### SGRP 101

**Eligible Provider (EP) Objective:** Use computerized provider order entry (CPOE) for medication, laboratory and radiology orders directly entered by any licensed healthcare professional who can enter orders into the medical record per state, local and professional guidelines.

**Eligible Hospital (EH) Objective:** Use computerized provider order entry (CPOE) for medication, laboratory and radiology orders directly entered by any licensed healthcare professional who can enter orders into the medical record per state, local and professional guidelines.

<table>
<thead>
<tr>
<th>EP/EH Measure</th>
<th>Objective: Use computerized provider order entry (CPOE) for medication, laboratory and radiology orders directly entered by any licensed healthcare professional who can enter orders into the medical record per state, local and professional guidelines.</th>
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<tbody>
<tr>
<td></td>
<td>CPOE for medications includes drug-drug interaction (DDI) checking for “never” combinations as determined by an externally vetted list.</td>
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<td><strong>Measure:</strong> More than 60% of medication, laboratory, and radiology orders created by the EP or authorized providers of the eligible hospital’s or CAH’s inpatient or emergency department (POS 21 or 23) during the EHR reporting period are recorded using CPOE.</td>
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<td><strong>Certification Criteria:</strong> EHR must be able to consume an externally supplied list of “never” DDIs, using RxNorm and NDF-RT standards along with a TBD DDI reactions value set.</td>
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</table>
|               | **Certification Criteria for EPs**
|               | - EHR must have the ability to transmit lab orders using the lab order and results interface guidelines produced by the S&I Framework Initiative. |

**Seeking externally maintained list of DDIs with higher predictive value**

60% threshold for EP CPOE feels aggressive for MU3 timing but we support the goal.

Regarding the use of an externally vetted list of ‘never’ drug-drug interactions, our concern is that undue reliance on this list will diminish the screening of other DDIs that may not make the list, but can be just as harmful to patients. We point to research that demonstrates that if the list of high priority interactions (by Phansalkar et al J Am Med Inform Assoc 2012;19:735-743) were used as a filter setting, only 2.5% of clinically significant interactions would be displayed to physicians. While it is true that those alerts displayed would be useful, many important alerts would be suppressed. We believe that it is extremely important to find the proper balance between addressing alert fatigue without compromising patient safety.

We request that HITPC consider inclusion of diet/nutrition orders as a component of CPOE. An HL7 January 2013 Ballot has a “Nutrition/Diet Orders Messaging” project which will be used to create a “Best Practices” for implementation of Nutrition/Diet Orders. Per Joint Commission, all in-patients must have a diet order placed by an authorized provider prior to the patient receiving any food. These diet orders typically sent via a HL7 v2 Diet Orders interface to the Nutrition Department, which allows for reduced errors, increased efficiency and potentially improved patient satisfaction.
### SGRP 130

**Objective:** Use computerized provider order entry for referrals/transition of care orders directly 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.

**Measure:** More than 20% of referrals/transition of care orders created by the EP or authorized providers of the eligible hospital’s or CAH’s inpatient or emergency department (POS 21 or 23) during the EHR reporting period are recorded.

Some of AMIA’s members also suggest that Nutrient Drug Interactions be included as a CDS when medications are ordered.

Agree with this objective as it will allow for easier tracking of the closed loop referral. In addition, if properly constructed, the transitions of care orders will allow both patients (who should receive an electronic copy) and providers a better compilation of relevant orders.

We strongly endorse this proposed requirement and believe 20% is a reasonable entry point. We support an emphasis on the transition of care and believe CPOE and automated medication reconciliation should be a focus to promote quality and safety.

Regarding transitions of care orders we strongly endorse the requirement but recognize limitations since MU incentives are tied to acute settings (EH/EP). Without incentives for settings where patients will transition to (e.g., home care, subacute, long term care, rehab), impact is likely to be extremely limited. Measures for Care Transition Summary (SRGP 303) and Transition Care Plan (SRGP 304) will be necessary complements to bridge these transitions.
### AMIA Response to Request for Comments Meaningful Use Stage 3

<table>
<thead>
<tr>
<th>SGRP 103</th>
<th>EP/EH Objective: Generate and transmit permissible prescriptions electronically (eRx)</th>
<th>EP Objective: Generate and transmit permissible prescriptions electronically (eRx)</th>
<th>Advanced medication reconciliation to check for formulary compliance.</th>
<th>How to include formulary checking into EHR and connection to formulary sources (e.g., PBMs)?</th>
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<tr>
<td></td>
<td>EP Measure: More than 50% of all permissible prescriptions written by the EP are compared to at least one drug formulary (reviewed for generic substitutions) transmitted electronically using Certified EHR Technology.</td>
<td>EH Objective: Generate and transmit permissible discharge prescriptions electronically (eRx)</td>
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<td></td>
<td>EH Measure: More than 30% of hospital discharge medication orders for permissible prescriptions (for new or changed prescriptions) are compared to at least one drug formulary and transmitted electronically using Certified EHR Technology.</td>
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</table>
Medication formulary checking:

Key to standardize this process or we will not be able to have useful outcomes measurement re nursing and interprofessional practice outcomes.

We urge HITPC to further consider patient reported data as well as data collected by providers.

Suggest there be a mechanism to distinguish health data that is patient reported from provider supported data as the sources of data in a longitudinal health record rapidly expand. There are many benefits to the Certified EHR technology being able to provide patient-level formulary and benefit (F&B) information to the provider at the point of care. Having the patient's actual F&B will enable the provider to prescribed medications in consultation with the patient considering the patient's full array of choices based on their insurance benefits.

Patient level F&B information at the point of care will reduce the likelihood of surprises and unanticipated cost when the patient gets to the pharmacy and increase the likelihood that the patient will actually fill the prescription. Seamless patient formulary and benefit data will facilitate a meaningful dialogue between the patients and
providers at the point of care and lead to the patient receiving the right care, at the right time, and decreased problems at the point of sale or pharmacy. This will also facilitate shared decision making and may influence medication adherence.

In MU Stages 1 and 2 no standard is required for Formulary and Benefit. Although there is an F&B standard through NCPDP it does not provide patient level data, nor is it in real-time.

Certified EHRs should have the functionality to run real-time, patient level formulary checks and a technical standard should be developed to support real-time access to up-to-date, patient level formulary information, for example, similar to the information PBMs currently provide to pharmacies.

CEHRT for F&B could be done through a neutral third party with specification being public versus how it is done today through a proprietary process and levels of certification are not fully known. There would be a need to improve the accuracy of patient matching to their F&B the pharmacy insurance card data.

**Measure:** More than 50% of all permissible prescriptions, or all prescriptions written by

☐ If Rx is formulary-compliant, transmit to pharmacy.
### AMIA Response to Request for Comments Meaningful Use Stage 3

| SGRP 104 | EP Objective: Record the following demographics  
|---|---|
| • Preferred language  
| • Sex  
| • Race  
| • Ethnicity  
| • Date of birth  
| Retire prior demographics objective because it is topped out (achieved 80% threshold).  
**Certification criteria:**  
• Occupation and industry codes  
• Sexual orientation, gender identity (optional fields)  
• Disability status  
  • Differentiate between patient reported &  
Do commenters agree with retiring the measure, or should we continue this objective?  
Continuing the measure would mean an additional number of objectives that providers will need to attest to.  
We do not believe this item should be retired yet and suggest it continue to be an ongoing focus. AMIA members request additional data to support the contention that this has been "topped out"?  
If this is “retired” we believe that it is critical to clarify that HITPC is not retiring the objective - just the measure.  
We believe that the HITPC must ensure that these data will be effectively used by appropriate quality measures, clinical decision support, information exchanges, or other measures to ensure that  
| □ If Rx is not formulary compliant, prescriber presented with alternatives (if available through formulary database) or provided a structured prior-authorization form to complete before Rx transmitted. Capability for automatic approval of prior-auth should be available.  
EH MENU Objective: Generate and transmit permissible discharge prescriptions electronically (eRx)  
EH MENU Measure: More than 10 percent of hospital discharge medication orders for permissible prescriptions (for new, changed, and refilled prescriptions) are queried for a drug formulary and transmitted electronically using Certified EHR Technology  
the EP and queried for a drug formulary and transmitted electronically using CEHRT. |
the objective is met in a clinically relevant way. Many data elements must be collected because they are part of the care summary or are required for other purposes such as to trigger CDS and to report quality measures. Since the data must be recorded for other purposes, we agree that a measure that simply indicates collection is unnecessary. More meaningful measures that actually use the collected data are required. These measures also are determinants of health and health outcomes and will assist us to further drive interventions and research.

We are concerned that retiring measures that EPs are doing well in runs the risk of sending the message that this measure no longer matters, so HITPC must clearly communicate to EPs that recording of such information is still required to support CQMs, CDS, and exchange of summaries.

We are supportive of adding capture of occupation and Industry codes, sexual orientation, gender identity (Optional) and disability status. However, given that items like occupational history (and family history) are often time consuming and best assembled in the home rather than the healthcare setting, strong consideration should be given to making these...
<table>
<thead>
<tr>
<th><strong>EH Objective: Record the following demographics</strong></th>
<th>medically determined</th>
<th></th>
<th>items contributable by patients themselves, through effective patient generated health data approaches.</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Preferred language</td>
<td>• Need to continue standards work</td>
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<tr>
<td>• Sex</td>
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<tr>
<td>• Race</td>
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<tr>
<td>• Ethnicity</td>
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<tr>
<td>• Date of birth</td>
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<tr>
<td>• Date and preliminary cause of death in the event of mortality in the eligible hospital or CAH</td>
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<tr>
<td><strong>Measure:</strong> More than 80 percent of all unique patients seen by the EP or admitted</td>
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<tr>
<td>SGRP 105</td>
<td><strong>Consolidated in summary of care objective</strong>&lt;br&gt;Maintain an up-to-date problem list of current and active diagnoses</td>
<td><strong>Certification criteria:</strong> EHR systems should provide functionality to help maintain up-to-date, accurate problem list&lt;br&gt;&lt;br&gt;<strong>Certification criteria:</strong> Use of lab test results, medications, and vital signs (BP, ht, wt, BMI), to support clinicians’ maintenance of up-to-date accurate problem lists. Systems provide decision support about additions, edits, and deletions for clinicians’ review and action. For example, if diabetes is not on the problem list but hypoglycemic medications are on the medication list: the EHR system might ask the provider whether diabetes should be on the problem list. It would not automatically add anything to the problem list without professional action.</td>
<td>Patient input to reconciliation of problems&lt;br&gt;&lt;br&gt;The implementation of these criteria will assist in achieving the CDC’s goal of using EHR technology features to identify patients meeting criteria for hypertension who are not yet diagnosed and managed for the disorder. How to incorporate into certification criteria for pilot testing?&lt;br&gt;The intent is that EHR vendors would provide functionality to help maintain functionality for active problem lists, not that they supply the actual knowledge for the rules. We generally support this proposed requirement. If systems will be expected to provide automatic decision support based on additions, edits and deletions to problem and medication lists, commercially-produced value sets will play a vital role in ensuring that problems and meds are accurately updated. In Stage 2, the Stage 1 measure for Problem Lists was essentially &quot;retired&quot; (by incorporating into another measure without...</td>
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explicitly measuring compliance with the original measure, rather than made more robust according to the MU objective of accurate and up-to-date.

We resonate with many of the concepts advanced by Dr. Lawrence Weed in his discussions of problem-oriented medical records going back as far as the late 1960s. In this view, the patient’s chart is not simply a collection of scribbled notes to partially capture events for future recall or current billing, but rather a "guidance system" and "thesis" that more closely represents a patient-centered research notebook of careful observations, results, interpretations, conclusions and reflections about future directions of the patient’s care.

We would like to see the Meaningful Use measures focus more on encouraging physicians and other health professionals to record, review, manage, and share information that more fully supports these goals. One example would be to advance the objective of ensuring an accurate and up-to-date problem list rather than dropping the problem list as a measure and assuming that this issue has been addressed with the minimal requirements specified in Stage 1.
Another example would be requiring structured association of problems with medication, laboratory and imaging orders, so it is clear what tests and treatments are associated with which problem(s). Creating measures that add structure and clinical decision support to problem assessments and plans would further encourage thoughtful documentation as well as the assemblage, review and comparison with prior assessments within efficient workflows.

We concur with enabling decision support to suggest additions to the problem list based on vital signs (e.g., recurring high blood pressure readings), laboratories (e.g., persistent hyperglycemia, HIV+) and medications (e.g., diabetes or tuberculosis medications).

We recommend including a date of reconciliation and/or update for problems on problem list.

We question the maturity of CDS systems having the ability to cross-check medications with Problem List.

We are concerned that not all patients/families will be able/competent agents to reconcile their own data, and new approaches are needed to encourage their participation in this reconciliation.

Additional data are needed to
We urge HITPC to consider standardization from vendors re: problem list management of coded data. We note the lack of standardization re: (organizational/provider defined) workflows and standards of interprofessional practice. We believe that there is a need to address patient/family data reconciliation 1) systems to support patients or authorized designees to amend inaccuracies in their health data; and 2) systems to support sharing of patient generated health data. In particular this would apply to problem lists, medications, and medication and non-medications allergies and intolerances.

Certification criteria: EHR systems should provide functionality to help maintain up-to-date, accurate medication list

Certification criteria: Use of problems and lab test results to support clinicians’ maintenance of up-to-date accurate medication lists. Systems provide decision support about additions, edits, and deletions for clinicians’ review. For example, an antibiotic (not for acne) has been on the medication list for over say a month, the EHR system might ask the provider whether the medication is a chronic medication. The system will not make any changes without professional approval.

Certification criteria: Use other EHR data such as medications filled or dispensed, or free text searching for medications to support maintenance of up-to-date and accurate medication lists.
AMIA Response to Request for Comments Meaningful Use Stage 3

<p>| medication. |</p>
<table>
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<tr>
<th>SGRP 107</th>
<th><strong>Consolidated with summary of care - Maintain active medication allergy list</strong></th>
<th><strong>Certification criteria:</strong> EHR systems should provide functionality to code medication allergies including its related drug family to code related reactions.</th>
<th><strong>Contraindications that could include adverse reactions and procedural intolerance.</strong></th>
</tr>
</thead>
</table>

The intent is that EHR vendors would provide functionality to help maintain functionality for active medication allergy lists, not that they supply the actual knowledge for the rules.

The wording of this proposed criterion is confusing, particularly with regard to what is to be coded (i.e. reaction type?; medication?). Does the phrase “related drug family” mean that drug classes would be coded? If so, we would advise against this and recommend posting allergies at the most specific level appropriate.

The NPRM for Stage 3 should also clarify the role of RxNorm and the use of commercially-available code sets.

We believe that the documentation of allergies and intolerances within the EHR remains problematic. While medication allergies are placed on a medication allergy list as per the Stage 2 final rule, a patient may have other allergies and intolerances that are not documented yet may have equal if not greater health consequences. We suggest that HITPC look to the work of the HL7 Patient Care Work Group which supports the systematic documentation of medication and non-medication allergies and intolerances in a centralized “list” format within the EHR. See:
Allergies and intolerances included on the “list” may be documented by a health care provider based on an actual observation of an event, or reported by the patient to a health care provider in the health care setting. With the increased emphasis on patient generated data, personal health records and patient portals we believe that HITPC needs to address ways of accepting a patient or family member’s data and documentation of an allergy or intolerance. We believe that Systems should support methods to encourage patients to be active in reconciliation of allergies and intolerances. With the creation of an allergy list via the use of consistent terminology coding systems, these artifacts can then be used for inclusion in C-CDA documents and in reporting for e-measures. A pathway for this use of allergy data has been defined for medications. Based on the work of HL7, non-medication allergies can follow the same patterns. This approach may represents a low burden for the vendor community and help ensure increased patient safety throughout the continuum of care.
| SGRP 108 | **Objective:** Record and chart changes in vital signs:  
- Height/length  
- Weight  
- Blood pressure (age 3 and over)  
- Calculate and display BMI  

patients 0-20 years, including BMI  
**Measure:** More than 80 percent of all unique patients seen by the EP or admitted to the eligible hospital’s or CAH’s inpatient or emergency department (POS 21 or 23) 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 | Retire measure because it is topped out (achieved 80% threshold). Track progress to improve outcomes via CQM NQF 0018 | Do commenters agree with retiring the measure, or should we continue this objective? Continuing the measure would mean an additional number of objectives that providers will need to attest to.  

With respect to the proposal to retire this criteria (Objective: Record and chart changes in vital signs) we seek additional information about the evidence that over 80% have achieved electronic charting of changes in vital signs and growth charts? We wonder if this is via attestation alone. We suggest that DHHS consider the validity of the data and applicability to incoming MU EPs and EHs before retiring any measures. We note that EPs are not required to perform quality measure NQF 0018 for hypertension, so coverage may be incomplete.  

We are concerned about the retirement of this measure as we believe it is still lacking across settings.  

There is an ongoing need for interoperable data sets across professions/disciplines. For example, BMI is documented by the nutritionist, physician, and nurse |
separately. Need more dialog and coordination b/t disciplines to support meaningful interprofessional / team based care.

We believe that all too frequently, an inpatient record is populated with one data point on a growth chart re height/wt and BMI when this is not very meaningful without historical data also populating a growth chart. Additional data that are key for providing effective, safe care across transitions and across non-acute care settings are needed, such as:

- trending data in the growth charts.
- gestational age reflected in pediatric growth charts
- prompts to ACT on BMI data given the severity of obesity in society

We recommend that the CQM consider NQF 0024 and 0421 which monitor both child, adolescent and adult weight control. BMI is an indicator which should be used with clinical interpretation as it is unreliable in multiple clinical scenarios. Continuing the measures should help monitor a plan in place for overweight and obese individuals.

| SGRP 109 | EP/EH Objective: Record smoking status for patients 13 years old or older | Retire measure because it is topped out (achieved 80% threshold). Track progress to improve outcomes via CQM NQF 0028 | Do commenters agree with retiring the measure, or should we continue this objective? Continuing the measure would mean an additional number of |
AMIA Response to Request for Comments Meaningful Use Stage 3

<table>
<thead>
<tr>
<th>SGRP 112</th>
<th>EH MENU Objective: Record whether a patient 65 years old or older has an advance directive</th>
<th>Ensure standards support in CDA by 2016</th>
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<tr>
<td></td>
<td>EH MENU Measure: More than 50 percent of all unique patients 65 years old or older admitted to the eligible hospital's or CAH's</td>
<td>EP MENU/EH Core Objective: Record whether a patient 65 years old or older has an advance directive</td>
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<tr>
<td></td>
<td></td>
<td>EP MENU/EH Core Measure: More than 50 percent of all unique patients 65 years old or older admitted to</td>
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</table>

- by the EP or admitted to the eligible hospital’s or CAH’s inpatient or emergency departments (POS 21 or 23) during the EHR reporting period have smoking status recorded as structured data

- We do not have consensus about retiring the measure. We do think that progress could be tracked via CQM measures. We do not recommend retirement of this measure for pediatrics/adolescent health care

- We believe that the collection of data regarding smoking behavior is problematic and should be improved. We recommend recording all tobacco use rather than just smoking status. (It does not include non-cigarette tobacco use, appropriate codes for youth, nor is it consistent with codes needed for quality measures). Since many providers may not track NQF 0028 (not required), many providers may not track tobacco use without a mandated capture and code set.

- objectives that providers will need to attest to.
| inpatient department (POS 21) during the EHR reporting period have an indication of an advance directive status recorded as structured data. | the eligible hospital’s or CAH’s inpatient department (POS 21) during the EHR reporting period have an indication of an advance directive status recorded as structured data. | Certification criteria: Explore greater specificity for food-drug interactions  
Procedure/Surgery/lab/radiology/test prior authorization v.A: for those procedures/surgeries/lab/radiology/test with clear and objective prior authorization requirements and a structured data prior authorization form is available, clinician fill out the prior authorization form using structured data fields and prior authorization can be granted electronically and in real-time by the payor.  
Procedure/Surgery/lab/radiology/test prior authorization v.B: for those procedures/surgeries/lab/radiology/test, for which prior authorization is non-standardized and is highly individualized, a standardized form is created that collects from the clinician text fields answering an agreed upon set of medical necessity questions, standardized form is sent electronically to insurer for review, insurer responds with Approval/Denial (with rationale if denied) using a standardized format text document back to clinician with either approval and/or denial with rationale. | Ability for EHRs to consume CDS interventions from central repositories. The EHR would query (via web services) available databases to identify “trigger event” conditions (e.g., case reporting criteria, drug-drug interactions, potentially relevant trials) based on the patient’s health condition, diagnoses, location, and other basic facts.  
The HITPC is interested in experience from payors that may contribute to CDS.  
We strongly endorse the focus on Prevention, Chronic Disease Mgmt, Appropriateness of lab/rad orders, and advanced medication-related decision support. We support inclusion of advanced medication-related decision support for Stage 3, including maximum dose and weight-based screening. We also support the ability of EHRs to consume CDS interventions from central repositories, which builds off the work of the S&I Framework’s Health eDecisions Initiative.  
We question if appropriate steps have been considered if CDS is |
| SGRP 113 | EP/EH Objective: Use clinical decision support to improve performance on high-priority health conditions  
Measure:  
1. Implement five clinical decision support interventions or guidance related to four or more clinical quality measures at a relevant point in patient care for the entire EHR reporting period. Absent four clinical quality measures related to an EP, eligible hospital or CAH’s scope of practice or patient population, the clinical decision support interventions must be related to high-priority health conditions. It is suggested that one of the five clinical decision support interventions be related to improving health departments, preference-sensitive care lists)  
2. The EP, eligible hospital, or CAH has enabled and implemented the functionality for drug-drug and drug-allergy interaction checks for the entire EHR reporting period.  
Certification criteria:  
1. Ability to track CDS triggers and how the provider responded to improve the effectiveness of CDS interventions  
2. Ability to flag preference-sensitive conditions, and provide decision support materials for patients.  
3. Capability to check for a maximum dose in addition to a weight based calculation.  
4. Use of structured SIG standards  
5. Ability for EHRs to consume CDS interventions from central repositories (e.g., rules for drug-drug interactions, rules for reporting diseases for public health departments, preference-sensitive care lists)  
3. Appropriateness of lab and radiology orders  
4. Prevention, Chronic Disease Mgmt, including maximum dose and weight-related decision support.  
5. Disease interactions, rules for reporting diseases for public health departments, preference-sensitive care lists)  
- **Appropriateness of lab and radiology orders**  
- **Prevention, Chronic Disease Mgmt, including maximum dose and weight-related decision support.**  
- **Disease interactions, rules for reporting diseases for public health departments, preference-sensitive care lists)** | Objective: Use clinical decision support to improve performance on high priority health conditions  
Measure:  
1. Implement 15 clinical decision support interventions or guidance related to five or more clinical quality measures that are presented at a relevant point in patient care for the entire EHR reporting period. The 15 CDS interventions should include one or more interventions in each of the following areas, as applicable to the EP’s specialty:  
- Preventative care (including immunizations)  
- Chronic disease management, including hypertension* (e.g., diabetes, coronary artery disease)  
- Appropriateness of lab and radiology orders  
- Advanced medication-related decision support** (e.g., renal drug dosing)  
2. The EP, eligible hospital, or CAH has enabled the functionality for drug-drug and drug-allergy interaction checks for the entire EHR reporting period.  
Certification criteria:  
1. Ability to track CDS triggers and how the provider responded to improve the effectiveness of CDS interventions  
2. Ability to flag preference-sensitive conditions, and provide decision support materials for patients.  
3. Capability to check for a maximum dose in addition to a weight based calculation.  
4. Use of structured SIG standards  
5. Ability for EHRs to consume CDS interventions from central repositories (e.g., rules for drug-drug interactions, rules for reporting diseases for public health departments, preference-sensitive care lists) |
This will assist in achieving the CDC’s goal of indeed moving to the cloud. ONC needs to assure that the certification criteria for Stage 3 reflect this reality. For example, it is not clear why HITPC requires a cloud-based CDS repository to record numerators, as is now the case for all modules in Stage 2.

In Stage 3, we urge HITPC to more closely align the functional and certification requirements of both CDS and patient-specific educational resources. Many modular vendors provide content to both clinicians and patients so it makes sense to more closely align these two criteria.

The CDS requirement for Stage 3 includes the ability of EHRs to identify and transmit “trigger event” conditions based on a patient’s health condition, diagnoses, location and other basic facts to a third party content repository. We recommend the added requirement that these third party content repositories should then return in a web services form any relevant, evidence-based guidance to the clinician that can be made available in the patient record.

We believe that the Immunization Information System (IIS) community already has maturing products in place to provide clinical decision support (CDS) services related to immunization several
such as via web services, an IIS or companion system can provide CDS when provided with a patient’s immunization history, age, gender, and disease occurrence (e.g., had chicken pox).

In response to a standard HL7 v2 message querying for immunization history, many IIS return the CDS information as well. The transaction may or may not be transported via web services. For example, HLN is developing an open source immunization CDS service called ICE (http://www.hln.com/ice) based on a general-purpose open source product called OpenCDS (http://www.opencds.org). We understand that at least one major ambulatory EHR vendor has also incorporated ICE into the next release.

We support the continuing inclusion of CDS in MU recommendations, and we think the IIS community can serve as a strong early adopter of independently-available services-based products that provide this functionality within the immunization domain. We understand that this functionality is in production between IIS and EHR systems today. For example we understand that, HLN supports an implementation of this service at some scale in New York City in conjunction with the Department...
We request further definition of “ability to flag preference-sensitive condition and provide decision support materials for patients”.

The HL7 Patient Care Allergy and Intolerance Work Group has considered the inclusion of preferences as a correlate to the allergy and intolerance substance list. This was included based on patient reported “allergy” or “intolerance” to a food or medication, when in fact it was actually a preference.

We believe that providers need to be informed about patients’ participation in a registry (especially if it is related to the episode of care at the time the pt presents and recommend that systems provide such functionality (is a patient part of a registry or clinical trial).

| SGRP 114 | **EP/EH Objective**: Incorporate clinical lab-test results into Certified EHR Technology | **Objective**: Incorporate clinical lab-test results into EHR as structured data | **Measure**: More than 80% of all clinical lab tests results as structured data  
**Measure**: More than 55 percent of all clinical lab-test results ordered by the EP or by authorized providers of the

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We do not have consensus on this criterion. Some of our members support the increase in performance for this criterion from 55%-80%. Structuring lab data makes it easier for clinicians to access CDS content. Others believe that 80% is unreasonable until such time as all laboratory service providers are required to provide results by a consistent standard that CEHRT is also required to support, and that interfaces using this standard have been demonstrated to be functional.

Members also request that standards be developed for flags, comments, and notes.

There is a question regarding what to do when the laboratory tests were not ordered by the EP but by a covering colleague?
AMIA Response to Request for Comments Meaningful Use Stage 3

| SGRP | EP CORE Objective: Generate lists of clinical lab tests results ordered by the EP or by authorized providers of the eligible hospital or CAH for patients admitted to its inpatient or emergency department (POS 21 or 23) during the EHR reporting period whose results are either in a positive/negative affirmation or numerical format are incorporated in Certified EHR Technology as structured data | EP Objective: Generate lists of patients for multiple inpatient or emergency department (POS 21 or 23) 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 | We support the use of dashboards being incorporated into both nursing and interprofessional practice settings and recommend making elements of the dashboard actionable. We suggest use of these dashboards both within settings e.g. acute care and by EP’s as well as to traverse settings and unify care delivery across time and the continuum of care. We recognize inherent limitations of these dashboards with MU incentives focused on acute settings only.

We suggest that “Real-time” needs to be defined very carefully. 1 day? 1 hour? 1 minute from data entry?

Data for these purposes will always be a “retrospective” report – everything contained in an EHR is retrospective – so these terms must be well-defined.

How frequently are EPs “supposed” to manage/review “real-time” lists?

The wording suggests that retrospective reports are not actionable; we do not think that...
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AMIA Response to Request for Comments Meaningful Use Stage 3

| 115 | patients by specific conditions to use for quality improvement, reduction of disparities, research, or outreach | specific conditions and present near real-time (vs. retrospective reporting) patient-oriented dashboards to use for quality improvement, reduction of disparities, research, or outreach reports. Dashboards are incorporated into the EHR’s clinical workflow for the care coordinator or the provider. It is actionable and not a retrospective report. |
| SGRP | EP Objective: Use clinically relevant information to | EP Objective: Use clinically relevant information to |

It must be made clear that none of this activity is expected to occur during the face-to-face encounter. Otherwise, this would be highly disruptive.

We request further clarification on the term “actionable” in this context.

This seems to be an application separate from the EHR that accesses the EHR database or an extract of that database. Perhaps the requirements in this category should be about the ability to access the data – this could then support multiple uses.

We concur, and believe that capabilities for reminders should include via patient portals, and mobile reminders.

We suggest that throughout all of the MU measures, the term “office visit” should be replaced with “encounter” wherever possible.

The healthcare system is trying to move away from considering the office visit to be the center of
| 116 | information to identify patients who should receive reminders for preventive/follow-up care and send these patients the reminder per patient preference. **Measure:** More than 10% of all unique patients who have had two or more office visits with the EP within the 24 months before the beginning of the EHR reporting period were sent a reminder, per patient preference when available. | identify patients who should receive reminders for preventive/follow-up care. **EP Measure:** More than 20% of all unique patients who have had an office visit with the EP within the 24 months prior to the beginning of the EHR reporting period were sent a reminder, per patient preference when available. **Exclusion:** Specialists may be excluded for prevention reminders (could be more condition specific). | healthcare delivery. We do not believe that all specialists should be excluded. There are appropriate prevention interventions for conditions that are typically treated by specialists. See prior note about the ability to access data to support multiple uses. |
| SGRP 117 | **EH Objective:** Automatically track medications from order to administration using assistive technologies in conjunction with an electronic medication administration record (eMAR)  
**Measure:** More than 10 percent of medication orders created by authorized providers of the eligible hospital’s or CAH’s inpatient or emergency department (POS 21 or 23) during the EHR reporting period are tracked using eMAR.  
2) Mismatches (situations in which a provider dispenses a medication and/or dosing that is not intended) are tracked for use in quality improvement. | **EH Objective:** Automatically track medications from order to administration using assistive technologies in conjunction with an electronic medication administration record (eMAR)  
**Measure:** 1) More than 30% of medication orders created by authorized providers of the eligible hospital’s or CAH’s inpatient or emergency department (POS 21 or 23) during the EHR reporting period are tracked using eMAR.  
2) Mismatches (situations in which a provider dispenses a medication and/or dosing that is not intended) are tracked for use in quality improvement. | We recommend that HITPC consider a higher threshold (at least 80%) rather than 30% of medication orders being tracked via the eMAR. Ultimately the target should be to 100%. |
|---|---|---|---|
| SGRP 118 | **MENU Objective:** Imaging results consisting of the image itself and any explanation or other accompanying information are accessible through  
What barriers could be encountered in moving this to core?  
Do the images need to be of sufficient quality to act upon (diagnostically actionable)? If so, what are the implications for network speed, monitor resolution, and medico-legal issues? How quickly do they need to be accessible?  
We ask for clarification-- On what basis was the decision to move this from menu to core other than the progression to another stage?  
Are there any data to support the fact that this is something that practices have been able to do as | **CORE Objective:** Imaging results consisting of the image itself and any explanation or other accompanying information are accessible through | |
<table>
<thead>
<tr>
<th>SGRP</th>
<th><strong>MENU Objective</strong>: Record patient family</th>
<th><strong>CORE Objective</strong>: Record high priority family history</th>
</tr>
</thead>
</table>

**Information are accessible through Certified EHR Technology.**

**MENU Measure**: More than 10 percent of all tests whose result is one or more images ordered by the EP or by an authorized provider of the eligible hospital or CAH for patients admitted to its inpatient or emergency department (POS 21 and 23) during the EHR reporting period are accessible through Certified EHR Technology.

**CORE Measure**: More than 10 percent of all tests whose result is an image (including ECGs) ordered by the EP or by an authorized provider of the eligible hospital or CAH for patients admitted to its inpatient or emergency department (POS 21 and 23) during the EHR reporting period are accessible through Certified EHR Technology.

We request data to support the effective use of images by generalists?

Additional concerns are:
1) the added cost, and
2) the interfaces/links to external systems. This will be technically challenging and costly for small office users.

Having a report should be CORE, having it be structured where possible (e.g., mammogram BI-RADS score, DEXA T-scores) should be core, but the image itself should remain MENU, except for EKGs, which could be pdf files that could be scanned and attached.

See prior note about the ability to access data to support multiple uses.
It is unclear what CDSS tools will support this measure. We recommend that HITPC develop more explicit certification criteria.

There is a need to capture the health status of numerous first degree relatives as individualized / personalized medicine becomes more prevalent in health management / care delivery.

40% may not be a realistic goal for MU3 given PHR adoption rates and existing barriers to patients entering these data. We should encourage methods where patient generated data can be shared across PHR and EHR tools.

It is not clear what effect there would be on health impact (preventive action, clinical decision support) and clinical workflow without a definition of high priority. We suggest that consideration be given to adding family history to items that may be contributed by patients electronically from their personal health records.

**CORE Measure:** Record high priority family history in 40% of patients seen during reporting period

**Certification criteria:** Make sure that every appropriate CDS intervention can take into account family history for outreach (need to move that functionality along as part of preventative outreach).

**MENU Measure:** More than 20 percent of all unique patients seen by the EP or admitted to the eligible hospital or CAH’s inpatient or emergency department (POS 21 or 23) during the EHR reporting period have a structured data entry for one or more first-degree relatives.
| SGRP | EP/EH MENU Objective: Record electronic notes in patient records for more than 30% of office visits within four calendar days. | We support moving electronic notes from menu to core for Stage 3. We support HITPC efforts to remain agnostic in specifying the form of the electronic note, whether it be structured data or natural language processing (NLP). We believe that clinicians and providers should choose the form of the note, as long as the data being captured is accurately recorded, searchable and is able to be exchanged. We believe that it is important to continue to develop new open note concepts. We recommend this as a standard as timely completion of notes by EP is key to care coordination. We believe that 4 calendar days is too long – should be second business day following the visit. We ask for clarification whether this proposed measure is meant for menu or core, EH and/or EP. Please clarify that the notes must be searchable. |
more than 30 percent of unique patient office visits. Notes must be text-searchable. Non-searchable scanned notes do not qualify but this does not mean that all of the content has to be character text. Drawings and other content can be included with text notes under this measure.

**EP MENU Measure:** Enter at least one electronic progress note created, edited, and signed by an authorized provider of the eligible hospital’s or CAH’s inpatient or emergency department (POS 21 or 23) for more than 30 percent of unique patients admitted to the eligible hospital or CAH’s inpatient or emergency department during the EHR reporting period. Electronic progress notes must be text-searchable. Non-searchable, scanned notes do not qualify, but this does not mean that all of the content has to be character text. Drawings and other content can be included with text notes under this measure.

<table>
<thead>
<tr>
<th>SGRP</th>
<th><strong>EH MENU Objective:</strong> Provide structured</th>
<th><strong>EH CORE Objective:</strong> Provide structured electronic lab</th>
</tr>
</thead>
</table>

It is not clear if this applies to EP and EH?

We support a focus on this standard to more systematically address results management that often are managed with great difficulty during transitions of care.

We urge HITPC to review recent research that consider the # of open test results when the patient is discharged such as PT/PTT with
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<tbody>
<tr>
<td><strong>121</strong></td>
<td>electronic lab results to ambulatory providers</td>
<td>results to eligible professionals.</td>
<td>anti-coagulation.¹ ² ³ ⁴</td>
</tr>
<tr>
<td><strong>EH MENU Measure:</strong></td>
<td>Hospital labs send structured electronic clinical lab results to the ordering provider for more than 20 percent of electronic lab orders received</td>
<td><strong>EH CORE Measure:</strong> Hospital labs send (directly or indirectly) structured electronic clinical lab results to the ordering provider for more than 80% of electronic lab orders received.</td>
<td></td>
</tr>
</tbody>
</table>

² David C Kaelber, Wendy Foster, Jason Gilder, Thomas E Love, Anil K Jain Patient characteristics associated with venous thromboembolic events: a cohort study using pooled electronic health record data J Am Med Inform Assoc 2012 19:6 965-972 Published Online First: 3 July 2012
³ Hardeep Singh, Christiane Spitzmueller, Nancy J Petersen, Mona K Sawhney, Michael W Smith, Daniel R Murphy, Donna Espadas, Archana Laxmisan, Dean F Sittig Primary care practitioners’ views on test result management in EHR-enabled health systems: a national survey, J Am Med Inform Assoc amiajnl-2012-001267Published Online First: 25 December 2012 doi:10.1136/amiajnl-2012-001267
⁴ Jeffrey L Schnipper, Eric G Poon, Deborah H Williams, Kathleen Rossi-Roh, Allison Macleay, Catherine L Liang, Nyryan Nolido, Jonas Budris, David W Bates, Christopher L Roy Design and implementation of an automated email notification system for results of tests pending at discharge Anuj K Dalal, J Am Med Inform Assoc 2012;19:4 523-528 Published Online First: 19 January 2012 doi:10.1136/amiajnl-2011-000615
### AMIA Response to Request for Comments Meaningful Use Stage 3

| SGRP  | NEW   | Objective: The EHR is able to assist with follow-up on test results  
Measure: 10% of test results, including those which were not completed are acknowledged within 3 days  
Certification Criteria:  
☐ EHRs must have the ability to identify abnormal test results and notify the ordering providers when results are available or not completed by a certain time.  
☐ EHRs must record date/time test results are reviewed and by whom  
| We support multiple modes for follow-up, including mobile health messages |
| SGRP  | 122   | Objective: Provide patients the ability to view online, download, and transmit (VDT) their health information within 4 business days of the information being available to the EP.  
• EPs should make info available within 24 hours if generated during course of visit  
• For labs or other types of info not generated within course of visit, it is made available to pts within four business days of info becoming available  
| Building on Automated Transmit:  
1a. Create the ability for providers to review patient-transmitted information and accept updates into EHR.  
1b. Related certification criteria: Standards needed for provider directories in order to  
| Explore the readiness of vendors and the pros and cons of including certification for the following in this objective.  
The movement of so much complex patient data beyond the (security of) the healthcare system presents enormous risks and challenges.  
Patients are not necessarily well equipped to effectively use and manage these complex and sensitive data. EPs are not necessarily experts on the management and security of data beyond their walls.  
We questions placing the burden of providing transparency and education to patients on EPs. In |
Fact, many of the patient engagement processes advocated in this document should not be the sole responsibility of EPs. There are many other actors throughout our society who are in a far better position to provide services to patients, yet the sole focus of patient advocacy remains the EP. EPs should not be required to take on the responsibility of educating patients/families about the management and security of IIHI beyond their practice through these new access points.

The specification of multiple, single-purpose access functions is putting the cart before the horse. Requirements for specific functions will result in a plethora of add-ons that may not be able to be maintained with system upgrades. Instead, there should be general specifications for external access to data (including images) that can then support all sorts of applications.

**EP Measure:** 1. More than 50 percent of all unique patients seen by the EP during the EHR reporting period are provided timely (within 4 business days after the information is available to the EP) online access to their health information subject to the EP’s discretion to withhold certain information.

2. More than 5 percent of all unique patients seen by the EP during the EHR reporting period (or their authorized representatives) view, download, or facilitate more automated transmissions per patients’ designations.

* Potential to increase both thresholds (% offer and % use) based on experience in Stage 2

**Note:** Depending on experience in Stage 2, CMS may want to give credit to some providers (e.g. specialists) for view/download/transmit where the patient has requested that they prefer info to be sent to a location they specify (such as another provider portal or PHR), rather than only making available information on the provider’s portal.
AMIA Response to Request for Comments Meaningful Use Stage 3

<table>
<thead>
<tr>
<th>transmit to a third party their health information.</th>
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<tr>
<td><strong>EH Objective:</strong> Provide patients the ability to view online, download, and transmit information about a hospital admission</td>
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<tr>
<td><strong>MENU item:</strong> Automated Transmit*: (builds on Automated Blue Button Initiative (ABBI)): Provide 50% of patients the ability to designate to whom and when (i.e. pre-set automated &amp; on-demand) a summary of care document is sent to patient-designated recipient** (for example, a one-time request to send</td>
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1. More than 50 percent of all patients who

July 2010;153(2):121-125

What is the best way to ensure that individuals access their
<p>| are discharged from the inpatient or emergency department (POS 21 or 23) of an eligible hospital or CAH have their information available online within 36 hours of discharge |
| information from specialist to primary care, or a standing request to always send an updated care summary when certain events arise, such as a change in medication or the completion of new tests or procedures). *Subject to the same conditions as view, download, transmit |
| **Before issuing final recommendations in May 2013, HITPC will also review the result of Automated Blue Button pilots, in addition to considering public comments received. |
| health information through the view/download/transmit capability are provided with transparency and education about the benefits and potential risks of downloading health information, consistent with the HIT Policy Committee’s recommendations of August 16, 2011? Is certification an appropriate vehicle for ensuring such transparency is part of CEHRT? If so, what would the certification requirement look like? If not, what are other mechanisms for ensuring transparency to consumers using the view/download/transmit capabilities? |
| In its recent final rule, and in response to comments, ONC adopted Level A conformance as the standard for the accessibility web content in accordance with the Web Content Accessibility Guidelines (WCAG). ONC indicated per commenters suggestions that WCAG Level AA conformance would be considered for the next edition of certification criteria. Given that all EHR technologies certified to the view, download, transmit to a 3rd party certification criterion will have met Level A, how difficult would it be for EHR technology to have to meet Level AA conformance? |</p>
<table>
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<tr>
<th>AMIA Response to Request for Comments Meaningful Use Stage 3</th>
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<tbody>
<tr>
<td>Is the 24 hour interval proposed inconsistent with the four-day interval noted in the prior standard? SGRP 116</td>
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<tr>
<td>We support lifetime cumulative radiation dosing information being captured per person</td>
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<tr>
<td>We endorse use of open notes to complement capture and management of images.</td>
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<tr>
<td>We suggest making data available in formats/locations based on patient preferences and not solely on provider's portal.</td>
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<tr>
<td>Perhaps certification would ensure adoption of the consolidated continuity of care document so a standard set of data/info is available across transitions.</td>
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<td>However, it is not clear whether modifications in content are needed to address consumer health literacy levels.</td>
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<td>SGRP 204B</td>
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<td>SGRP</td>
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<tr>
<td><strong>Objective:</strong> Provide patients with the ability to request an amendment to their record online (e.g., offer corrections, additions, or updates to the record) through VDT in an obvious manner.</td>
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</tbody>
</table>

We support this requirement as part of individuals owning and guiding the quality of their own health record. Methods need to encourage patients to amend and update their personal health records and providers’ electronic health records. Patients may not agree with statements in their records for reasons other than the factual validity of the statements. Patients may not agree that they are addicted to a substance or that they have physical or psychological limitations.

We believe that this objective would therefore require additional functionality to provide EPs the ability to comment on a patient request for amending a record – especially when there is disagreement about the patient request. The practicality of such an exchange of request and documentation of comments needs to be evaluated in the context of

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AMIA Response to Request for Comments Meaningful Use Stage 3

| SGRP 205 | EP Objective: Provide clinical summaries for patients for each office visit | The clinical summary should be pertinent to the office visit, not just an abstract from the medical record. | What specific information should be included in the after visit summary to facilitate the goal of patients having concise and clear access to information about their most recent health and care, and understand what they can do next, as well as when to call the doctor if certain symptoms/events arise? | We believe that standards need to be both standardized and context specific. There is a need to construct patient-oriented language to promote pt/family participation in this process to reconcile their own records and to take action as needed. | This implies that patients will have access to a plan of care (POC) that is reconciled at each office visit. While a focus on a patient-centered POC is surely needed, adoption of standards across care settings (e.g., home care, LTC, Rehab, subacute) is needed to operationalize. | This is an area sorely in need of improvement. It is sometimes very... |
difficult, to find the most important information needed for the summary among the vast array of data that are required to be included for MU but may not address everything that the patient needs to attend to or be aware of between visits or at transitions. We encourage the HITPC to consider the following:

1. Patients may want an abstract of the medical record.
2. If the patient has only been to the office 1-2 times, a clinical summary might be almost the entire record.
3. A summary of the visit might not encompass the important elements of care for a condition that spans several visits over several months/years.
4. Need to preserve flexibility to enhance value to patients by not over-specifying this.
5. Information should emphasize what actions the patients should take/follow up.

| EP/EH Objective: Use Certified EHR education resources and provide those resources to the patient | Additional language support: For the top 5 non-English languages spoken nationally, provide 80% of patient-specific education materials in at least one of those languages spoken nationally. | We support the proposed criterion for Stage 3 and the recommended approach to translate and make available materials in non-English languages. However, we question that this proposed measure makes unsupportable assumptions about the distribution of speakers of different languages across the US. There are parts of the country where only 1 language is spoken by 100% of the people; therefore, |
requiring 80% of the education materials in one of the top 5 languages may be extraneous work for these practices. Further, the converse is true. An area of the country may have a population of which >50% speak a language not in the top 5 non-English languages. They would not be served well.

We urge consideration of an that requires that the EP/EH to provide materials in languages other than English when 10% or more of the patient population served speaks a particular language – if such materials are available publicly.

As with clinical decision support, the HITPC needs to anticipate the use of cloud-based central repositories that can provide these educational resources. Finally, as noted above in our comments on clinical decision support, this criterion and CDS should be more closely aligned for purposes of functional requirements and certification.

Patient-specific education resources should contain clear resources which are relevant to the patient at the time that they receive them, rather than educational content that is edited to exclude content which is not applicable to the patient.
**EP CORE Measure:** Patient specific education resources identified by CEHRT are provided to patients for more than 10 percent of all unique patients with office visits seen by the EP during the EHR reporting period.

**EH CORE Measure:** More than 10 percent of all unique patients admitted to the eligible hospital's or CAH's inpatient or emergency departments (POS 21 or 23) are provided patient-specific education resources identified by Certified EHR Technology.

| Language-based on EP's or EH's local population, where publically available. | Patients should have access to community resources which provide additional information beyond the basic educational content from the EHR source. Local resources relative to patient's community need to be shared with the patient. Educational Resources alone are often the beginning point for patient knowledge but are often not related to patient behavior change. Since the capability to do this exists now, the measure could be well above the 10% level for MU3! Facilitation of patient-provider communication related to health data management and patient consent is imperative. Patients who are uncertain about how their data will be used or concerned about the potential for misuse may be less willing to provide complete, accurate information to providers, thereby negatively affecting their care and rendering their data less useful or harmful to legitimate data use for research. The potential for patients’ restriction of data use and provision of incomplete and/or inaccurate information can be reduced by requiring organizations and providers to designate someone who can answer all patients’ questions about data collection, storage, and use. MU3 should require providers and... |
| SGRP 207 | **EP Objective:** Use secure electronic messaging to communicate with patients on relevant health information  
**EP Measure:** A secure message was sent using the electronic messaging function of Certified EHR Technology by more than 5 percent of unique patients (or their authorized representatives) seen by the EP during the EHR reporting period | **Measure:** More than 10%* of patients use secure electronic messaging to communicate with EPs | Create capacity for electronic episodes of care (telemetry devices, etc) and to do e-referrals and e-consults  
*What would be an appropriate increase in threshold based upon evidence and experience?  
We believe that all patients should be offered the service (with provider specific guidelines for use) rather than telephone services.  
We question the use of secure electronic messaging to communicate with EP’s by consumers? We agree that this is important and recommend additional focus to promote access by consumers to secure electronic messaging.  
We question why this is specified to communicate with EPs and not with the practice team or just practice? There could be more value for patients exchanging secure emails with nurses, medical assistants, and administrative staff than with the EP. With respect to an increase in threshold, we ask for the data from the experience in MU Stage 2?  
We believe that this should include all patient-initiated messages, whether as originating messages or in response to a message sent by organizations to make information about data use policies freely available, and such information should be suitable for patients with limited literacy. |
This requirement that a % of patients must use this technology is inconsistent with the principle of patient preference.

SGRP 208  | Not included separately (in reminder objective)  | EP and EH Measure: Record communication preferences for 20% of patients, based on how (e.g., the medium) patients would like to receive information for certain purposes (including appointment reminders, reminders for follow up and preventive care, referrals, after visit summaries and test results).  | Concur, we believe that communication preferences should be recorded and updated along with POC during primary care visits. Preferences should include a variety of methods including mobile texts. |

SGRP 209  | New  | Certification Criteria: Capability for EHR to query research enrollment systems to identify available clinical trials. No use requirements until future stages.  | The goal of this objective is to facilitate identification of patients who might be eligible for a clinical trial, if they are interested. The EHR would query available clinical trial registries and identify potentially relevant trials based on patient’s health condition, location, and other basic facts. Ultimately, the EHR... |
would not be able to determine final eligibility for the trial; it would only be able to identify possibly relevant trial opportunities.

We recommend that a more specific criterion be defined to support registry and clinical trial data exchange and (re-)use; as well as updating of this information during primary care visits.

This depends on registries to provide a standard API to support such inquiries.

This presumes that all of the information in the EHR is completely accurate and up-to-date - and that those fields line up with each and every database that includes research protocols. This seems like a huge task that would be better accomplished by making querying of such databases easier for EPs and patients.

The literature clearly demonstrates that selection of research subjects is complex, and all EPs may not be up to the task. Rather than giving practices the ability to query for studies, it would be more useful to give study organizers the ability to query for patients.6

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<table>
<thead>
<tr>
<th>SGRP 302</th>
<th>EP/EH CORE Objective: The EP/EH who receives a patient from another setting of care or provider of care or believes an encounter is relevant should perform medication reconciliation.</th>
<th>EP / EH / CAH Objective: The EP, eligible hospital or CAH who receives a patient from another setting of care or provider of care or believes an encounter is relevant should perform reconciliation for: - medications - medication allergies - problems</th>
<th>Reconciliation of contraindications (any medical reason for not performing a particular therapy; any condition, clinical symptom, or circumstance indicating that the use of an otherwise advisable intervention in some particular line of treatment is improper, undesirable, or inappropriate)</th>
<th>Certification Criteria: Standards work needs to be done to support the valuing and coding of contraindications.</th>
<th>Feasibility to add additional fields for reconciliation e.g. social history? Is anyone currently doing reconciliation outside of meds, med allergies, and problems and what has the experience been?</th>
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<tbody>
<tr>
<td>EP/EH CORE Measure: The EP, eligible hospital or CAH performs medication reconciliation for more than 50% of transitions of care in which the patient is transitioned into the care of the EP or admitted to the eligible hospital’s or CAH’s inpatient or emergency department (POS 21 or 23)</td>
<td>EP / EH / CAH Measure: The EP, EH, or CAH performs reconciliation for medications for more than 50% of transitions of care, and it performs reconciliation for medication allergies, and problems for more than 10% of transitions of care in which the patient is transitioned into the care of the EP or admitted to the eligible hospital’s or CAH’s inpatient or emergency department (POS 21 or 23). Certification Criteria: Standards work needs to be done to adapt and further develop existing standards to define the nature of reactions for allergies (i.e. severity).</td>
<td>Certification Criteria: Standards work needs to be done to support the valuing and coding of contraindications.</td>
<td></td>
<td>We support reconciliation of allergies and problems. HITPC may want to consider creating an initiative within the Standards and Interoperability (S&amp;I) Framework to define the standards that will be needed to extend reconciliation to include allergies and problems. We would be pleased to participate in such an initiative. Please see our previous comments about medication and non medication allergies, intolerances.</td>
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<td>We suggest that Stage 3 focus on data capture (see 104 and 109) and patient contribution of social history data (see 204B) rather than reconciliation at this stage. Concur with reconciliation of problem lists.</td>
<td></td>
<td></td>
<td>We suggest that Stage 3 focus on data capture (see 104 and 109) and patient contribution of social history data (see 204B) rather than reconciliation at this stage. Concur with reconciliation of problem lists.</td>
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<tr>
<td></td>
<td>Stage 3 Recommendation – performance of reconciliation for medication allergies.</td>
<td>The reconciliation process between providers for medication (and non-medication) allergies requires a well defined list of substances causing an adverse reaction. The ability for a system to date the known active vs. inactive status of</td>
<td></td>
<td>Stage 3 Recommendation – performance of reconciliation for medication allergies.</td>
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a given list element as well as who is performing the reconciliation is essential. This element should define how HITPC expects providers to ensure the use of the “correct” lists for this purpose.

The proposal also suggests that standards work needs to be done to adapt and further develop existing standards to define the nature of reactions for allergies (i.e. severity).

We refer HITPC to work conducted by the HL7 Patient Care Work Group within the current Domain Analysis Model.⁷

We recommend a focused work effort be initiated to guide data capture and reconciliation of allergy history by providers and consumers across settings.

SGRP 303

**EP/EH CORE Objective:** The EP/EH/CAH who transitions their patient to another setting of care or provider of care or refers their patient to another provider of care provides summary care record for each transition of care or referral.

**CORE Measure:** 1. The EP, eligible hospital, or CAH that transitions or refers their patient to another setting of care or provider of care provides a summary of care record for more than 50 percent of transitions of care and referrals.

**EP/ EH / CAH Objective:** EP/EH/CAH who transitions their patient to another setting of care or refers their patient to another provider of care

Provide a summary of care record for each site transition or referral when transition or referral occurs with available information

Must include the following four for transitions of site of care, and the first for referrals (with the others as clinically relevant):

1. Concise narrative in support of care transitions (free text that captures current care synopsis and experience)

**CORE Measure:**

1. Concise narrative in support of care transitions (free text that captures current care synopsis and experience)

*What would be an appropriate increase in the electronic threshold based upon evidence and experience? We believe that all Summary of Care Records should at a minimum, have a Nutrition/Diet Order from the sending provider/facility. If patient is on Enteral/Parenteral Feeding the complete order, including fluid requirements should be included with the order.

AMIA Response to Request for Comments Meaningful Use Stage 3

| 2. The EP, eligible hospital or CAH that transitions or refers their patient to expectations for transitions and/or referral | There is a need for CCD/structured data for reporting capabilities HITPC needs to address the lack of incentives for nonacute settings to adopt CCD and other standards that support effective/safe transitions. Recommend this address nursing and allied health practice and the interprofessional/person-centric plan of care. We are concerned that because there are no incentives for nonacute settings to adopt the MU3 standards, the 30% threshold for electronic transmission not feasible. Some of members believe that this is over-specified. The measure should be predominantly in support of providing a concise narrative in support of the transition in care – that will return the highest value for the effort (synopsis). The EHR should automatically populate the summary with the treating physician/clinician and consulting physicians who provided care during the relevant episode of care preceding the transition. We are concerned that too much information or highly specified requirements will result in clinically important information being |
overlooked.
<table>
<thead>
<tr>
<th><strong>SGRP</strong></th>
<th><strong>New</strong></th>
<th><strong>EP/ EH / CAH Objective:</strong> EP/ EH/CAH who</th>
<th><strong>How might we advance the</strong></th>
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</table>
| another setting of care or provider of care provides a summary of care record for more than 10% of such transitions and referrals either (a) electronically transmitted using CEHRT to a recipient or (b) where the recipient receives the summary of care record via exchange facilitated by an organization that is a NwHIN Exchange participant or in a manner that is consistent with the governance mechanism ONC establishes for the nationwide health information network. | 2. Setting-specific goals 3. Instructions for care during transition and for 48 hours afterwards 4. Care team members, including primary care provider and caregiver name, role and contact info (using DECAF (Direct care provision, Emotional support, Care coordination, Advocacy, and Financial)) **Measure:** The EP, eligible hospital, or CAH that site transitions or refers their patient to another setting of care (including home) or provider of care provides a summary of care record for 65% of transitions of care and referrals (and at least 30%* electronically). **Certification Criteria:** EHR is able to set aside a concise narrative section in the summary of care document that allows the provider to prioritize clinically relevant information such as reason for transition and/or referral. **Certification Criteria:** Ability to automatically populate a referral form for specific purposes, including a referral to a smoking quit line. **Certification Criteria:** Inclusion of data sets being defined by S&I Longitudinal Coordination of Care WG, which and are expected to complete HL7 balloting for inclusion in the C-CDA by Summer 2013: 1) Consultation Request (Referral to a consultant or the ED) 2) Transfer of Care (Permanent or long-term transfer to a different facility, different care team, or Home Health Agency) | How might we advance the
| 304 | transitions their patient to another site of care or | concept of an electronic shared |
| Measure: The EP, eligible hospital, or CAH that transitions or refers their patient to another site of care or provider of care provides the electronic care plan information for 10% of transitions of care to receiving provider and patient/caregiver. | Certification Criteria: Develop standards for a shared care plan, as being defined by S&I Longitudinal Coordination of Care WG. Some of the data elements in the shared care plan overlap content represented in the CDA. Adopt standards for the structured recording of other data elements, such as patient goals and related care planning and collaboration tool that crosses care settings and providers, allows for and encourages team based care, and includes the patient and their non-professional caregivers? Interested in experience to date and the lessons learned. Think through these priority use cases: 1. Patient going home from an acute care hospital admission 2. Patient in nursing home going to ED for emergency assessment and returning to nursing home 3. Patient seeing multiple ambulatory specialists needing care coordination with primary care 4. Patient going home from either hospital and/or nursing some and receiving home health services What are the most essential data elements to ensuring safe, effective care transitions and ongoing care management? How might sharing key data elements actually improve the communication? Consider health concerns, patient goals, expected outcomes, interventions, including advance orders, and care team members. What data strategy and terminology are required such that the data populated by venue specific EHRs can be exchanged. How might |

| Patient going home from an acute care hospital admission |
| Patient in nursing home going to ED for emergency assessment and returning to nursing home |
| Patient seeing multiple ambulatory specialists needing care coordination with primary care |
| Patient going home from either hospital and/or nursing some and receiving home health services |

For each transition of site of care, provide the care plan information, including the following elements as applicable:

- Medical diagnoses and stages
- Functional status, including ADLs
- Relevant social and financial information (free text)
- Relevant environmental factors impacting patient’s health (free text)
- Most likely course of illness or condition, in broad terms (free text)
- Cross-setting care team member list, including the primary contact from each active provider setting, including primary care, relevant specialists, and caregiver
- The patient’s long-term goal(s) for care, including time frame (not specific to setting) and initial steps toward meeting these goals
- Specific advance care plan (Physician Orders for Life-Sustaining Treatment (POLST)) and the care setting in which it was executed.

For each referral, provide a care plan if one exists.
Existing terminologies be
We suggest including harmonized social and exposure history data element sets from Public Health Reporting Initiative if social history information is included. These may not be all inclusive but would help ensure consistency with data elements used for public health reports.

Several of our members support the inclusion of A Nutrition Care Plan for all in-patients, with particular attention given to patients with multiple chronic conditions. We refer HITPC to work underway by the Academy of Nutrition and Dietetics (the “Nutrition Care Process” (NCP)).

The Academy has developed a Draft Standard for Trial Use within HL7 – the Electronic Nutrition Care Process System Functional Profile (ENCPRS) which provides a basis for the use of the NCP in clinical care.8 9 10

HITPC should consider that, diet and physical activity be included as required data components in the Summary of Care Record and for

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What are the requirements (legal, workflow, other considerations) for patients and their identified team to participate in a shared care plan? Is it useful to consider role-based access as a technical method of implementing who will have access to and be able to contribute to the care plan? How will such access be managed?

All health care providers should be able to submit content which is included in the Health Care Plan. At present, many EHR systems have different “locations” within the system for team members: occupational therapy, physical therapy, nutrition, social work, etc. These notes/content may not be “seen” by the provider unless attention is drawn to them by the ancillary provider and/or a consult was written by the provider.

Having a shared care record would allow the medical provider a better global view of conditions and treatment critical to patient care. In most instances, role based care for other providers are used.

Adoption of MU3 standards across care settings including non-acute settings is needed to realize this goal. Currently the lack of adoption
We propose that the Shared Care Plan also include definitions for patient generated health data and feedback. Some of our members believe that the most important and reasonable expectations for the proposed list are:

- Medical diagnoses and stages
- Relevant social and financial information (free text)
- Most likely course of illness or condition, in broad terms (free text)
- Cross-setting care team member list
- The existence of the advance care plan – (not the specifics).

The others are also important but more challenging to provide – especially from the ambulatory environment to the inpatient environment.

<table>
<thead>
<tr>
<th>SGRP 305</th>
<th>New</th>
<th>EP / EH / CAH Objective: EP/EH/CAH to whom a patient is referred acknowledges receipt of external information and provides referral results to the requesting provider, thereby beginning to close the loop.</th>
<th>Continue working to close the loop with an acknowledgement of order receipt and tracking for completion.</th>
<th>The HITPC would appreciate comments on the return of test results to the referring provider.</th>
</tr>
</thead>
</table>

**AMIA Response to Request for Comments Meaningful Use Stage 3**

<table>
<thead>
<tr>
<th>Measure:</th>
<th>For patients referred during an EHR reporting period, referral results generated from the EHR, 50% are returned to the requestor and 10% of those are returned electronically*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certification Criteria:</td>
<td>Include data set defined by S&amp;I Longitudinal Coordination of Care WG and expected to complete HL7 balloting for inclusion in the C-CDA by Summer 2013: Shared Care Encounter Summary (Consultation Summary, Return from the ED to the referring facility, Office Visit)</td>
</tr>
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<thead>
<tr>
<th>Certification Criteria:</th>
<th>Include standards for referral requests that require authorizations (or pre-certifications) for procedure, surgery, lab, radiology, test orders</th>
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<tbody>
<tr>
<td></td>
<td>*This builds upon the clinical quality measure (CQM) in stage 2 for closing the referral loop, CMSS0v1 (NQF TBD)</td>
</tr>
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</table>

|  | anticipated, it seems logical that any referral response would include results from tests, laboratory work and other diagnostic test. A good example of this would be a referral from hospital to rehab hospital to home care. If particular labs (potassium, liver function tests) are to be monitored in a consistent fashion, then a chronological measurement is the most valuable situation. Methods should also include patient notification. Additionally, certification criteria should include a function that provides an automatic “successful delivery” or receipt for electronic information sent in advance of a referral visit. Perhaps the reverse – when a consultant sends a note electronically, the successful receipt of that note by the referring EP is automatically generated. This appears to be imposing requirements that are beyond meaningful use. |
| SGRP 127 | New | New | Ability to maintain an up-to-date interdisciplinary problem list inclusive of versioning in support of collaborative care |

It appears that there are many logistical, organizational, and even technical challenges to asking providers to review a mixed list in search of the items relevant to them. We believe that there are several reasons why an up-to-date interdisciplinary problem list still does not exist despite decades of efforts by many well-intentioned experts and interdisciplinary groups, including:

- This is a horribly complex technical and political lift.
- Different care team members truly do have different needs for a problem list.
- Different clinical disciplines use different terminologies and vocabularies. There is little or no agreement regarding names and definitions for terms.
- How will a system possibly account for and/or reconcile the ongoing use of different standards by different disciplines within a common shared list?
- There are differences of opinion regarding the potential role of the patient in reconciling their own problem list and its relationship to current POC.

It also appears that the problem list is already becoming “polluted”
with information from so many different stakeholders that it may be losing its value. Add to this the expectation that “all problems are reconciled” and that each EP will have a different perspective on this, and you’ll have the situation in which no one has assessed certain parameters because other items have pushed it out of sight.

Any requirement for an interdisciplinary problem list should be accompanied by a requirement that allows for views of different stakeholders and a process to require reconciliation only of those problems specific to one’s role (e.g., physicians vs. nurses vs. physical therapists, etc.

We encourage HITPC to specifically seek input and advice from those groups already actively working on efforts to address this objective. One possible consideration is the creation of an interdisciplinary patient-centered problem list and then as needed, other disciplines can add more discipline specific problems. We suggest that HITPC seek greater consensus on any MU requirements on this topic and further seek data to confirm that the value proposition can be demonstrated.

We support efforts to achieve an interdisciplinary problem list. We recommend the ability to compare like problems from multiple lists.
| SGRP 125 | New | New | Medication reconciliation: create ability to accept data feed from PBM (Retrieve external medication fill history for medication adherence monitoring)
Vendors need an approach for identifying important signals such as: identify data that patient is not taking a drug, patient is taking two kinds of the same drug (including detection of abuse) or multiple drugs that overlap.
**Certification criteria:** EHR technology supports streamlined access to prescription drug monitoring programs (PDMP) data.
For example:
- Via a hyperlink or single sign-on for accessing the PDMP data
- Via automated integration into the patient’s medication history
Leveraging things like single sign on or functionality that could enable the linkage between PDMPs and prescribers and EDs?

| SGRP 308 | New | New | **EH Objective:** The EH/CAH will send electronic notification of a significant healthcare event in a timely manner to key members of the patient’s care team, such as the primary care provider, referring provider or care coordinator, with the patient’s consent if required.
**EH Measure:** For 10% of patients with a significant healthcare event (arrival at an Emergency Department (ED), admission to a hospital, discharge from an ED or hospital, or death), EH/CAH will send an electronic notification to at least one key member of the team.
We note that as described above (113) we believe that this functionality is already in production in a number of jurisdictions around the country.
National standards exist for these transactions, and additional work is being done in 2013 to reduce the variability in implementation of these standards across the country to make interface development easier for EHR vendors and EP/EHs.

We have some concerns that the MU objectives stipulating data exchange with Public Health departments may effectively create unfunded mandates for system...
upgrades and workflow change in health departments. Such exchange DOES support efficiency and prevention benefitting EPs, EHs, health departments and the public, and should be continued and expanded. However, we are also concerned that current MU incentives and State HIE program funds provide little support to health departments in building the infrastructure to receive and use (and reuse) the information.

We believe that there may be significant challenges to successful implementations if Public health agencies are expected to create this infrastructure “in-kind”. The sector is already operating with scarce resources and many competing priorities. Increased Federal investment in local and state health department implementation of exchange with Certified EHR Technology would likely increase the speed and likelihood that benefits are achieved.

As part of patient centered care, we believe that patients should have ability to identify which other providers will receive updates on their conditions and progress. Recommend clear directions on process for patient’s consent, including methods to update changes in consent based privacy by providers.
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<th>AMIA Response to Request for Comments Meaningful Use Stage 3</th>
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<tbody>
<tr>
<td>patient's care team, such as the primary care provider, referring provider or care coordinator, with the patient’s consent if required, within 2 hours of when the event occurs.</td>
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<tr>
<td>While we recognize the importance of the notification for care coordination, we believe that the 2 hour window for electronic notification is likely not attainable at the present time,</td>
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<tr>
<td>SGRP 401A</td>
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<tr>
<td><strong>EP/EH Measure</strong>: Successful ongoing submission of electronic immunization data from Certified EHR Technology to an immunization registry or immunization information system for the entire EHR reporting period</td>
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| SGRP 401B | New | **EP/EH Objective**: Capability to receive, generate or access appropriate age-, gender- and immunization | Immunization registries, by history, typically include BMI, height and weight for children and adolescents. We therefore recommend adoption of a consistent standard (under development) to assure useful data capture. Historically, BMI is often transmitted with little information on the exact measurements (height/weight). We request that this measure be further clarified. |

As described above (113) above, IIS already are moving to provide CDS services to EHR systems and EP/EHs. While there may be general uniformity in some CDS rules – almost always based on Advisory Committee on
history-based recommendations (including immunization events from immunization registries or immunization information systems) as applicable by local or state policy.

**Measure:** Implement an immunization recommendation system that: 1) establishes baseline recommendations (e.g., Advisory Committee on Immunization Practices), and 2) allows for local/state variations. For 20% of patients receiving an immunization, the EP/EH practice receives the recommendation before giving an immunization.
| SGRP | EH Objective: Capability to submit electronic reportable laboratory results to public health agencies, except where prohibited, and in accordance with applicable law and practice | EH Objective (unchanged): No change from current requirement for electronic lab reporting which generally is sent from the laboratory information system | SGRP | New | EP Objective: Capability to use externally | Some of our members ask if there a need to address consent based privacy here also? |
|---|---|---|---|---|---|---|---|
| 402A | **Exclusion:** EPs and EHs that administer no immunizations.  **Certification criteria:** EHR uses a standard (e.g., national, state and/or local) rule set, plus patient age, gender, and prior immunization history to recommend administration of immunizations; capture the act and date/time of recommendation review. | | **New** | | | We suggest moving case reporting of reportable conditions to Stage 3. Unlike public health disease registries (404 and 405) (except for Cancer Registries) this reporting is universally mandated for clinicians nationally, and much reporting or supplemental content is collected that is not part of the Electronic Laboratory Reporting (402A). EPs (and EHs) already submit millions of public health reports annually, largely using manual processes. Although state variation does occur in the lists of reportable conditions and data elements, these have become increasingly consistent. |
over time. Current initiatives are creating harmonized data element sets and exchange formats that may be suitable for use by Stage 3 (e.g., S&I Public Health Reporting Initiative). Standardized electronic reporting can be enabled without automatically accessing a knowledgebase about which conditions are reportable. (For example, it can be initiated by professionals the way it is today.) Thus it is not mandatory to combine the objective for external access of reportable condition knowledge with that about the actual submission of electronic reports of data from CEHRT, nor need these two concepts be dependent on one another.

Variability at state level is potentially problematic.

We suggest that HITPC consider focusing on a specific set of diseases for MU3 with intent of expansion post MU3.
Certification criteria: The EHR uses external data to prompt the end-user when criteria are met for case reporting. The date and time of prompt is available for audit. Standardized (e.g., consolidated CDA) case reports are submitted to
## AMIA Response to Request for Comments Meaningful Use Stage 3

| SGRP 403 | **EP MENU Objective:** Capability to submit electronic syndromic surveillance data to public health agencies, except where prohibited, and in accordance with applicable law and practice  
**EH Objective:** Capability to submit electronic syndromic surveillance data to public health agencies, except where prohibited, and in accordance with applicable law and practice  
**EP/EH Measure:** Successful ongoing submission of electronic syndromic surveillance data from Certified EHR Technology to a public health agency for the entire EHR reporting period | No change from current requirements. | the state/local jurisdiction and the data/time of submission is available for audit. Could similar standards be used as those for clinical trials (SGRP209)? |
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<tr>
<td>SGRP 404</td>
<td><strong>EP only MENU Objective:</strong> Capability to identify and report cancer cases to a public health central cancer registry, except where prohibited, and in accordance with applicable law and practice.</td>
<td><strong>EH/EP Objective:</strong> Capability to electronically identify and report cancer cases to a public health central cancer registry, except where prohibited, and in accordance with applicable law and practice.</td>
<td>See comment on 402B. The same data elements harmonized for public health reporting could be reused for this objective. With the exception of immunization registries, cancer registry reporting and hearing screening reporting (which is not commonly considered a “registry” since both normal and abnormal screens are often reportable) there is little standardization within or across different types of registries today.</td>
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AMIA Response to Request for Comments Meaningful Use Stage 3

<table>
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<tr>
<th>EP only MENU Measure: Successful ongoing submission of cancer case information from CEHRT to a public health central cancer registry for the entire EHR reporting period</th>
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<tbody>
<tr>
<td>hearing detection and intervention) from Certified EHR to either local/state health departments, except where prohibited, and in accordance with applicable law and practice. This objective is in addition to prior requirements for submission to an immunization registry.</td>
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<tr>
<td><strong>Measure:</strong> Documentation of ongoing successful electronic transmission of standardized reports from the Certified EHR Technology to the jurisdictional registry. Attestation of submission for at least 10% of all patients who meet registry inclusion criteria during the entire EHR reporting period as authorized, and in accordance with applicable State law and practice.</td>
</tr>
<tr>
<td><strong>Certification criteria:</strong> EHR is able to build and then...</td>
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<td>SGRP 405</td>
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AMIA Response to Request for Comments Meaningful Use Stage 3

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<tr>
<th>SGRP 407</th>
<th>New</th>
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<tr>
<td><strong>EH Objective:</strong> Capability to electronically send standardized Healthcare Associated Infection (HAI) reports to the National Healthcare Safety Network (NHSN) using a common format from the Certified EHR is able to build and send a standardized message report format to an external registry, maintain an audit of those reports, and track total number of reports sent.</td>
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</table>

Authorized, and in accordance with applicable state/local law and practice.

**Certification criteria:**
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<tr>
<th>EHR, except where prohibited, and in accordance with applicable law and practice.</th>
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<tr>
<td>In general, we support this new criterion. The 10% goal should be achievable, recognizing that there are currently only a few HAIs that have required reporting, but many more that could be added over time. However, we believe that compliance with this criterion may be challenging. For example, NHSN must first clearly define the structure and content of the report and then provide adequate time for vendors to develop the software accordingly. Presently, NHSN does not make its specifications known until the requirement is nearly ready to be implemented. This lack of sufficient notification and, at times, the clarity around the requirements could be a major barrier to timely compliance. In addition, the proposed criterion also mentions that the reporting must be in “accordance with State law.” Many states have HAI reporting requirements that vary from NHSN both in the HAI type and the related data. Vendors would therefore have to consider many variations (literally up to 50) in how the HAI reporting is handled, further complicating development of the certified technology to support this new criterion.</td>
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</table>
**AMIA Response to Request for Comments Meaningful Use Stage 3**

**Measure:** Documentation of successful electronic transmission of standardized healthcare acquired infection reports to the NHSN from the Certified EHR Technology. Total numeric count of HAI in the hospital and attestation of Certified EHR electronic submission of at least 10% of all reports during the entire EHR reporting period as authorized, and in accordance with applicable State law and practice.

**Certification criteria:** EHR is able to sending a standard HAI message to NHSN, maintain an audit and track total number of reports sent.

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<th>SGRP 408</th>
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**EH/EP Objective:** Capability to electronically send adverse event reports (e.g., vaccines, devices, EHR, drugs or biologics) to the Federal Drug Administration (FDA) and/or Centers for Disease Control and Prevention (CDC) from the Certified EHR, except where prohibited, and in accordance

We believe that well-developed exchange standards exist and are implemented for hundreds of EHS.

This seems very broad and will require additional development to consider ADE reports from each of these perspectives. We believe that the feasibility is more likely if a distinct set of AE reports is targeted.

Though we are unaware of any system that currently has all of these capabilities, we believe this is a reasonable criterion to include in a future stage of meaningful use. The functionality is consistent with that proposed in SGRP 407 (HAI reporting), but the same compliance and technology development concerns need to be considered.

Although vaccine adverse event reporting is mentioned in this measure, to our knowledge CDC is...
unable to accept an electronic submission of a VAERS report (see http://vaers.hhs.gov/esub/index). Provision for electronic submission is at best in the “R&D” stage at CDC, so any future adoption of this functionality would be predicated on the development of this capability. The Public Health Reporting Initiative has developed a data element set (http://wiki.siframework.org/file/d etail/ConsensusReview_DataHarmonizationProfile.docx) and exchange format (http://wiki.siframework.org/PHRI +Implementation+Guide) that could generate certain types of reports to FDA. We believe that these should be considered for possible inclusion in Stage 3.

with applicable law and practice.

**Measure:** Attestation of successful electronic transmission of standardized adverse event reports to the FDA/CDC from the Certified EHR Technology. Total numeric count (null is acceptable) of adverse event reports from the EH/EP submitted electronically during the entire EHR reporting period as authorized, and in accordance with applicable State law and practice.

**Certification criteria:** EHR is able to build and send a standardized adverse event report message to FDA/CDC and maintain an audit of those reports sent to track number of reports sent (Common Format).
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<th>EWG 101</th>
<th>New</th>
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**MENU objective:** For patients transitioned without a care summary, an individual in the practice should query an outside entity. The intent of this objective is to recognize providers who are proactively querying.

**Certification criteria:** The EHR must be able to query another entity for outside records and respond to such queries. The outside entity may be another EHR system, a health information exchange, or an entity on the NwHIN Exchange, for example. This query may consist of three transactions:

a) Patient query based on demographics and other available identifiers, as well as the requestor and purpose of request.
b) Query for a document list based for an identified patient
c) Request a specific set of documents from the returned document list

When receiving inbound patient query, the EHR must be able to:

a) Tell the querying system whether patient authorization is required to retrieve the patient’s records and where to obtain the authorization language*. (E.g. if authorization is already on file at the record-holding institution it may not be required).

Should the measure for this MENU objective be for a number of patients (e.g. 25 patients were queried) or a percentage (10% of patients are queried)? What is the best way to identify patients when querying for their information?

This is an important measure would need to have a high percentage of returns. For it to be useful to transitions of care, it seems measuring the overall percentage of returned content would be most useful. In addition, it would be helpful to analyze the usefulness of the returned data: does it cover the MU Core set of data?

1. Public health registries are potential targets for these queries – in fact, IIS already respond to standard queries for immunization history and CDS. We recommend adding them as another example in the first paragraph of the certification criteria.
2. The details of this objective seem to assume and require not only clinical documents (as opposed to other types of messages) and IHE XDS-like workflow. We do not believe the query/response
mechanism should be restricted to this format and transaction standard as other types of queries (especially via web services but not based on IHE profiles) are dominant now and for the foreseeable future.

3. With respect to the behavior of the EHR receiving an inbound query, we do not believe that consent management standards or implementation have evolved (or will likely evolve in the time threshold of Stage 3) to the point where the behavior described will be feasible. In addition, state-level consent laws vary greatly. While some jurisdictions now allow for an electronic attestation of a patient consent signature they also require the actual signature to be conveyed to the record-holding organization.

We suggest that this requirement should be incorporated into the language of the criterion. Finally, we do not agree that an EHR should be required to query an outside entity for the authorization language. We do not believe that standards are widely implemented for this. To the extent that an EP/EH needs to obtain a signature on a form the acquisition of the proper form should optionally be an out-of-band activity.

Patient identity is still a critical problem when querying between systems in the absence of a national patient identifier. HIEs can
be very helpful in providing Master Patient Index (MPI) services that allow participating systems to "register" their patients and that relate patient data together from disparate sources. In addition, public health registries have been challenged by patient identity issues for years when working to build consolidated records from multiple sources (like a consolidated immunization history in an EHR). Their experiences and lessons learned should be leveraged in developing best practice guidelines for patient identification. Many organizations such as AMIA, AHIMA, and HIMSS are potential sources of best practices and lessons learned information.

We believe that the lack of incentives for non-acute settings to adopt MU3 criteria is a major barrier to meeting this objective.

b) At the direction of the record-holding institution, respond with a list of the patient’s releasable documents based on patient’s authorization.

c) At the direction of the record-holding institution, release specific documents with patient’s authorization.

The EHR initiating the query must be able to query an outside entity* for the authorization language to be
<table>
<thead>
<tr>
<th>ID</th>
<th>New</th>
<th>Certification criteria: The EHR must be able to query a Provider Directory external to the EHR to obtain entity-level addressing information (e.g. push or pull addresses).</th>
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<tbody>
<tr>
<td>IM</td>
<td>102</td>
<td>Presented to and signed by the patient or her proxy in order to retrieve the patient’s records. Upon the patient signing the form, the EHR must be able to send, based on the preference of the record-holding institution, either: 1. a copy of the signed form to the entity requesting it 2. an electronic notification attesting to the collection of the patient’s signature. *Note: The authorization text may come from the record-holding EHR system, or, at the direction of the patient or the record-holding EHR, could be located in a directory separate from the record-holding EHR system, and so a query for authorization language would need to be directable to the correct endpoint.</td>
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<tr>
<td>IM</td>
<td>103</td>
<td>Certification criteria: Enable a user to electronically create a set of export summaries for all patients in EHR technology formatted according to the standard adopted at § 170.205(a)(3) that represents the most current clinical information about each patient and includes, at a minimum, the Common MU Data Set and the following data expressed, where applicable, according to the</td>
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AMIA Response to Request for Comments Meaningful Use Stage 3

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<tr>
<th>specified standard(s):</th>
<th>should come over as the absolute minimum data set. This must be structured data where available and text in a readable format where text is the original storage format.</th>
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<tbody>
<tr>
<td>(i) <em>Encounter diagnoses.</em> The standard specified in § 170.207(i) or, at a minimum, the version of the standard at § 170.207(a)(3); (ii) <em>Immunizations.</em> The standard is another item that relates to a non-EHR application that can access the EHR database or an extract. However, the export is easy compared to import - we would have to tackle this problem one domain at a time. Right now, we can’t even import lab results very easily (except as text blobs). Of course, the ability to import could be a selling point for an EHR, but requiring it seems unnecessary. For many developers/designers using HL7 Consolidated CDA (CCD document) as the standard required by ONC, there is a lack of structured support/help desk functionality. HL7 is a volunteer organization which is not mandated to provide this support. HHS should consider funding a center to provide this technical support, including implications for moving from traditional EHRS to web, cloud, and mobile solutions.</td>
<td></td>
</tr>
<tr>
<td>We suggest that the Common MU Data Set include as a minimum Nutrition/Diet Order or desired diet from patient (as followed when an otherwise generally healthful diet is ordered by the provider.</td>
<td></td>
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</tbody>
</table>
Discharge Instructions should be included in relation to the discharging diagnoses.

Data that supports the complete care of the patient should be included, which includes ADL, financial stability, nutrition care and ability to navigate with or without assistance. Other data is needed to identify patients’ access to healthcare, including their ability to afford care visits and medications.
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<table>
<thead>
<tr>
<th>ID #</th>
<th>Stage 2 Final Rule</th>
<th>Stage 3 Recommendations</th>
<th>Proposed for Future Stage</th>
<th>Questions / Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>specified in § 170.207(e)(2); (iii) Cognitive status; (iv) Functional status; and (v) Ambulatory setting only. The reason for referral; and referring or transitioning provider’s name and office contact information. (vi) Inpatient setting only. Discharge instructions.</td>
<td></td>
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</table>
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In addition to the questions above, the HITPC would also appreciate comment on the following questions.

Questions

MU01  Currently, providers have to meet all MU criteria to receive incentives. Is there flexibility in achieving a close percentage of the objectives, but not quite achieving all of them? What is the downside of providing this additional flexibility? How will it impact providers who are achieving all of the MU criteria? If there is additional flexibility of this type, what are the ways this can be constructed so that it is not harmful to the goals of the program and advantageous to others?

We request that HITPC provide data regarding what percentage of those qualifying for MU incentive payments come close but do not qualify. What are the reasons that they are not meeting the objectives?

Flexibility will be especially crucial with the new functionality proposed in Stage 3 and beyond. Many EHRs will have trouble meeting the requirements in elegant ways, if at all. Providers who are now locked into using these EHRs should not be penalized for the product’s inability to meet the requirements. There should be the ability to select “5 of 7” (or whatever) and graded incentives, rather than all or none.

MU02  What is the best balance between ease of clinical documentation and the ease of practice management efficiency? This is a confusing question as these two components of practice are directly related. Practice efficiency depends on clinicians and clinical team members being able to document efficiently, accurately – and clinical documentation should support communication among and between everyone involved in a patient’s care. Any inefficiency introduced as a result of poorly designed EHR systems directly or indirectly affect patient care. Time wasted on poorly designed systems is time not spent on patient care. Practices distracted by poorly designed workflow, sluggish reporting, etc. spend energy and staff resources on activities that do not lead to better care. Allowing EPs the ability to delegate tasks and documentation as is appropriate is an important way of increasing the productivity and effectiveness of the practice.

MU03  To improve the safety of EHRs, should there be a MU requirement for providers to conduct a health IT safety risk assessment? Are there models or standards that we should look to for guidance?

Yes, there should be a health IT safety risk assessment that includes all relevant clinical departments and providers who have access to the patient.

Various stakeholders including vendors, testing entities, and measure authors should bear responsibility for ensuring that any functionality introduced to EHRs are tested prior to implementation in practice, and then tested again by the vendor once the implementation is complete.
This basic assurance could be complemented with aggressive reporting of health IT-related safety issues in practice. This reporting should be seamless, embedded into EHR products, and aggregated/studied by entities authorized to receive, analyze and report on findings – yet protected from medicolegal discovery. The airline industry model could serve as a template to design a health care version of such a reporting process.

Evaluation similar to the Leapfrog Group evaluation of hospital EHRs for safety is potentially reasonable. I.e., a series of patients with existing criteria are loaded into the systems as test patients and a specific script is followed to report the result. Vendors should provide a standard mechanism to load such test patients with discrete data (presumably from a structured CDA document) and to create a report of findings (also in a structured CDA document, perhaps similar to a QRDA Category 3). Providers should thus be able to quickly upload the test cases and send the reports (and view the reports themselves). The testing must be performed at the local implementation to address any modifications that have occurred to the ‘model’ EHR.

**MU04** Some federal and state health information privacy and confidentiality laws, including but not limited to 42 CFR Part 2 (for substance abuse), establish detailed requirements for obtaining patient consent for sharing certain sensitive health information, including restricting the recipient’s further disclosure of such information. How can EHRs and HIEs manage information that requires patient consent to disclose so that populations receiving care covered by these laws are not excluded from health information exchange? How can MU help improve the capacity of EHR infrastructure to record consent, limit the disclosure of this information to those providers and organizations specified on a consent form, manage consent expiration and consent revocation, and communicate the limitations on use and restrictions on re-disclosure to receiving providers? Are there existing standards, such as those identified by the Data Segmentation for Privacy Initiative Implementation Guide, that are mature enough to facilitate the exchange of this type of consent information in today’s EHRs and HIEs?

Enable patients to provide mobile and updateable consents, possibly among other options at point of care, including consenting to all categories of information, or by selecting categories. This would allow a provider to explain the potential need for and benefit of information in that particular clinical context. This strategy was employed for primary care provider members of Wisconsin HIE, where state laws did not authorize information exchange a priori without consent for non-emergency providers. As the committee makes clear with the phrasing of this question, granular consent appears harder and harder to accomplish the deeper you dig into the granularity and expand the complexity of the workflows. Early attempts to manage granular consent have also shown that patients routinely change their minds.

As we overload our systems in an attempt to manage granular consent, we are unlikely to ever be happy with the result. A better approach is to focus on identification and punishment of inappropriate use of patient data across the healthcare system.
MU regulations need to take into account that over time, greater quantities of the information will be generated from patients and caregivers themselves. Such information may come from self-reported healthy history questionnaires, remote monitoring devices, mobile health applications, personal health records populated with quantitative data from health care providers, and other sources. Data from patient-initiated research is becoming an increasingly prolific source of patient information. Health care organizations and providers should implement EHRs and other systems that can accept such data submitted in standard data forms, and should demonstrate that they accept patient-generated data. Patients should be able to provide consent for ALL categories of patient generated health data, or by select categories.

**MU05** The HITECH ACT has given a lot of emphasis to EHRs as the central distribution channel for health information, but there may be limits on how much we can add on to EHR technologies. As additional program demands are added onto EHRs, what can be done to foster innovation to share information and receive intelligence from other, non-EHR applications and services that could be built on top of that data architecture?

While limited external capability exists, it seems that an attention to verification of demographic data should be captured from the patient and/or caregivers. A list of those authorized for this verification should accompany every record. For example if a child is a caregiver/proxy for the elderly parent, then this data should consistently “follow the patient” until/if it is modified. Having patients verify information rather than continuously re-write will allow for fewer mistakes, more efficiency on time spent verifying data and consumer/patient satisfaction. This should become an expected part of any encounter with a provider. It would also allow for a discrete method of capturing change in job/career status, financial status, ability to pay for medications/care and/or food security without the patient having to answer sensitive questions directly.

For example, Is it possible to create an application programming interface (API) to make available the information defined in a CCDA so that systems can communicate it with each other? This is an interesting question and one which deserves more research and innovation; it would be advantageous if a patient could create the content that they want in a CCDA which could then be shared across providers and EHRs and amended by not only providers but the patient themselves. These approaches would encourage more active and shared decision making with consumers and also support consumers to mediate some health information exchange. An API to make available information defined in a CCDA more accessible should include provisions for communicating both to web and mobile services.

Is the information defined in the CCDA the appropriate content for other uses of clinical information? Are the standards used to communicate between EHR systems (e.g. Direct, Exchange) adequate for communication between EHRs and other kinds of systems? What other technologies, standards or approaches could be implemented or defined to facilitate the sharing of clinical knowledge between EHRs and other systems? We
urge attention to harmonization of patient reported data and patient mediation of data. **MU06** What can be included in EHR technology to give providers evidence that a capability was in use during the EHR reporting period for measures that are not percentage based. This capability will need to support measures that occur in all stages of MU (e.g. there are yes/no measures in stage 1 that still need to be supported). Are there objectives and measures that should be prioritized to assist providers in showing that the capability was enabled during the reporting period?

It seems that functionality much like an “error log” could be built into systems so that monitoring of when and what capabilities are enabled and how they impacted care could occur. This seems to be a functionality that occurs after other core functions are incorporated into the requirements. There should be a simple dashboard presentation of which functions/features are “on” and for what period of time they were “on” and when, if any, changes were made to the status of the capability (e.g., suspended, upgraded, deleted).
II. Quality Measures

The Health IT Policy Committee, in the October 2010 “Tiger Team Summary Report”, the December 2010 Request for Comment, and the August 2011 Transmittal Letter, described the intention to support the development of HIT-sensitive, parsimonious, longitudinal, outcomes-focused CQMs for the EHR Incentive Program. In advance of Stage 2 the HITPC recommended eCQM subdomains and concepts for development and implementation. In advance of Stage 3, the committee intends to focus more broadly on the measure components (logic and value sets), the environment in which the measures operate and the extent to which the measures support quality improvement.

We understand the fundamental mission of the EHR Incentive Program CQM set is to promote the capabilities of EHRs to capture relevant data and to calculate and report measures used by public recognition and payment programs as efficiently and reliably as possible in order to improve the quality of care and experience of care for providers and patients

1. The measures should leverage, to the greatest extent possible, data routinely captured in the EHR and PHR during the process of care, while minimizing data-collection burden on the part of providers
2. The measures set should address measures for public reporting and quality improvement, and be meaningful at the point of care.
3. CQMs should not be “hard coded” into the EHR. Doing so may negatively impact local workflow.
   □ Providers should be able to configure the CQM calculation to use data elements appropriate to local workflow
   □ When part of EHR the CQM should calculate automatically.
4. An end goal is to shift quality measurement and reporting from sampled retrospective/human chart reviews/ accounting to concurrent/ machine-automated/ improvement while recognizing that there will remain a place for human abstracted quality measurement.
5. Support for CQM calculations should be flexible and adaptive to future requirements, which may include new measures or changes to measure definitions at minimal cost and resources.

Please use the identification numbers below to comment on the appropriateness of the fundamental mission and five key attributes described above for the stage 3 clinical quality measures.
Questions

QMWG01 As we propose to expand the features of the eCQM measure set, how can it be done in ways to minimize health care costs and reduces burden on health care providers?

Collection of data to support eCQMs should be solely based on expected routine data collected as a consequence of established/common workflows for the condition being measured. No additional work should be required of EPs/EHs to provide the data. Certified EHR systems should also provide an easy-to-use mechanism for EPs to implement and track additional CQMs of their choosing. The certified functionality must not be limited to hardwired measures specified by the government or other outside organizations. The burden placed on vendors and providers by the ever expanding number of CQMs and efficiency measures is tremendous and may not serve the interests of patient care or cost containment. The best way to reduce reporting costs and burden is to continue aligning and harmonizing the Meaningful Use measures with those required by the Joint Commission and CMS (i.e. Hospital VBP, PQRS). We recommend outreach to NCQA to consider alignment with the HEDIS measures as well as communications with major commercial payers to see if there can be even broader harmonization. Look at what and how data are collected in the course of providing care and use that information to create. Consider introducing incentives to non acute settings for adopting MU3 standards so that efficacy can be measured across care transitions and settings.

QMWG02 Furthermore, when considering the finite resources available to technology developers, what measures, types of measures or attributes of measures should be a high priority?

Healthcare associated infections using NHSN. Also, cross-cutting measures that are sufficiently common that even small improvements in performance would have an effect on the population that can be measured (quality, cost, experience). Need process measures linked to outcome measures. Need to consider that processes that work in one organization, geographic area, may not work or be appropriate in another. Consider adding social determinants of health and genomic information to denominators as more data become available and linked to interventions and outcomes.

QMWG03 Are there innovations or technological capabilities for measure development or specification that the HITPC could support that would reduce the burden on technology developers?

- Expand on open platforms with open APIs for accelerating innovation
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- Expand on success of recent ONC contest, redesigning the PHR from graphic designers perspective, sharing 50 winners in open space demonstration.

**QMWG04** Meaningful Use program has used menu objectives and menu CQMs to provide flexibility for providers. Should there be core CQMs for high priority health conditions, such as controlling hypertension?

We suggest consideration of culturally sensitive nutrition counseling for prevention and management of diabetes, hypertension, and other conditions where there are known racial and ethnic disparities. Expand to community-based measures and involve multidisciplinary teams that include the patient and their significant others. We suggest that the HITPC and ONC ultimately consider elimination of all MU Core/Menu objectives in favor of a slate of eCQMs that, if an EP/EH were able to report would be sufficient evidence of adequate use of the EHR system to, collect data effectively, process it, communicate/share, etc. This focus on quality measures, coupled with robust and omnipresent educational resources identifying the prerequisite activities/actions needed to report effectively, would be more relevant to patients, families and clinicians than MU measures. While a set of high priority measures would appear to make sense, particularly for high prevalence conditions such as cardiovascular disease, we still believe there is value in the menu approach. It provides flexibility for providers and organization and allows better alignment with strategic goals or quality gaps vs forcing participation in areas where measure performance may be topped out. With this approach, it is important that the menu stay within reasonable boundaries, yet also support other new combinations of potential data sources which may be combined with EHR data, such as mobile health, patient reported health data, device, and remote monitoring.

A. **Patient Centeredness: Broaden Stakeholder Input**

The HITPC intends to capture insights broadly from providers, patients, lay caregivers and other stakeholder groups across the healthcare landscape that have been previously less engaged in HIT policymaking but actively engaged as providers, purchases and recipients of care.

**QMWG05** How can the HITPC and QMWG capture input from a wide variety of providers, patients, organizations and societies?

Most ancillary providers have a good understanding of those pain points which most contribute to their stakeholders (patients/consumers) angst. It would be helpful if ancillary professional societies were queried for what needs their stakeholders need most. More thoughtful responses would be generated by smaller lists of questions and longer time periods provided for responses. We urge the HITPC to consider more widespread grassroots community outreach – public schools – PTSA, colleges and universities, faith-based organizations, and youth organizations and community based health care collaboratives – such as Girls Scouts, Boy Scouts, youth athletic organizations, anywhere you find parents and their children.
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QMWG06 What additional channels for input should we consider?
ONC has performed well in getting patients to “tell their story”. There are many “patient advocates” who have nudged the patient/consumer role to a new progressive level. Some facilities have enabled a patient site to report safety conditions and/or concerns based upon the care they receive. Some facilities include patients as board members and/or membership in practice councils. Many patients may want to tell their story but not receive publicity or expose private information. These “case studies” would be helpful in improving what patients need and want the most. Is there the capability to create a “trusted source” where the authenticity of story content could be verified, yet the patients private information is protected?

B. Patient Centeredness: Patient-reported and Patient-Directed Data
The HITPC recognizes that both patients and providers generate and consume clinical quality data. The committee anticipates that consumer generated and directed data is most useful if the data spans settings and is oriented to outcomes. We appreciate that performance data is important for both quality improvement and for shared decision making. Contributors have challenged the workgroup to develop CQMs that accommodate personal care goals in addition to guideline-directed care goals. This is a commendable aspiration; still significant barriers to integration of patient-generated data with EHR clinical data remain.

QMWG07 Please comment with guidance on how consumer-reported data can be incorporated into CQMs. What examples are there of EHR-enabled quality measures that use data directly entered by patients?

We believe that consumers will learn to recognize which data impact their care and conditions the most, as we develop innovations to shorten these feedback cycles and develop more meaningful visual data displays. For example, the HGB A1c level is now a useful value that allows both provider and patient to evaluate their response to care. Other such values need to be identified and used in a manner that patients can monitor their own progress, report it periodically to patients and evaluate their progress longitudinally. We urge the inclusion of more quality of life-type of measures and patients, including preferences, social determinants of health, which can be shared from personal health tools into other provider tools (Estrabrook, et al.)

QMWG08 Please provide examples of how patient-directed data is informing shared decision making. How does the public view the integration of EHR derived data with patient generated data for quality measurement?

Data source should always be identified (lab, patient, provider, etc) but studies have shown that patient generated data is typically more reliable and accurate than the protected provider record. When patients have an expected participation and understand the consequence on their care, they are more likely to make changes and follow intended therapy. Each patient should have “between care” expectations that allow them to bring specified data or content back to their provider and/or upload
it between care for use at the next visit. This of course would be highly patient specific; studies have shown that patient more
likely follow treatment when the provider inquires on the next visit.

How important is it to keep this data separate? Should it be separate? It seems that the data should not be kept separate, but
rather tagged as patient reported. Keeping it separate implies that it is not as important for care as the provider generated data,
when in fact—all of the data should be considered together and any outliers discussed. Data should not be separate; note source
of all information—not just patient-generated. More work is needed re: the reconciliation of patient generated data. For
example, to what extent is a verification process needed before these data can be used to drive decision support?

C. CQM Pipeline: Process and Outcome Measures

The HITPC Quality Measure Workgroup has previously described, in the October 2010 “Tiger Team Summary Report” and the
December 2010 Request for Comment, our intention to support the development of HIT-sensitive, parsimonious, longitudinal
outcomes-focused CQMs for the EHR Incentive Program. The HITPC also recognizes that there remains value in developing near
real-time, point-of-care, process measures for clinical use that can contribute nuance to performance demonstrated by value-
oriented, and outcome measures.

QMWG09 Please provide comment on how the HITPC should proceed with our focus on clinical outcomes. Should the HITPC focus its
efforts on building point-of-care process measures or value-centered outcome measures?

Process measures will remain important. Outcome measures—if appropriately specified—will become more relevant over time. In the short
term, the capability to adequately report results on both process and outcome measures could serve as evidence of effective (meaningful)
use of health IT. Since these would be clinically relevant measures, EPs/EHs and patients/consumers would likely welcome the focus on
these as opposed to measures that focus on structure and check boxes to satisfy MU objectives. It would also move away from attestation as
EPs/EHs would report on these measures effectively—or not.

We recommend minimizing process measure CQMs that force changes in workflow and data capture without impacting the desired outcomes
of care quality and cost. While a balance is clearly needed between process measures and outcomes measures, the latter should be given
priority and will reduce the overall measurement burden while driving innovative care strategies.

We believe that provider groups tend to target the process measures while perhaps losing focus on the overall care outcomes. Given the
complexity of the overall care process, there has never been reliable data showing that process measure improvements truly impact
outcomes metrics. It could even be argued that at this stage in the evolution of performance-based healthcare, process of care measures
have reduced value and should only be used to target critical elements of the care process where common deficiencies are known and when actual outcomes are difficult to measure or are not temporally related to the care provided.

We do not think that this needs to be an either–or situation. Both are needed. A process measure has an outcome in mind. Why do you check blood pressure or HgbA1c? What good is knowing a BMI measurement is high without knowing an intervention was initiated and then how successful was the intervention. Sometimes the outcome is immediately apparent, others take awhile and therefore need to be followed. We urge the elimination of claims-based outcome measures and the ongoing and enhanced development (and refinement) of outcome measures that use data from EHRs and other HIT.

QMWG10 Is this a false or unnecessary dichotomy? Should we instead consider a third approach, to promote process-outcome measure “suites”, combinations of end outcome measures that are potentially associated with process measures? For example, Stage 2 eCQM set will include three HIV measures. The outcome of viral load suppression is accompanied by two related process measures for an HIV medical visit and for Pneumocystis Pneumonia prophylaxis. Some of our members believe that this is indeed a false dichotomy.

D. CQM Pipeline: Measure Development Lifecycle
The HITPC is considering recommendations both on the types of measures that are developed on the process for measure development. The QMWG has heard from eCQM measure developers, that “retooling”, the process of translating existing quality measures, originally based on administrative and claims data and chart abstraction, into XML code may not fully preserve the original intent of the legacy measures and measure components (logic and value sets). Furthermore, retooled measures often do not take full advantage of the richness of clinical data in the EHR, and do not reach out to collect data from patients that are possible through the use of PHRs. Consequently, the QMWG is considering recommending that HHS efforts shift from retooling paper chart/claims measures to designing de novo EHR-enabled measures. The QMWG supports development of de novo measures that stay faithful to high priority quality measurement concepts.

QMWG11 Please comment on challenges and ambiguities in retooling legacy paper abstracted and claims based eCQMs.

Considering the current limitations in collecting paper-based data for CQM performance assessment and the further difficulties in translating that to electronic collection, it seems supporting de novo development of eCQMs is an approach worthy of exploration. This will also support collection of a more robust data set for more accurate performance assessment. New technologies for data surveillance and collection will likely provide the necessary tools to support eCQM development and refinement. Existing legacy paper-based and claims-based CQMs depend on ICD-9-CM to identify the denominators. While there is some “conversion” from ICD-9 to ICD-10, there is no standardized mapping. Using GEM to identify similar ICD-10 codes does not take into consideration the significant granularity of ICD-10. Additionally, ICD-10 is still
not a clinical terminology and not as granular as SNOMED CT. Any retooled measure is essentially a different measure from its legacy version and a new baseline needed to be established. Additionally, in the inpatient setting, coding (for payment) is most often done at discharge which decreases the real-time capability for quality improvement.

**QMWG12** Is this a shift away from retooling legacy paper-based CQMs in exchange for designing CQMs de novo a reasonable course of action?

Considering the current limitations in collecting paper-based data for CQM performance assessment and the further difficulties in translating that to electronic collection, it seems supporting de novo development of eCQMs is an approach worthy of exploration. This will also support collection of a more robust data set for more accurate performance assessment. New technologies for data surveillance and collection will likely provide the necessary tools to support eCQM development and refinement. We urge HITPC not to retool any more legacy paper-based CQMs. And we support the elimination of claims-based measures except as adjuncts for efficiency measures.

**QMWG13** Please comment on the provider/payer/patient experience with using retooled measures as opposed to experience with de novo measures designed and intended for EHR-based measurement.

E. **CQM Pipeline: MU Alignment with Functional Objectives**

The HITPC understands that EHRs are a powerful tool with the potential to increase clinical efficiency. However, with EHR adoption and implementation there is also a risk of increasing provider administrative burden as well. The HITPC recognizes that successful attestation weighs an administrative burden on providers and their staff. For Stage 3, the workgroup intends to alleviate administrative burden by further aligning the eCQMs logic and value sets with EHR Incentive Program Functional Objectives. For example, care coordination CQMs can be refined/or designed de novo to better align with the Summary of Care objective. Our goal is not only to mitigate increased burden but to guide users on leveraging efficient and meaningful use. The HITPC seeks comments to guide our recommendations for Stage 3 in this area. The HITPC continues to support HHS-wide efforts to align CQMs across quality assessment programs (PQRS, MU, IQR, etc).

**Table:**

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<tr>
<th>QMWG14</th>
<th>Please comment on aligning CQMs with MU Objectives. Would eCQM-MU Objective alignment be clinically valuable to providers or might this be a redundant exercise in shifting resources? <strong>We believe that this is redundant. Resources would be better spent developing de novo eCQMs and aligning measures across quality programs.</strong></th>
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<tbody>
<tr>
<td>QMWG15</td>
<td>Which measures and objectives, in particular, have the greatest potential to maximize meaningful alignment? Please</td>
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</table>
F. CQM Pipeline: Domains and Exemplars

The HITPC continues to encourage development and release of eCQMs that cover the six priority domains identified by the National Quality Strategy. The HITPC intends to identify exemplar measures/concepts that both address underrepresented NQS priority domains and leverage the current and near future capabilities of EHRs.

QMWG16 Which, if any, high priority domains should receive prioritized attention in Stage 3? What measure concepts, addressing these domains, should be considered for development? What EHR capabilities should be leveraged to realize these concepts?

There are CQM domains which are critical to most patients: nutrition intake in response to care. For example, if a patient is septic, kcalories and protein needs/goal in particular become considerably higher. Such patients typically are unable to consume their entire kcalorie/protein intake and so are further compromised. A CQM which addresses compromised conditions and values that should be measured would be very effective in evaluation and treatment of the whole patient. Nutrition intake occurs in 100 percent of all patients; it is simply the route that varies (enteral feedings, parenteral nutrition via central line, texture modifications for stroke patients, breast milk for infants, etc.)

Mental health measures for all setting and age groups. The Dementia DRG is the #3 DRG for Medicare patients. This DRG encompasses much more than just Alzheimer’s. Lower extremity joint replacements are another high cost, high frequency area. What can be done to decrease the frequency of the need for these procedures? Is it weight loss, exercise? Pneumonia is still a high frequency, high cost area. What can be done to decrease the incidence? We urge HITPC to move MU so that we can obtain prevention. We urge association of costs with prevention and treatment to determine which interventions are most effective, including costs. We suggest that HITPC move away from provider-specific measures and more into team-based and interdisciplinary /community-based measures.

QMWG17 Are there EHR based exemplar measures that exist, or that are being conceptualized or developed, that address these domains and theses concepts? What scientific evidence, if any, supports these concepts and exemplars?

G. CQM Pipeline: MU and Innovation
The HITPC recognizes that some health systems, ACOs, and other provider networks have developed, tested and deployed locally generated CQMs that address high priority conditions or processes relevant to their local patient population or organizations. Usually, health systems do not submit these self-developed CQMs for endorsement by NQF because they do not consider themselves to be a measure developer. However, these locally developed measures may be useful to many other organizations in the country.
In order to leverage some of the innovation by health systems in creating measures that leverage data from the EHR, the QMWG has discussed a proposal to allow EPs or EHs to submit a locally developed CQM as a menu item in partial fulfillment of MU requirements (in lieu of one of the existing measures specified in the MU program). Health care organizations choosing this optional menu track would be required to use a brief submission form that describes some of the evidence that supports their measure and how the measure was used in their organization to improve care. The healthcare organization benefits by reporting on something that it feels is important in partial completion of MU qualification. CMS benefits from learning about CQMs developed by EHR users in the field, and may use this pipeline of innovative CQMs as a stimulus for new-measure development.

As the EHR Incentive Program is currently an attestation and not accountability program, we see this program as a valuable opportunity to encourage provider-level CQM innovation and perform provider-level CQM testing. If we can set reasonable criteria, then we can use this program for more developmental and innovative work. We have received comments that recommend individual providers that have designed/developed their own measures should be allowed to submit these measures and data as part of attestation.

| QMWG18 | Please comment on the desirability and feasibility of such an innovation track as a voluntary, optional component of the MU CQM requirement. Sounds like a good idea – desirable and feasible. |
| QMWG19 | The QMWG has considered two approaches to institution-initiated eCQMs. A conservative approach might allow “Certified CQM Development Organizations”, such as professional societies and IDNs to design, develop, release and report proprietary CQMs for MU. An alternate approach might open the process to any EP/EH but constrain allowable eCQMs with certain design standards. There are advantages and disadvantages to both. Please submit comments on either, both or unique approaches. Recommend convening discussions with professional societies with shared goals. This is already occurring to some extent within alliances and shared projects, but it would allow for collaboration and identified priorities where multiple stakeholder groups already participate. Professional societies often are not positioned to financially support the development of quality measures. Collaboration and professional society input would be invaluable to creating eCQMs in an efficient manner. |
| QMWG20 | What information should be submitted with a locally developed CQM to help CMS and other healthcare providers assess the innovative measure? For example, should the submission form include a brief description of: 1) importance/rationale of the measure domain; 2)evidence basis for the specific measure; 3) feasibility, and 4) usefulness of the measure? Yes, all of the above. However, do not require randomized clinical
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<table>
<thead>
<tr>
<th>QMWG21</th>
<th>What constraints should be in place? Should individual providers have an option to choose and/or design their own measures outside of the established CQM EHR Incentive Program set? Should these “practice-level” measures be required to conform to the Quality Data Model data elements and/or entered into the Measure Authoring Tool or conform to a simplified HQMF XML? Use of the QDM, MAT, and value sets should be encouraged, however feedback regarding inadequacies, incompleteness, recommendations for improvement, etc. should be encouraged even more.</th>
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<tr>
<td>QMWG22</td>
<td>What precautions might be necessary to mitigate fraud, waste and abuse and to avoid submission of trivial new measures that are unlikely to advance the field? Not sure if this is needed, but having a review panel similar to an IRB may avoid any thoughts of frivolous submissions.</td>
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<tr>
<td>QMWG23</td>
<td>For the existing and/or in the proposed expanded institution-initiated CQMs, how can federal agencies better support consistent implementation of measures for vendors and local practices (e.g., test case patients, template workflow diagrams, defined intent of measure and value set)? Encourage submission of actual patient data for use in testing. The technology for deidentifying data is getting much better. Provide financial incentives for organizations that submit data for use in testing.</td>
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<tr>
<td>QMWG24</td>
<td>Stage 3 may increase the number of measures EPs and EHs calculate and report. Considering provider burden, is there a limit to the number of measures that a provider should be expected to calculate? Is there evidence to support a limit? The issue is not a problem of volume. The key problems with current CQM reporting include poorly designed measures, measures that require complex data collection unrelated to direct patient care, use of inappropriate coding systems, and requiring reporting of measures that are inappropriate to the patient population. The key will be to make sure the data are standardized and in discrete fields and the measure logic solid. If the measure logic is available to be applied externally rather than baked into the software, the burden to the providers should be minimal regardless of the number of measures. There should be a minimum number of cases if the measures are expected to be applied to any VBP program.</td>
</tr>
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</table>
H. Quality Improvement Support: Architecture and Standards

The HITPC recognizes that there is an opportunity, in the next stage of Meaningful Use, to design measures that improve the user experience and leverage technologic capability of certified EHR software to affect quality improvement. The workgroup considers the features below for eCQMs and EHRs to valuable both for users and meaningful in clinical practice.

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<tr>
<td>QMWG25</td>
<td>Please comment on the value and feasibility of the eCQM and EHR features listed below:</td>
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<tr>
<td></td>
<td>- Ability to accept downloaded specifications for new measures with little tailoring or new coding</td>
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<td></td>
<td>- Minimal manual data collection or manipulation</td>
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<td></td>
<td>- Ability to aggregate measure data to varying business units (practice, episode, ACO, medical home, MA plan, etc)</td>
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<td></td>
<td>- Ability to build measures that incorporate cross-setting records for episodes, medical homes, outcomes (e.g., readmissions)</td>
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<td></td>
<td>- Ability to build multi-source data records, including claims, patient reported data</td>
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<td></td>
<td>- Ability to implement machine-readable HQMF that minimizes manual vendor coding</td>
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<td></td>
<td>- Ability to drill-down on reported measures for QI analyses</td>
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</table>

The listed abilities suggest a path forward for quality measurement that should lead us to a better understanding of the actions and activities that matter most in improving health and health care. There are at least two clear obstacles to achieving his vision. First, no matter how hard measure developers work to create measure that rely on structured data that is collected routinely during clinical processes, the exclusion criteria continue to require exceptional data collection efforts that subvert the care process. Also, while there seems to be general agreement that patient-focused measures that follow the patient across settings and processes hold tremendous promise, we have no agreed-upon method to identify patients across settings and systems. The HIT PC must establish a single patient identification method, or a very small set of such methods as a prerequisite to specifying the use of measures that require such unambiguous identification. Strong support for all items below in G25, with
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Focus to eliminate manual vendor coding. The market for mobile health (mHealth) applications was estimated to reach $1.3 billion in 2012, and continues to grow steadily. We urge HITPC to consider how MU may need to address providers and organizations secure receipt and management of data generated by mHealth applications and/or devices. We also urge ONC to address future issues regarding integration of mHealth-generated data in standard formats into the EHR.

| QMWG2  | 6 | What other features, if any, should be considered? Please make suggestions. |
| QMWG2  | 7 | What is the role of multi-source data exchange in achieving these features? |

**I. Quality Improvement Support: CQM Population Management Platform**

The HITPC intends to encourage the development and expansion of HIT tools that leverage use of eCQMs for population management. The work group is especially interested in development of CQM population mapping and task-management platforms such as, clinical quality measure dashboard or business process management software and workflow engines that allow users to respond to actionable data on clinical care gaps and assign tasks both to individual patients and for user-determined cohorts. The workgroup understands that this technology is desired by providers and requests comments on the potential role of the HITPC and DHHS in this space.

| QMWG28 | Please comment on the value and feasibility of the CQM Population Management Platforms. Is there an evidence basis for clinical population management platform use? Is there a business case? Is this an area that could benefit from HITPC policy guidance or will the market mature and evolve without input? |
| QMWG29 | What information or features might be present in a basic clinical CQM population management view (population score, denominator members, patient-level data element drill down, provider comparison, risk adjustment, ad-hoc queries, etc)? |

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| QMWG30 | What are the technological challenges to widespread release and adoption? Can the HITPC encourage technology in this area without being prohibitively prescriptive? Should the HITPC and HHS pursue avenues outside of regulation to support this technology: e.g. design open source prototypes, challenge grants, demonstration projects, guidance document, etc? |
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III. Privacy and Security

In September 2012, the HITPC recommended that EHRs should be able to accept two factor (or higher) authentication for provider users to remotely access protected health information (PHI) in stage 3. This included recommending that organizations/entities, as part of their HIPAA security risk analysis, should identify any other access environments that may require multiple factors to authenticate an asserted identity, and that organizations/entities should continue to identify proof provider users in compliance with Health Insurance Portability and Accountability Act (HIPAA). The HITPC would like input on the following questions related to multi-factor provider authentication:

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<tr>
<td>PSTT 01</td>
<td>How can the HITPC’s recommendation be reconciled with the National Strategy for Trusted Identities in Cyberspace (NSTIC) approach to identification which strongly encourages the re-use of third party credentials?</td>
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<tr>
<td>PSTT 02</td>
<td>How would ONC test the HITPC’s recommendation in certification criteria?</td>
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<tr>
<td>PSTT 03</td>
<td>Should ONC permit certification of an EHR as stand-alone and/or an EHR along with a third party authentication service provider?</td>
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In addition to considering provider user authentication, the HITPC has assessed the success of the security requirement included in Stage 1 of Meaningful use and is looking for feedback on the logical next steps. In Stages 1 and 2 of Meaningful Use, EPs/EHs/CAHs are required to attest to completing a HIPAA security risk analysis (and addressing deficiencies): In Stage 2, they are required to attest to specifically addressing encryption of data at rest in Certified EHR Technology.

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<td>PSTT 04</td>
<td>What, if any, security risk issues (or Health Insurance Portability and Accountability Act (HIPAA) Security Rule provisions) should be subject to Meaningful Use attestation in Stage 3? For example, the requirement to make staff/workforce aware of the HIPAA Security Rule and to train them on Security Rule provisions is one of the top 5 areas of Security Rule noncompliance identified by the HHS Office for Civil Rights over the past 5 years. In addition, entities covered by the Security Rule must also send periodic security reminders to staff. The HITPC is considering requiring EPs/EHs/CAHs to attest to implementing HIPAA Security Rule provisions regarding workforce/staff outreach &amp; training and sending periodic security reminders; we seek feedback on this proposal. The key to any such activity is the availability of truly useful education materials to guide practices to the desired objectives. Small practices lack the expertise needed to design and deliver such programs. More importantly, this objective must not be allowed to morph into a requirement where practices must pay for consultants to come in and deliver programs as an unreimbursable expense.</td>
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1 Remote access includes the following scenarios: a) Access from outside of an organization’s/entity’s private network; b) Access from an IP address not recognized as part of the organization/entity or that is outside of the organization/entity’s
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compliance environment; and c) Access across a network, any part of which is or could be unsecure (such as across the open Internet or using an unsecure wireless connection).

Feedback on standards for accounting for disclosures would also be appreciated. Accounting for disclosures, surveillance for unauthorized access or disclosure and incident investigation associated with alleged unauthorized access is a responsibility of organizations that operate EHRs and other clinical systems. Currently, the 2014 Edition for Certified EHR Technology specifies the use of ASTM E-2147-01. This specification describes the contents of audit file reports but does not specify a standard format to support multiple-system analytics with respect to access. The HITPC requests comment on the following related questions:

<table>
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<tr>
<th>PSTT 05</th>
<th>Is it feasible to certify the compliance of EHRs based on the prescribed standard?</th>
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<td>Is it appropriate to require attestation by meaningful users that such logs are created and maintained for a specific period of time?</td>
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<tr>
<td><strong>PSTT 06</strong></td>
<td><strong>If EHRs certification includes a requirement to maintain such logs, attestation may ultimately serve no further purpose.</strong></td>
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<tr>
<td>PSTT 07</td>
<td>Is there a requirement for a standard format for the log files of EHRs to support analysis of access to health information access multiple EHRs or other clinical systems in a healthcare enterprise?</td>
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<tr>
<td>PSTT 08</td>
<td>Are there any specifications for audit log file formats that are currently in widespread use to support such applications?</td>
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