CMS NPRM Stage 2 MU Objectives and Measures for Hospitals and CAHs			
Objective	**Measure**		**AMIA MEMBER COMMENTS**
CORE SET (eligible hospitals/CAHs must meet all 16 Core set objectives)			
1. Use CPOE for medication, laboratory, and radiology orders entered by any licensed healthcare professional who can enter orders into the medical record per State, local, and professional guidelines to create the first record of the order.	More than 60 percent of medication, laboratory, and radiology orders created by authorized providers of the hospital's inpatient or emergency department during the EHR reporting period are recorded using CPOE. [Measure in Stage 1 was 30 percent.]		CPOE was easily meet and exceeded in Stage 1 by this group and should be at the higher criteria. Note that CPOE is defined as Physician Order Entry but the criterion refers to Provider Order Entry. The definition should change. Non-licensed should not be allowed to enter computer orders as they are not capable of responding to alerts. Alerts are the main driving force behind this criterion, as the intent is to improve quality. Denominator as stated meets the requirement as it is a percent of all the set of orders. Any change in denominator will require a change in the criterion. CPOE order entry should include any individual with practice authority to create an order, but should not allow for scribes. Expanding to allow for scribes defeats the purpose of computerized provider order entry and would allow for a margin of transcription error. If there are situations where non-licensed personnel have authority to initiate an order that is non-delegated those situations would be deemed acceptable. Denominator – agree that eventually the denominator needs to expand in definition to include all order types, however, this must be balanced with reasonability for EPs and EH's to successfully expand the scope to all order types. Perhaps an expanded definition for an incremental approach is better suited. Please clarify what is meant by the "first record of the order". Would not a D/C order need to be electronic if the first was? The denominator should be "all patients with at least one type of the designated order"
2. Record all of the following	More than 80 percent of all unique patients		Inclusion of Race and Ethnicity is always an issue with regard to accuracy

demographics: (A) Preferred language; (B) Gender; (C) Race; (D) Ethnicity; (E) Date of birth; and (F) Date and preliminary cause of death in the event of mortality in the hospital.	admitted to the hospital's inpatient or emergency department during the EHR reporting period have demographics recorded as structured data. [Comparable measure in Stage 1 was 50 percent.]		of the data. We believe that It is subject to individual interpretation regardless of if it is observational or self-reported. Since the proposed criterion applies to the act of recording and says nothing about the accuracy it is acceptable at the increased level. Disability status should remain off the list of required demographics. It adds information that is not applicable for most patients. When it is applicable it would be transmitted in other areas. The same reasoning applies for gender identity and sexual orientation. Additionally these characteristics are considered offensive by some to ask and an invasion of privacy by others to universally collect. They should not be a general requirement. Are these data to be self report? Does this include data interfaced from an ADT system? How is disability status defined and determined, e.g. Social security vs. as perceived by the patient? What is the purpose of documenting sexual orientation and gender identity? .Who would report? We do not feel this is appropriate to require and could be considered a violation of patient privacy. AMIA supports including the date and preliminary cause of death for hospitals as this information would be necessary for the reporting to "specialized registries
3. Record and chart changes in the following vital signs: (A) Height/Length; (B) Weight; (C) Blood pressure (ages 3 and over); (D) Calculate and display BMI; (E) Plot and display growth charts for patients 0-20 years, including BMI.	More than 80 percent of all unique patients admitted to the hospital's inpatient or emergency department during the EHR reporting period have blood pressure (for patients age 3 and over only) and height/length and weight (for all ages) recorded as structured data. [Comparable measure in Stage 1 was 50 percent.]		Agree with Stage 2 @ 80% Does this include interoperable entry from physiologic devices?

4. Record smoking status for patients 13 years old or older	More than 80 percent of all unique patients 13 years old or older admitted to the hospital's inpatient or emergency department during the EHR reporting period have smoking status recorded as structured data. [Comparable measure in Stage 1 was 50 percent.]		Agree with the change in the measure numerator. The smoking status values adopted do not align with those used in the quality measures in Stage 1 and are also proposed for Stage 2, such as NQF 0028, Preventive Care and Screening: Tobacco Use: "Screening and Cessation Intervention (percentage of patients aged 18 years and older who were screened for tobacco use one or more times within 24 months AND who received cessation counseling intervention if identified as a tobacco user". Given that NQF 0028 goes beyond documenting smoking status to encouraging cessation counseling, we suggest alleviating reporting burdens by aligning on a single tobacco use value set. We also urge that common definitions be used whenever possible for the measurement of MU and for quality measurement. This will promote the value of all measures and support correlation between quality measures and MU of EHRs.
5. Use clinical decision support to improve performance on high priority health conditions.	(1) Implement 5 clinical decision support interventions related to five or more clinical quality measures, if applicable, at a relevant point in patient care for the entire EHR reporting period. (2) The hospital has enabled the functionality for drug-drug and drug-allergy interaction checks for the duration of the EHR reporting period. [Comparable measure in Stage 1 was one clinical decision support intervention.]		This criterion is important because it encourages adoption of a greater number of CDS interventions. The studies in informatics examining the value of EHR systems clearly show that EHRs with CDS interventions achieve safety and quality goals better than EHR systems that are simply electronic record-keeping applications. Enabling the end user to review the rationale for a given CDS intervention (e.g., review the relevant USPSTF guideline), the bibliographic information (e.g., reference(s) for the intervention), and date when the intervention was last revised or updated is logical functionality for the EHR to provide. Several existing EHR systems provide this functionality. For example, users of the Medical Gopher software developed by the Regenstrief Institute can hit "CTL+G" to review the guideline language, and users can press "CLT+R" to view references for the guideline. However, such functionality is rarely used in practice. Studies performed at the Regenstrief Institute found that almost no clinicians ever utilized the available functions to review details on the guidance provided by the CDS.

			So while such functionality is logical and may be practical, it is unlikely to utilized by busy clinicians. Therefore engineering test cases and spending time to test such functionality may ultimately be a waste of precious private and public dollars. We strongly urge CMS to consider this when finalizing the proposed rules for 2014 certification. Although it may be practical to implement functionality that provides access to information on the bibliographic citation(s) and developer of CDS guidance, it is impractical for EHR systems to provide details on the "funding source" of the CDS intervention or the evidence behind the intervention. We suggest that CMS rename this criterion to make it clear that the use here refers to the use in CQM measures. The term "high priority health conditions" is confusing in this regard. Many of the CQM measures relate to process quality improvement and not outcome results and may not be considered a high priority health conditions outside payment requirements Agree with the use of clinical decision support to utilize EHR's not merely for data collection but to improve care. Also agree with the replacement of the term "rule" with "intervention" – as an appropriate evidence-based intervention triggered within context of the patient situation may provide more relevant and efficient clinical decision support than only rules and alerts. Clinicians need user-facing representation ("at their fingertips") of guideline-based clinical guidance. Equally important is access to clinical relevant information to retrieve diagnostic or therapeutic reference information. Regarding the attributes of the clinical decision support intervention, we are concerned with the number of details at each intervention level within the Certified EHR Technology (CEHRT). Rather, each identified clinical decision support intervention should be linked to an evidence-based source(s) (content vendor and/or academic source) with an identified date of release/revision. Agree interventions must be presented through the CEHRT to a licensed

			healthcare professional who can exercise judgment about the decision support intervention before action is taken. Request explicit clarity and understanding that a "licensed healthcare professional" can be any member of the interprofessional team in which the intervention is relevant to practicing to their scope of practice (for example the following licensed clinicians are identified with the current CQMs: nurses, pharmacists, lactation specialists (RNs), and respiratory therapists). We agree that a focus on interventions related to clinical quality measures (CQM) is appropriate and agree that generally EPs and EHs should be encouraged to use CDS interventions to improve quality on priority conditions, as established by a linkage to a nationally established CQM. However, we are concerned with and oppose the specific proposal that "[p]roviders would implement [five] clinical decision support interventions that they believe will result in improvement in performance for [five] or more of the clinical quality measures on which they report." We believe this proposed change introduces unnecessary inflexibility. 1. Providers might not know exactly which clinical quality measures they intend to report until the conclusion of the reporting period when they can determine conclusively that measures have non-zero denominators. Yet, they will be asked to implement clinical decision support interventions prior to the start of the reporting period. If they implement clinical decision support related to a selection of five of the quality measures to work on improving performance and decide later to report to CMS on a different selection of quality measures, we believe they should still receive credit for this objective and measure. We propose that, while selected interventions should be associated with one or more of the final set of CMS CQMs (assuming that this final set has sufficient breadth and depth), CMS should not require that the interventions be linked to CQMs reported by the EP. In addition, given that the breadth

			and depth of the final set of CQMs is yet to be determined, we suggest that CMS consider requiring such an association for no more than three out of the five interventions. 2. Providers might wish to change their interventions mid-reporting period, based on how they are doing with an intervention or changes in clinical priorities. We suggest that CMS clarify that providers could modify or replace interventions during the reporting period and still meet this objective and measure so long as they use at least five interventions throughout the reporting period. In addition, the only standard identified by ONC for CDS functionality is §170.204(b)(1) (HL7 Context-Aware Knowledge Retrieval (''Infobutton'') Standard, International Normative Edition 2010) (see page 13847). We do not think that either CMS or ONC intends that providers would only use the Infobutton standard as their sole method of clinical decision support interventions to meet meaningful use. Although the Infobutton standard might be helpful in some cases, it is not sufficient or appropriate for use with all CDS interventions, given that it is a standard that permits carrying of context when doing referential searching.
6. Incorporate clinical lab-test results into CEHRT as structured data.	More than 55 percent of all clinical lab tests results ordered by authorized providers of the hospital for patients admitted to its inpatient or emergency department during the EHR reporting period whose results are either in a positive/negative or numerical format are incorporated in CEHRT as structured data. [Comparable measure in Stage 1 (which was in the Menu and not Core set) was 40 percent.]		Moving this from menu to core is a positive step. We need to encourage greater adoption and use of ELR so that we can better leverage ELR messages for public health surveillance and monitoring. Such activities are critical to public health agency missions, and electronic reporting could greatly reduce human labor associated with faxed and mailed lab results (which still happens in a large percentage of cases). We not believe that this will be practical in cases where the multiple tests within a battery are unavailable as discrete ELR messages. When a battery of tests is reported on paper or via fax, multiple tests are reported on one sheet of paper. Manual review of non-ELR tests/batteries would be very costly and impractical for many hospitals and most physician practices. No objection to move to the core. Most hospitals labs can report

			electronically or should update so they can. Counting should be done at the individual test level as proposed. Doing it in this fashion will remove any issues in timely reporting of all components in a panel and differences that might relate to numeric and non-numeric tests in the panel. It, however, introduces an issue in counting panels that involve reflux testing not known at time of order. Reflux testing introduces a factor that might have been considered in establishing the percentage. In these one test is ordered but have many results returned as the result in one test may cascade into one or more other tests automatically inflating the percentage. The reflux test is now standard in laboratory testing and is done provide more timely results and prevent additional sample collection when the next test can be anticipated based on the previous result. CMS provides for this type of test in Medicare payment rules. To more accurately set a percentage taking reflux testing into account will require more detailed study. It is suggested that the impact is small and the guess at a percentage made here suffices. Suggest holding at 40% but agree to move from menu to core. This will give those hospitals who did not choose as a menu item previously the required time to incorporate. Standardized data elements and terminology (ONC doc). Lab systems should be certified as well. There are several measurement challenges with this objective, which include: 1. To generate an accurate denominator, the EHR must know which lab tests are expected to return a numeric or positive/negative result, and which results were returned in this way, even if they were not returned electronically. How does the EHR know which lab orders are in this category? For example, some allergy tests will return a numeric result if sent to a particular lab and a text result if sent to a different lab. Attempting to have the EHR determine if the result is numeric is very complex.

			CMS requested feedback on the feasibility of counting lab tests individually, not as panels or groups in both the numerator and the denominator, which would mean reporting by each test component rather than orders. This reporting approach is not feasible. The number of test components within a panel is variable depending on the lab that results that test, and sometimes dependent on the actual result. There is no way for the EHR to accurately count the denominator using these methods
7. 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 hospital with a specific condition. [Comparable measure in Stage 1 was the same (one report) but the measure was a Menu, not a Core one.]		For the purpose of MU the number should not be raised. AMIA believes that once a hospital finds the utility of the report they can generate others voluntarily that would be more meaningful. Providers are already generating lists, but we suggest that CMS is more specific in the intent of how the lists should be used. Agree that "many EPs and eligible hospitals would use these reports in combination with one of the selected quality measures and decision support interventions to improve quality for a high priority issue". Agree CMS should not dictate the specific report to be generated. Suggest measure is core and suggest the number of lists not be dictated, but rather aligned with the clinical quality measures the EP, eligible hospital, or CAH are reporting. For example, if the EP is reporting diabetes, ischemic vascular disease, hypertension, and coronary artery disease measures, the EP should generate four lists. If the hospital is reporting, AMI and pneumonia measures, the hospital should generate two lists
8. Automatically track medications from order to administration using assistive technologies in conjunction with an electronic medical administration record (eMAR).	More than 10 percent of medication orders created by authorized providers of the hospital's inpatient or emergency department during the EHR reporting period are tracked using eMAR.		Most hospitals use some form of eMAR in medication administration today. The 10% level should be easily meet. It is noted that it is impossible to meet this criterion unless the hospital uses an eMAR or the EHR includes that as part of a non-standard feature set. Should consideration be given to that if the hospital does not have the technology? As noted use of an eMAR is a valuable safety feature but MU should not be used a vehicle to force the adaptation of another tool.

			Question: 1) Require X % of medication orders limited one service area or entire hospital? 2) Require X % of patient admissions that start in the ED be required? Does this need to specify oral tablets? Does this need to specify injectables, topicals, intravenous, intramuscular, TPN etc?
9. Provide patients the ability to view online, download and transmit information about a hospital admission.	(1) More than 50 percent of all patients who are discharged from the inpatient or emergency department of the hospital have their information available online within 36 hours of discharge (2) More than 10 percent of all patients who are discharged from the inpatient or emergency department of a hospital view, download or transmit to a third party their information during the EHR reporting period		Until we have true consensus on standards for the data requested this should be a menu option. The criterion is standard natural but the act of passing information to the patient would be confusing if different providers used differing standards. While an accompanying NPRM focuses on the standards, today the ones recommended are not widely used in many cases and the imposition of true standard based information may be delayed. Testing of this needed criterion should continue by making a menu option. Also, as noted, presenting the information for patient use is stage one and that stage is not very helpful. The true benefits occur when the patient accesses and uses the information. CMS notes this is an emerging area by assigning a 10% usage level as a passing level. It indicates the intent is to promulgate usage by making the provider responsible for awareness knowledge. We believe that this is a larger societal issue and the hospital should not be penalized if their patient group is unwilling to access or use the information. Lastly, the criterion ignores the biphasic nature of this information. There is no requirement for the provider to accept information from patient provided information. Until we can shorten the new patient information transfer electronically we will have little patient acceptance of these systems. Basically, this is a criterion still in development and should be left as a menu option, with the second part dropped. As a menu option, increasing the level for the first part is fine.

			Exclusion: How is this determined? While using the 50% of housing units with 4Mbps availability seems reasonable, how up to date is the FCC's information? When reviewing the broadband maps on April 4, 2012 (www.broadband.gov), the data was as of 6/30/2011. The broadband data needs to be much more current, e.g., within 3 months. What about changes in level of service, for example power interruptions due to natural disasters? Will hospitals be able to request an exemption/exclusion due to decreased broadband availability? The EHs and CAHs have no control over their patients' willingness and/or ability to view or download their hospital admission information. However, it would be reasonable to track and report how many patients do view, download, or transmit their information. Also, the exclusion favors rural/remote hospitals and places additional reporting burden on the urban/suburban hospitals. Suggest measure 1 is core Suggest changed measure 2 – monitor for patients viewing, downloading, or transmitting also as core. If measure 2 is not changed, recommend as menu.
10. Use CEHRT to identify patient-specific education resources and provide those resources to the patient.	More than 10 percent of all unique patients admitted to the hospital's inpatient or emergency department are provided patient-specific education resources identified by CEHRT.		Providing patient educational material, either directly or by reference, is an essential component of today's medical practice. Having it as Core is desirable. The material should be patient unique meaning literacy level and cultural factors should be considered. It is difficult to arrive at a good percentage but 10% seems a level most can meet. It is observed that many in a hospital may have exposure to the material on an outpatient basis and ignore the offer in the hospital. The criterion is mute on this issue, which is correct Agree that appropriate educations material resources are provided to the patient should be documented in the CEHRT. The actual educational documents do not need to be stored in the EHR. Seems that it would be more impactful to document patient understanding of education and resources through a "teach back" approach. Strongly agree that patient-specific education resources should be

			provided to patients and should be documented in the CEHRT (but the resources do not need to be stored within the CEHRT). We support removing the phrase "as appropriate" as hospitalized patients have identified problems and in most cases care planning that would indicate patient-specific teaching resources needed. With that said, we also recommend increasing the threshold from 10% to 25% for Eligible Hospital/CAH Measures. Unlike Eligible Providers set a 10%, all hospitalized patients do have face-to-face encounters with their treatment, the majority has a diagnoses/problem identified, and education is critical for patient safety and reducing hospital admissions. Thinking in terms of patient involvement and centeredness, it might be beneficial that not only EPs but also their PATIENTS would have access to this information. It might be included in the objective #9 "View, download and transmit data". This will help healthcare consumers to actively and knowledgably engage in the decisions about treatments and procedures provided. Suggest for stage 3 that outcomes of patient understanding of education and "teach back" be incorporated to include literacy and cultural aspects
11. The hospital that receives a patient from another setting of care or provider of care or believes an encounter is relevant should perform medication reconciliation	The hospital performs medication reconciliation for more than 65 percent of transitions of care in which the patient is admitted to the hospital's inpatient or emergency department. [Comparable measure in Stage 1 (which was in the Menu set) was 50 percent.]		
12. The hospital that transitions their patient to another setting of care or provider of care or refers their patient to another provider of care should provide summary care record for each transition of care or referral	(A) The hospital that transitions or refers their patient to another setting of care or provider of care provides a summary of care record for more than 65 percent of transitions of care and referrals (B) The hospital that transitions or refers their patient to another setting of care or provider of care electronically transmits using CEHRT to a recipient with no organizational affiliation and using a different CEHRT vendor than the		The criterion does not require posting the information received to the EHR, either in a holding area until confirmed or directly unconfirmed. Until a clear specification of the intent of the criterion with respect to the user is made proscription on the standards used is difficult. It is noted that if direct storage in the receiving EHR is not the intent than fax, as is used today, could meet this criterion. NHIN and other accepted HIE communication standards must be considered acceptable to this standard until, or even after, universal acceptance is give to the ONC standards. Conversion between standards

	sender a summary of care record for more than 10 percent of transitions of care and referrals.		can result in loss of medical fidelity resulting in a mistaken input and no improvement in quality. In this regard, transmission between providers in an integrated healthcare environment should be allowed to use private standards, especially terminology, in their transition of care documents, as they may not have direct access to the parent EHR. There is presumption in this criterion that a communication system is robust enough (common protocols, acceptable security, etc) to make this possible at the levels envisioned. Given the high level of exclusions in Stage 1 it is suggested this is not the case. Moving this criterion forward more robustly is not indicated. The question CMS asks at the end is problematic for the reasons stated above. The less translation that is done to information to meet the requirements of transmission the greater the fidelity of the information. In area dominated by one EHR vendor quality is better served by not artificially translating information. The CMS NPRM (p.108) suggests that a care plan should be provided when the patient is referred or transferred to another provider. Among other components, the care plan should include “any instructions that the provider has given to the patient.” In our opinion, it should also include recommendations for other (receiving) EPs. The reason for that is that in order to enable the continuity of care, providers should collaborate and exchange relevant care suggestions and recommendations. For example, when patient is referred from hospital to outpatient settings (such as home-care), admitting EPs should be able to see what treatments or procedures were suggested by the hospital EPs. CMS NPRM suggests that each patient transition or referral summary should include a problem list defined as “a list of current and active diagnoses.” Comments are solicited on whether the problem list should be extended to include, "when applicable, functional and cognitive limitations" or whether a separate list should be included for functional and cognitive limitations.” From the research literature on the topic, it is evident that cognitive and functional status is necessary to provide

			holistic care for each individual. In some transitions, for example hospital-home care transition, it is very helpful to know patient's cognitive and functional status ahead of time to identify appropriate treatments, interventions or the amount of assistance the patient might need upon admission to this other setting. Therefore, it is highly suggested that the referral summary include information on a standardized cognitive and functional evaluation. Agree on moving beyond "exchange of key clinical information" to providing more of a contextual summary of care during transitions of care. We are supportive of the additional recording of "care plan fields, including goals and instructions" and "additional known team members beyond the referring or transitioning provider". *Rationale and comments:* • This addition begins a shift to a patient-centered care planning approach to care (vs. silo approach or clinician-centric) • It captures significant contributions of an interprofessional team involved in the care and preparation for transition (e.g., nurses, case managers, social workers, etc.) • The clinical context of the patient situation may also include human responses as part of their various conditions and issues. We encourage the problem (the focus of the plan of care) be open to individualize it to the patient situation as long as it meets the specified vocabulary standard. • The Goal(s) – or targeted outcomes/expected patient outcomes – should be based on evidence and individualized to the patient's situation. Comments on transport standards for 2014 Edition EHR Certification Criteria – move to open transport standards (eg, SOAP, SMTP, others?) – Current proposal is to move to common transport standards with requirements to move beyond organizational and vendor boundaries. ONC has indicated it would pursue an off-cycle rulemaking to add as an option for certification transport standard that emerge at any time after

			these proposed rules are finalized.
13. Capability to submit electronic data to immunization registries or immunization information systems except where prohibited, and in accordance with applicable law and practice.	Successful ongoing submission of electronic immunization data from CEHRT to an immunization registry or immunization information system for the entire EHR reporting period. [Comparable measure in Stage 1 (which was in the Menu set) refers to at least one test (which need not be successful) and follow up submission if the test is successful.]		Standing order programs in hospitals aim to routinely give influenza, pneumovax, and other immunizations to patients under certain criteria. SOPs will make most hospitals eligible for this criterion, since most jurisdictions track influenza given the H1N1 epidemic in 2009. This criterion therefore has the potential to dramatically increase the volume of adult immunizations reported to state registries. Therefore this criterion pushes EHR systems in the right direction to enable and improve critical public health functions. We note that the Immunization registry system, despite approximately 30 years of development by CDC and local health departments is not robust enough to fully handle this criterion. In Stage 1 45% meet the criterion by deferral implying poor coverage. In particular the query function is poorly developed, especially when multiple registries are involved. Other than the need for public health (PH) improvement in the system, the criterion should stand as presented. The criterion should have been core in Stage 1 and placing it there in Stage 2 fine. Moving to core may provide an incentive to PH to improve the system. Change from a general test to immunizations is desirable. The proposed measure seems quite burdensome until such time as CDC and public health agencies formalize the support of public health MU measures and mechanisms to automate data exchange to support immunization tracking. There needs to be harmonization between federal and state and state to state requirements for reporting. Recognizing these limitations, it is still important to aggressively move this measure forward if the goal of improving population health is to be realized. This measure would be strengthened with better defined, measureable outcomes.
14. Capability to submit electronic reportable laboratory results to public health agencies, except where	Successful ongoing submission of electronic reportable laboratory results from CEHRT to a public health agency for the entire EHR reporting period as authorized. [Comparable		These modifications are welcomed as ways to increase the utilization of EHR systems to improve public health reporting processes. This criterion is supportive of the evidence that shows ELR dramatically improves completeness and timeliness of reportable laboratory results to public

prohibited, and in accordance with applicable law and practice.	measure in Stage 1 (which was in the Menu set) refers to at least one test (which need not be successful) and follow-up submission if the test is successful.]		health. ELR adoption within state health departments continues to increase, enabling more jurisdictions to take advantage of electronic lab message infrastructure. The major obstacle to this criterion is the required mapping or translation of local laboratory concepts to standardized LOINC concepts. Research at the Regenstrief Institute has consistently demonstrated that mapping local concepts to standardized LOINC codes is complex and requires significant time and cost. A recent analysis** performed by Regenstrief shows that only 2/3 of the commonly reported laboratory results to public health are included in the currently published "common LOINC codes" or Top 2000. The Top 2000 LOINC codes is one way that laboratories can reduce the time and cost associated with the complex challenge of mapping their local laboratory concept dictionaries to the LOINC standard. However, laboratories may need to change their mapping strategies to meet this criterion, increasing the potential time and costs associated with meeting MU Stage 2. **This analysis was submitted to the 2012 AMIA Annual Symposium We note that the ability of PH to receive laboratory results is incomplete and local health departments are not robust enough to fully handle this criterion. In Stage 1 77% meet the criterion by deferral implying poor coverage. Other than the need for PH improvement in the system, the criterion should stand as presented. The criterion should have been core in Stage 1 and placing it there in Stage 2 fine. Moving to core may provide an incentive to PH to improve the system. CMS needs to assess capability of public health agencies to receive reportable data electronically before requiring hospitals to submit electronically. Additionally, how data is reported needs to be harmonized between public health agencies as there is wide variation

			today.
15. Capability to submit electronic syndromic surveillance data to public health agencies, except where prohibited, and in accordance with applicable law and practice.	Successful ongoing submission of electronic syndromic surveillance data from CEHRT to a public health agency for the entire EHR reporting period. [Comparable measure in Stage 1 (which was in the Menu set) refers to at least one test (which need not be successful) and follow-up submission if the test is successful.]		Keeping this in the menu set for EPs does make sense. Health departments are unsure what to do with specialist reporting of syndromic data. For example, it makes little sense for a cardiology practice to report chief complaint data to the public health department. The data are likely to be sensitive but non-specific. This will likely increase false positive alerts within syndromic surveillance systems (although we haven't seen any simulation studies of this appear in the literature). One possible option would be to somehow make this core but add exclusion for specialty care. Recording chief complaints from primary care would be of strong interest to many public health departments, so it would be worth considering for Stage 3. Meanwhile syndromic data from ED and urgent care are critical to health department surveillance activities as demonstrated during the H1N1 epidemic of 2009. Until PH accepts syndromic surveillance as a routine tool CMS should not require it as Core item. It is noted that, as the criterion also observed, this is not the case and most likely will not be for the next decade or beyond. Cost to PH of developing the system is outside the funds foreseeable to either local PH or to the CDC in these tight budget times. Having it as a menu item is also problematic. In Stage 1 most noted a deferral indicating lack of capability in moving forward due to PH. Until PH is available as a receiver and uses of the information the criterion occupies a menu slot that might be better used for a criterion worthy of testing. According to FR the CDC states that very few public health agencies accept syndromic surveillance data from ambulatory providers. CDC is working on this, so this may be a core item for EP in stage 3, so if there is possibility for stage 3, recommend to keep it on the menu
16. Protect electronic health information created or	Conduct or review a security risk analysis in accordance with the requirements under 45		Is the hospital required to report on data encryption methods specifically? If this was a requirement for stage I and the only change is

maintained by the CEHRT through the implementation of appropriate technical capabilities.	CFR 164.308(a)(1), including addressing the encryption/security of data at rest in accordance with requirements under 45 CFR 164.312(a)(2)(iv) and 45 CFR 164.306(d)(3), and implement security updates as necessary and correct identified security deficiencies as part of the hospital's risk management process. [Stage 1 measure called for a security risk analysis but did not emphasize encryption of data, either in transit or at rest.]		addressing encryption, then it shouldn't be a very large burden.
MENU SET (eligible hospitals/CAHs must meet 2 of 4 Menu objectives)			
1. Record whether a patient 65 years old or older has an advance directive.	More than 50 percent of all unique patients 65 years old or older admitted to the hospital's inpatient department during the EHR reporting period have an indication of an advance directive status recorded as structured data.		We observe that the comments CMS makes about storing a copy of an advance directive may be valid but that is not a reason why they should not require storage of one. It might shorten the time for a family to agree to patient's wishes or produce the legal copy if needed. Knowledge of an advance directive early in care is essential as the population ages. Recording whether a patient has an advanced directive has long been required by TJC. That said, it seems that there are populations of individuals less than age 65 where an advance directive is more critical in documenting than an individual just because they are >65 yrs. …e.g. 38 yr old w/ end stage cancer.
2. Imaging results and information are accessible through CEHRT.	More than 40 percent of all scans and tests whose result is an image ordered by an authorized provider of the hospital for patients admitted to its inpatient or emergency department during the EHR reporting period are accessible through CEHRT. [This is a new measure for Stage 2.]		The criterion for exchange should be deferred until a more robust exchange system is in place. Note that many complex image studies are now exchanged by CD/DVD through mail or hand carried due to image size. Providing links in these cases may not be appropriate for security reasons.
3. Record patient family health history as structured data.	More than 20 percent of all unique patients admitted to the hospital's inpatient or emergency department		The criterion should be deferred, even as a menu option. Without standards it is unclear how CEHRT could comply with the criterion and we would not want to start use at any level in an ad hoc fashion, which

	during the EHR reporting period have a structured data entry for one or more first-degree relatives. [This is a new measure for Stage 2.]		is implied. Define first-degree relatives? What if the patient was adopted and/or has no access to family Hx? What if the patient's identification is unknown? It's also unrealistic to assume that even if the technology can support it, that patients will be able to contribute to the record. Their illness/injury can preclude their ability to do so. In addition, they may not be aware of the specifics or they may not be correct. Also, AMIA is not sure how widespread it is for patients to contribute directly to the record. We believe that is not common at this point. A process would need to be determined at any EH in order to support this. Exactly what structured data elements would be expected? I think it's very unrealistic to implement this standard at this point. In addition to standardizing the data elements, terminology needs to be standardized.
4. Generate and transmit permissible discharge prescriptions electronically (eRx).	More than 10 percent of hospital discharge medication orders for permissible prescriptions (for new or changed prescriptions) are compared against at least one drug formulary and transmitted electronically using CEHRT. [This is a new measure for Stage 2.]		The eRx message for new, changed and refills is different. It is felt the hospital knows the state of the patent's medication on admission as determined during medicine reconciliation. Therefore is not a burden for the hospital to identify the state of the order and mix modes if needed. The issue of potential conflict with medication orders from the PCP or other outside provider is a more fundamental medical management issue and not one to consider with respect to MU. If there is a need to distinguish between new, refill and changes then this might introduce a burden for the hospital, but I don't see why there needs to be a distinction. Formularies need to be harmonized among payor types particularly since updates occur on a frequent basis among all formularies.