions. Providers wishing to claim that an objective/measure is inapplicable to them would need to meet the criteria of such an exception.
  - CMS expects that the menu set of 10 measures in stage 1 will be core criteria in Stage 2 meaningful use. The thresholds will likely increase as well.
- Clinical Measures
  - EPs must report on 6 clinical measures; 3 core measures (see table 7 below) and 3 additional measures (see table 6 on page 19).
  - If any of the core measures have a 0 as the denominator because it is not within the EP's scope of practice to capture that information then the EP must choose from the alternates list. If the alternates don't apply to that particular EP he/she must verify that the alternates are not applicable to his/her scope of practice. It is possible that the EP because of his/her specialty will not report on 3 of the core/alternate measures.
  - CMS acknowledged there is a lack of relevant measures for various specialties, like behavioral and oral health. They expect to have measures in stage 2 for the specialties that were not included in stage 1.

Table 7 from Final Rule:

Clinical Quality Measure Group: Core for all EPs, Medicare or Medicaid	
Measure No.	Clinical quality measure title
NQF 0013	Hypertension: Blood Pressure Management
NQF 0028	Preventive Care and Screening Measure Pair: a. tobacco use assessment; b. tobacco cessation intervention
NQF 0421 / PQRI 128	Adult Weight Screening and Follow up

Alternate Core for all EPs, Medicare or Medicaid	
Measure No.	Clinical quality measure title
NQF 0024	Weight Assessment and Counseling for Children and Adolescents
NQF 0041 / PQRI 1110	Preventive Care and Screening: Influenza Immunization for Patients > 50 Years Old
NQF 0038	Childhood Immunization Status

Table 2 from Final Rule:
** = limited to patients whose records are maintained using certified EHR technology.

FUNCTIONAL CORE OBJECTIVES (Required)		
	Objective	**Measure**
Improving quality, safety, efficiency and reducing health disparities	Use computerized provider order entry (CPOE) for medication orders directly entered by any licensed healthcare professional who can enter orders into the medical record per state, local and professional guidelines. Note: Unique Patients refers to all patients seen during the EHR reporting period	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 using CPOE. ** • *Denominator: Number of unique patients with at least one medication in their medication list seen by the EP during the EHR reporting period.* • *Numerator: The number of patients in the denominator that have at least one medication order entered using CPOE.* *Exclusion: If an EP writes fewer than one hundred prescriptions during the EHR reporting period they would be excluded from this requirement.*
	Implement drug-drug and drug-allergy interaction checks. *Note: At a minimum, an EP must have at least one formulary that can be queried. This may be an internally developed formulary or an external formulary.*	The EP has enabled this functionality for the entire EHR reporting period. *Exclusion: If an EP writes fewer than one hundred prescriptions during the EHR reporting period they would be excluded from this requirement.*
	Generate and transmit permissible prescriptions electronically. *Note: Permissible prescriptions refers to the current restrictions established by the Department of Justice on electronic prescribing for controlled substances in Schedule II.*	More than 40% of all permissible prescriptions written by the EP are transmitted electronically using certified EHR technology. ** • *Denominator: Number of prescriptions written for drugs requiring a prescription in order to be dispensed, other than controlled substances, during the EHR reporting period.* • *Numerator: The number of prescriptions in the denominator generated and transmitted*

A prescription is the authorization by an EP to a pharmacist to dispense a drug that the pharmacist would not dispense to the patient without such authorization. This does not include authorizations for items such as durable medical equipment or other items and services that may require EP authorization before the patient could receive them. *These are excluded from the numerator and the denominator of the measure.*	*electronically.* *Exclusion: If an EP writes fewer than one hundred prescriptions during the EHR reporting period they would be excluded from this requirement.*
Record demographics: preferred language, gender, race, ethnicity, and date of birth. *Note: Use the race and ethnicity codes that follow current federal standards published by the Office of Management and Budget.* *If a patient declines to provide the information or if capturing a patient's ethnicity or race is prohibited by state law, such a notation entered as structured data would count as an entry for purposes of meeting the measure.*	More than 50% of all unique patients seen by the EP have demographics recorded as structured data. • *Denominator: Number of unique patients seen by the EP during the EHR reporting period.* • *Numerator: The number of patients in the denominator who have all the elements of demographics (or a specific exclusion if the patient declined to provide one or more elements or if recording an element is contrary to state law) recorded as structured data.*
Maintain 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 known for the patient recorded as structured data. • *Denominator: Number of unique patients seen by the EP during the EHR reporting period.* • *Numerator: The number of patients in the denominator who have at least one entry or an indication that no problems are known for the patient recorded as structured data in their problem list.*

Maintain active medication list. *Note: Active medication list is a list of medications that a given patient is currently taking.*	More than 80% of all unique patients seen by EP have at least one entry (or an indication that the patient is not currently prescribed any medication) recorded as structured data. • *Denominator: Number of unique patients seen by the EP during the EHR reporting period.* • *Numerator: The number of unique patients in the denominator who have at medication (or an indication that the patient is not currently prescribed any medication) recorded as structured data.*
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. • *Denominator: Number of unique patients seen by the EP during the EHR reporting period.* • *Numerator: The number of unique patients in the denominator who have at least one entry (or an indication that the patient has no known medication allergies) recorded as structured data in their medication allergy list.*
Record and chart changes in the following vital signs: height, weight, and blood pressure and calculate and display body mass index; plot and display growth charts for children 2-20 years, including BMI.	For more than 50% of all unique patients age 2 and over seen by EP record height, weight, and blood pressure are recorded as structured data. ** • *Denominator: Number of unique patients age 2 or over seen by the EP during the EHR reporting period.* • *Numerator: The number of patients in the denominator who have at least one entry of their height, weight and blood pressure are recorded as structure data.* *Exclusion: EPs who do not see patients 2 years and older. EPs who believe that measuring and recording height, weight and blood pressure of their patients has no relevance to their scope of practice.*

	Record smoking status for patients 13 years old or older.	More than 50% of all unique patients 13 years and old and older seen by EP have smoking status recorded as structured data. ** • *Denominator: Number of unique patients age 13 or older seen by the EP during the EHR reporting period.* • *Numerator: The number of patients in the denominator with smoking status recorded as structured data.* *Exclusion: EPs who see no patients 13 years or older would be excluded from this requirement.*
	Implement one clinical decision support rule relevant to specialty or high clinical priority along with the ability to track compliance to that rule.	Implement one clinical decision support rule.
	Report ambulatory quality measures to CMS or the States.	For 2011, provide aggregate numerator, denominator, and exclusions through attestation. For 2012, electronically submit the clinical quality measures.
Engage patients and families in their health Care	Provide patients with an electronic copy of their health information (including diagnostic test results, problem list, medication lists, medication allergies), upon request. *Note: Limited to information that exists electronically in or accessible from the certified EHR technology and is maintained by or on behalf of the EP.*	More than 50% of all patients of the EP who request an electronic copy of their health information are provided it within 3 business days. ** • *Denominator: The number of patients of the EP who request an electronic copy of their electronic health information four business days prior to the end of the EHR reporting period.* • *Numerator: The number of patients in the denominator who receive an electronic copy of their health information within three business days.*
	Provide clinical summaries for patients for each office visit.	Clinical summaries provided to patients for more than 50% of all office visits within 3 business days. **

	Note: Definition of an office visit- *Any billable visit that includes: (1) concurrent care or transfer of care visits, (2) consultant visits, (3) prolonged physician service without direct (face-to-face) patient contact (tele-health).* *Clinical summary- After-visit summary that provides a patient with relevant and actionable information and instructions containing, but not limited to, the patient name, providers office contact information, date and location of visit, an updated medication list and summary of current medications, updated vitals, reason(s) for visit, procedures and other instructions based on clinical discussions that took place during the office visit, any updates to a problem list, immunizations or medications administered during the visit, summary of topics covered/considered during visit, time and location of next appointment/ testing if scheduled, or a recommended appointment time if not scheduled, list of other appointments and testing patient needs to schedule with contact information, recommendation patient decision aids, laboratory and other diagnostic test orders, test/laboratory results (if received before 24 hours after visit), and symptoms.*	• *Denominator: Number of unique patients seen by the EP for an office during the EHR reporting period* • *Numerator: Number of patients in the denominator who are provided a clinical summary of their visit within three business days.* *Exclusion: An EP who has no office visits during the EHR reporting period would be excluded from this requirement.*
Improve care coordination	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. *Note: Definition of diagnostic test results-* *All data needed to diagnose and treat disease, such as blood tests, microbiology, urinalysis, pathology tests, radiology, cardiac imaging, nuclear medicine tests,*	Performed at least one test of certified EHR technology's capacity to electronically exchange key clinical information. *Note: Exchange can be of structured (i.e. drug and clinical lab data) or unstructured data (i.e. free text and scanned images).* *The use of information about a fictional patient that would be identical in form to what would be sent about an actual patient would satisfy this objective.*

	and pulmonary function tests.	*The test must include the transfer of actual or "dummy" data to the chosen other entity. The testing could occur prior to the beginning of the EHR reporting period, but must occur prior to the end of the EHR reporting period and every payment year would require its own, unique test.* *If multiple EPs are using the same certified EHR technology in a shared physical setting, the testing would only have to occur once for a given certified EHR technology.* *To be considered an exchange, the clinical information must be sent between different legal entities with distinct certified EHR technology or other system that can accept the information and not between organizations that share certified EHR technology.*
Ensure adequate privacy and security protections for personal health information	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 indentified security deficiencies as part of its risk management process.

FUNCTIONAL MENU OBJECTIVES (Choose five, one must be related to public health)		
	<u>Objective</u>	**<u>Measure</u>**
Improving quality, safety, efficiency and	Implement drug-formulary checks	The EP has enabled this functionality and has access to at least one internal or external drug formulary for the entire EHR reporting period.

reducing health disparities	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. • *Denominator: Number of lab tests ordered during the EHR reporting period by the EP whose results are expressed in a positive or negative affirmation or as a number.* • *Numerator: The number of lab test results whose results are expressed in a positive or negative affirmation or as a number which are incorporated as structured data.*
	Generate lists of patients by specific conditions to use for quality improvement, reduction of disparities, and research and outreach.	Generate at least one report listing patients of the EP with a specific condition.
	Send reminders to patients per patient preference for preventive/follow up care.	More than 20% of all unique patients 65 years or older or 5 years old or younger were sent an appropriate reminder during the EHR reporting period. • *Denominator: Number of unique patients 65 years old or older or 5 years old or younger.* • *Numerator: The number of patients in the denominator who were sent the appropriate reminder.* *Exclusion: If the EP does not have patients 65 years old or older or 5 years old or younger with records maintained using certified EHR technology that EP is excluded from this requirement.*
Engage patients and families in their health care	Provide patients with timely electronic access to their health information (including lab results, problem list, medication lists, medication allergies) within 4 business days of the information being available to the EP.	More than10% 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. • *Denominator: Number of unique patients seen by the EP during the EHR reporting period.* • *Numerator: The number of patients in the denominator who have timely*

		(available to the patient within four business days of being updated in the certified EHR) electronic access to their health information online.
	Use certified EHR technology to identify patient-specific education resources and provide those resources to the patient if appropriate.	More than10% of all unique patients seen by the EP are provided patient-specific education resources. • *Denominator: Number of unique patients seen by the EP during the EHR reporting period.* • *Numerator: Number of patients in the denominator who are provided patient education specific resources.*
Improve care coordination	The EP who receives a patient from another setting of care or provider of care or 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. • *Denominator: Number of transitions of care during the EHR reporting period for which the EP was the receiving party of the transition.* • *Numerator: The number of transitions of care in the denominator where medication reconciliation was performed.*
	The EP who transitions their patient to another setting of care or provider of care or 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 or refers 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. • *Denominator: Number of transitions of care and referrals during the EHR reporting period for which the EP was the transferring or referring provider.* • *Numerator: The number of transitions of care and referrals in the denominator where a summary of care record was provided.*

Improve population and public health	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). *Note: The use of test information about a fictional patient that would be identical in form to what would be sent about an actual patient would satisfy this objective.* *CMS only requires a single test and follow up submission if that test is successful. If the attempt fails, the EP still meets this objective but no submission of data is required.* *The testing could occur prior to the beginning of the EHR reporting period, but must occur prior to the end of the EHR reporting period. EPs in a group setting using identical certified EHR technology would only need to conduct a single test, not one test per EP. If the test is successful, then the EP, eligible hospital, or CAH should institute regular reporting to that entity in accordance with applicable law and practice. CMS will accept a yes/no attestation to verify all of the above for EPs have administered immunizations during the EHR reporting period.* *Exclusion: CMS requires that an EP determine if he/she has given any immunizations during the EHR reporting period. Those that have not given any immunizations during the EHR reporting period are excluded from this measure.*
	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). *Note: The use of test information about a fictional patient that would be identical in form to what would be sent about an actual patient would satisfy this objective.*

		A failed attempt would meet the measure. *This test must include the transfer of either actual or ''dummy'' data to the chosen public health agency. The testing could occur prior to the beginning of the EHR reporting period, but must occur prior to the end of the EHR reporting period. If the test is successful, then the EP should institute regular reporting to that entity according to applicable law and practice.* *Exclusion: If an EP does not collect any reportable syndromic information on their patients during the EHR reporting period, then they are excluded from this measure.*

Table 6 from Final Rule:
Clinical Quality Measures- Menu Set (Choose 3)

NQF Measure Number & PQRI Implementation Number	Clinical Quality Measure Title
NQF 0059 PQRI 1	**Title:** Diabetes: Hemoglobin A1c Poor Control **Description:** Percentage of patients 18 -75 years of age with diabetes (type 1 or type 2) who had hemoglobin A1c > 9.0%.
NQF 0064 PQRI 2	**Title:** Diabetes: Low Density Lipoprotein (LDL) Management and Control **Description:** Percentage of patients 18-75 years of age with diabetes (type 1 or type 2) who had LDL-C < 100 mg/dL).
NQF 0061 PQRI 3	**Title:** Diabetes: Blood Pressure Management **Description:** Percentage of patients 18 -75 years of age with diabetes (type 1 or type 2) who had blood pressure <140/90 mmHg.
NQF 0081 PQRI 5	**Title:** Heart Failure (HF): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy for Left Ventricular Systolic Dysfunction (LVSD) **Description:** Percentage of patients aged 18 years and older with a diagnosis of heart failure and LVSD (LVEF < 40%) who were prescribed ACE inhibitor or ARB therapy.
NQF 0070 PQRI 7	**Title:** Coronary Artery Disease (CAD): Beta-Blocker Therapy for CAD Patients with Prior Myocardial Infarction (MI) **Description:** Percentage of patients aged 18 years and older with a diagnosis of CAD and prior MI who were prescribed beta-blocker therapy.
NQF 0041 PQRI 110 * -Alternate Core Measure	**Title:** Preventive Care and Screening: Influenza Immunization for Patients ≥ 50 Years Old **Description:** Percentage of patients aged 50 years and older who received an influenza immunization during the flu season (September through February).
NQF 0043 PQRI 111	**Title:** Pneumonia Vaccination Status for Older Adults **Description:** Percentage of patients 65 years of age and older who have ever received a pneumococcal vaccine.
NQF 0031 PQRI 112	**Title:** Breast Cancer Screening **Description:** Percentage of women 40-69 years of age who had a mammogram to screen for breast cancer.
NQF 0034 PQRI 113	**Title:** Colorectal Cancer Screening **Description:** Percentage of adults 50-75 years of age who had appropriate screening for colorectal cancer.

NQF 0067 PQRI 6	**Title:** Coronary Artery Disease (CAD): Oral Antiplatelet Therapy Prescribed for Patients with CAD **Description:** Percentage of patients aged 18 years and older with a diagnosis of CAD who were prescribed oral antiplatelet therapy.
NQF 0083 PQRI 8	**Title:** Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD) **Description:** Percentage of patients aged 18 years and older with a diagnosis of heart failure who also have LVSD (LVEF < 40%) and who were prescribed betablocker therapy.
NQF 0105 PQRI 9	**Title:** Anti-depressant medication management: (a) Effective Acute Phase Treatment,(b)Effective Continuation Phase Treatment **Description:** The percentage of patients 18 years of age and older who were diagnosed with a new episode of major depression, treated with antidepressant medication, and who remained on an antidepressant medication treatment.
NQF 0086 PQRI 12	**Title:** Primary Open Angle Glaucoma (POAG): Optic Nerve Evaluation **Description:** Percentage of patients aged 18 years and older with a diagnosis of POAG who have been seen for at least two office visits who have an optic nerve head evaluation during one or more office visits within 12 months.
NQF 0088 PQRI 18	**Title:** Diabetic Retinopathy: Documentation of Presence or Absence of Macular Edema and Level of Severity of Retinopathy **Description:** Percentage of patients aged 18 years and older with a diagnosis of diabetic retinopathy who had a dilated macular or fundus exam performed which included documentation of the level of severity of retinopathy and the presence or absence of macular edema during one or more office visits within 12 months.
NQF 0089 PQRI 19	**Title:** Diabetic Retinopathy: Communication with the Physician Managing Ongoing Diabetes Care **Description:** Percentage of patients aged 18 years and older with a diagnosis of diabetic retinopathy who had a dilated macular or fundus exam performed with documented communication to the physician who manages the ongoing care of the patient with diabetes mellitus regarding the findings of the macular or fundus exam at least once within 12 months.
NQF 0047 PQRI 53	**Title:** Asthma Pharmacologic Therapy **Description:** Percentage of patients aged 5 through 40 years with a diagnosis of mild, moderate, or severe persistent asthma who were prescribed either the preferred long-term control medication (inhaled corticosteroid) or an acceptable alternative treatment.

NQF 0001 PQRI 64	**Title:** Asthma Assessment **Description:** Percentage of patients aged 5 through 40 years with a diagnosis of asthma and who have been seen for at least 2 office visits, who were evaluated during at least one office visit within 12 months for the frequency (numeric) of daytime and nocturnal asthma symptoms.
NQF 0002 PQRI 66	**Title:** Appropriate Testing for Children with Pharyngitis **Description:** Percentage of children 2-18 years of age who were diagnosed with pharyngitis, dispensed an antibiotic and received a group A streptococcus (strep) test for the episode.
NQF 0387 PQRI 71	**Title:** Oncology Breast Cancer: Hormonal Therapy for Stage IC-IIIC Estrogen Receptor/Progesterone Receptor (ER/PR) Positive Breast Cancer **Description:** Percentage of female patients aged 18 years and older with Stage IC through IIIC, ER or PR positive breast cancer who were prescribed tamoxifen or aromatase inhibitor (AI) during the 12-month reporting period.
NQF 0385 PQRI 72	**Title:** Oncology Colon Cancer: Chemotherapy for Stage III Colon Cancer Patients **Description:** Percentage of patients aged 18 years and older with Stage IIIA through IIIC colon cancer who are referred for adjuvant chemotherapy, prescribed adjuvant chemotherapy, or have previously received adjuvant chemotherapy within the 12-month reporting period.
NQF 0389 PQRI 102	**Title:** Prostate Cancer: Avoidance of Overuse of Bone Scan for Staging Low Risk Prostate Cancer Patients **Description:** Percentage of patients, regardless of age, with a diagnosis of prostate cancer at low risk of recurrence receiving interstitial prostate brachytherapy, OR external beam radiotherapy to the prostate, OR radical prostatectomy, OR cryotherapy who did not have a bone scan performed at any time since diagnosis of prostate cancer.
NQF 0027 PQRI 115	**Title:** Smoking and Tobacco Use Cessation, Medical assistance: a. Advising Smokers and Tobacco Users to Quit, b. Discussing Smoking and Tobacco Use Cessation Medications, c. Discussing Smoking and Tobacco Use Cessation Strategies **Description:** Percentage of patients 18 years of age and older who were current smokers or tobacco users, who were seen by a practitioner during the measurement year and who received advice to quit smoking or tobacco use or whose practitioner recommended or discussed smoking or tobacco use cessation medications, methods or strategies.

NQF 0055 PQRI 117	**Title:** Diabetes: Eye Exam **Description:** Percentage of patients 18 -75 years of age with diabetes (type 1 or type 2) who had a retinal or dilated eye exam or a negative retinal exam (no evidence of retinopathy) by an eye care professional.
NQF 0062 PQRI 119	**Title:** Diabetes: Urine Screening **Description:** Percentage of patients 18 -75 years of age with diabetes (type 1 or type 2) who had a nephropathy screening test or evidence of nephropathy.
NQF 0421 PQRI 128 * -Core Measure	**Title:** Adult Weight Screening and Follow-Up **Description:** Percentage of patients aged 18 years and older with a calculated BMI in the past six months or during the current visit documented in the medical record AND if the most recent BMI is outside parameters, a follow-up plan is documented.
NQF 0056 PQRI 163	**Title:** Diabetes: Foot Exam **Description:** The percentage of patients aged 18 –75 years with diabetes (type 1 or type 2) who had a foot exam (visual inspection, sensory exam with monofilament, or pulse exam).
NQF 0074 PQRI 197	**Title:** Coronary Artery Disease (CAD): Drug Therapy for Lowering LDL-Cholesterol **Description:** Percentage of patients aged 18 years and older with a diagnosis of CAD who were prescribed a lipid-lowering therapy (based on current ACC/AHA guidelines).
NQF 0084 PQRI 200	**Title:** Heart Failure (HF): Warfarin Therapy Patients with Atrial Fibrillation **Description:** Percentage of all patients aged 18 years and older with a diagnosis of heart failure and paroxysmal or chronic atrial fibrillation who were prescribed warfarin therapy.
NQF 0073 PQRI 201	**Title:** Ischemic Vascular Disease (IVD): Blood Pressure Management **Description:** Percentage of patients 18 years of age and older who were discharged alive for acute myocardial infarction (AMI), coronary artery bypass graft (CABG) or percutaneous transluminal coronary angioplasty (PTCA) from January 1-November 1 of the year prior to the measurement year, or who had a diagnosis of ischemic vascular disease (IVD) during the measurement year and the year prior to the measurement year and whose recent blood pressure is in control (<140/90 mmHg).
NQF 0068 PQRI 204	**Title:** Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antithrombotic **Description:** Percentage of patients 18 years of age and older who were discharged alive for acute myocardial infarction (AMI), coronary artery bypass graft (CABG) or percutaneous transluminal coronary angioplasty (PTCA) from January 1-November 1 of

	the year prior to the measurement year, or who had a diagnosis of ischemic vascular disease (IVD) during the measurement year and the year prior to the measurement year and who had documentation of use of aspirin or another antithrombotic during the measurement year.
NQF 0004	**Title:** Initiation and Engagement of Alcohol and Other Drug Dependence Treatment: (a) Initiation, (b) Engagement **Description:** The percentage of adolescent and adult patients with a new episode of alcohol and other drug (AOD) dependence who initiate treatment through an inpatient AOD admission, outpatient visit, intensive outpatient encounter or partial hospitalization within 14 days of the diagnosis and who initiated treatment and who had two or more additional services with an AOD diagnosis within 30 days of the initiation visit.
NQF 0012	**Title:** Prenatal Care: Screening for Human Immunodeficiency Virus (HIV) **Description:** Percentage of patients, regardless of age, who gave birth during a 12-month period who were screened for HIV infection during the first or second prenatal care visit.
NQF 0013 * -Core Measure	**Title:** Hypertension: Blood Pressure Measurement **Description:** Percentage of patient visits for patients aged 18 years and older with a diagnosis of hypertension who has been seen for at least 2 office visits, with blood pressure (BP) recorded.
NQF 0014	**Title:** Prenatal Care: Anti-D Immune Globulin **Description:** Percentage of D (Rh) negative, unsensitized patients, regardless of age, who gave birth during a 12-month period who received anti-D immune globulin at 26-30 weeks gestation.
NQF 0018	**Title:** Controlling High Blood Pressure **Description:** The percentage of patients 18-85 years of age who had a diagnosis of hypertension and whose BP was adequately controlled during the measurement year
NQF 0024 * -Alternate Core Measure	**Title:** Weight Assessment and Counseling for Children and Adolescents **Description:** Percentage of patients 2 -17 years of age who had an outpatient visit with a Primary Care Physician (PCP) or OB/GYN and who had evidence of BMI percentile documentation, counseling for nutrition and counseling for physical activity during the measurement year.

NQF 0028 * -Core Measure	**Title:** Preventive Care and Screening Measure Pair: a. Tobacco Use Assessment, b. Tobacco Cessation Intervention **Description:** Percentage of patients aged 18 years and older who have been seen for at least 2 office visits who were queried about tobacco use one or more times within 24 months b. Percentage of patients aged 18 years and older identified as tobacco users within the past 24 months and have been seen for at least 2 office visits, who received cessation intervention.
NQF 0032	**Title:** Cervical Cancer Screening **Description:** Percentage of women 21-64 years of age, who received one or more Pap tests to screen for cervical cancer
NQF 0033	**Title:** Chlamydia Screening for Women **Description:** Percentage of women 15-24 years of age who were identified as sexually active and who had at least one test for Chlamydia during the measurement year.
NQF 0036	**Title:** Use of Appropriate Medications for Asthma **Description:** Percentage of patients 5 -50 years of age who were identified as having persistent asthma and were appropriately prescribed medication during the measurement year. Report three age stratifications (5-11 years, 12-50 years, and total).
NQF 0038 * -Alternate Core Measure	**Title:** Childhood Immunization Status **Description:** Percentage of children 2 years of age who had four diphtheria, tetanus and acellular pertussis (DTaP); three polio(IPV), one measles, ,mumps and rubella (MMR); two H influenza type B (HiB); three hepatitis B (HepB); one chicken pox (VZV); four pneumococcal conjugate (PCV); two hepatitis A (HepA); two or three rotavirus (RV); and two influenza (flu) vaccines by their second birthday. The measure calculates a rate for each vaccine and nine separate combination rates.
NQF 0052	**Title:** Low Back Pain: Use of Imaging Studies **Description:** Percentage of patients with a primary diagnosis of low back pain who did not have an imaging study (plain x-ray, MRI, CT scan) within 28 days of diagnosis.
NQF 0075	**Title:** Ischemic Vascular Disease (IVD): Complete Lipid Panel and LDL Control **Description:** Percentage of patients 18 years of age and older who were discharged alive for acute myocardial infarction (AMI), coronary artery bypass graft (CABG) or percutaneous transluminal angioplasty (PTCA) from January 1-November1 of the year prior to the measurement year, or who had a diagnosis of ischemic vascular disease (IVD)

	during the measurement year and the year prior to the measurement year and who had a complete lipid profile performed during the measurement year and whose LDL-C<100 mg/dL.
NQF 0575	**Title:** Diabetes: Hemoglobin A1c Control (<8.0%) **Description:** The percentage of patients 18-75 years of age with diabetes (type 1 or type 2) who had hemoglobin A1c <8.0%.

Appendix A- Acronyms

CCHIT- Certification Commission for Health Information Technology
CHIP- Children's Health Insurance Program
CMS- Centers for Medicare and Medicaid Services
CQM- Clinical quality measures
EDR- Electronic dental record
EHR- Electronic health record
EP- Eligible professional
FQHC- Federally qualified health center
HIT- Health information technology
HITECH Act- Health Information Technology for Economic and Clinical Health Act
NPI- National provider identifier
NQF- National Quality Forum
ONC- Office of the National Coordinator
PA- Physician assistant
PQRI- Physician Quality Reporting Initiative
RHC- Rural health clinic
TIN- Tax identification number

Appendix B

Definition of Encounter (30% Medicaid)

In order to resolve any inconsistencies with the definitions of "encounter," for purposes of EP patient volume, we have allowed the following to be considered Medicaid encounters:

1) Services rendered on any one day to an individual where Medicaid or a Medicaid demonstration project under section 1115 of the Act paid for part or all of the service; or

2) Services rendered on any one day to an individual for where Medicaid or a Medicaid demonstration project under section 1115 of the Act paid all or part of their premiums, co-payments, and/or cost-sharing.

Definition of Encounter (30% Needy)

For purposes of calculating needy individual's patient volume, we have allowed the following to be considered needy patient encounters:

(1) Services rendered on any one day to an individual where Medicaid or CHIP or a Medicaid or CHIP demonstration project under section 1115 of the Act paid for part or all of the service;

(2) Services rendered on any one day to an individual where Medicaid or CHIP or a Medicaid or CHIP demonstration project under section 1115 of the Act paid all or part of their premiums, co-payments, and/or cost-sharing; or

(3) Services rendered to an individual on any one day on a sliding scale or that were uncompensated.