

Final Comment Summary for All Objectives & Questions

*Health Information Technology Meaningful Use
Work Group*

Table of Contents

CPOE	4
Drug-Drug & Drug-Allergy Interaction Checks	6
e-Prescribing	8
Record Demographics	10
Clinical Quality Measures & Question 5	12
Problem List, Medication List, Medication-Allergy List	14
Record Vital Signs	16
Recording Smoking Status	17
Clinical Decision Support (CDS)	18
Drug Formulary Checks.....	22
Record Existence of Advance Directives Question 7 Regarding Advance Directives	23
Structured lab Data	27
Generate Patient Lists for Clinical Priority Areas	29
Patient Reminders.....	31
Electronic Notes & Question #1	33
Medication orders automatically tracked via electronic medication administration record	35
Electronic Copy of Health Information	37
Clinical Summaries & Discharge Instructions.....	40
Patient-Specific Educational Resources.....	44
Hospital Portals	46
Electronic Access (EP)	49
Patient-Provider Secure Messaging	52
Patient Preferences for Communication	55
HIE Test & Question 9.....	57
Medication Reconciliation	63
Provide Summary of Care Record	65
List of Care Team Members.....	67
Longitudinal Care Plan.....	69
Immunization Reporting to Public Health Agencies.....	72
Electronic Lab Reporting to Public Health Agencies.....	74
Syndromic Surveillance Reporting to Public Health Agencies	77
Security and Privacy	79
Question # 2: Accessibility for People with Disabilities.....	82
Question # 3: Reducing Barriers to Patient Access	85

Question # 4: Experiences Incorporating Patient-Reported Data..... 88
Question # 6: Group Reporting Option 90
Question # 8: Elements of Care Plans & Summaries..... 92
Question # 10: Need for Stepping-Stone Objectives for Stage 3? 95
Timing of Stage 2 MU 101
Standards for Certification Criteria 103

TOPIC	CPOE
STAGE 1 FINAL RULE	More than 30% of unique patients with at least one medication in their medication list seen by the EP or admitted to the eligible hospital's or CAH's inpatient or emergency department (POS 21 or 23) have at least one medication order entered using CPOE
HITPC PROPOSED STAGE 2	CPOE (by licensed professional) for at least one medication, and one lab or radiology order for 60% of unique patients who have at least one such order (order does not have to be transmitted electronically)
POINTS	<p>Key Points</p> <ul style="list-style-type: none"> • Commenters support increased CPOE as a general goal, but are divided on the proposed changes • Many comments question the dual increase of order type (laboratory or radiology) and simultaneous increase in threshold level from 30% to 60% <ul style="list-style-type: none"> ○ Two thirds of comments state agreement with the 60% stage 2 threshold ○ One third of comments recommended a more modest increase from stage 1 to (range of) 40% to 55% • Several recommend the laboratory and radiology requirements be introduced as menu items rather than core requirements • Many comments request clarification of the term "licensed professional," commonly in reference to verbal/protocol-based orders enter by others (nurses, scribes, pharmacists) if the orders are cosigned by a licensed provider requirement? <p>EP: Support Changes to Objective</p> <ul style="list-style-type: none"> • General agreement with the proposed 60% threshold, specifically citing the need to maintain existing exclusions, with many comments emphasizing the need to maintain the following: <ul style="list-style-type: none"> ○ Unique patient standard vs. a percentage of all orders ○ Exemption from electronic transmission ○ Fewer than 100 prescriptions exclusion • Encourage that orders be transmitted electronically to internal entities when connectivity exists and the order fulfilling party is known at the time of order entry • Support but would like to see additional integration with CDS/evidence-based standards • Recommend coupling the structural measure with an outcome measure

TOPIC	CPOE
POINTS, continued	<p data-bbox="456 239 902 268">EH: Support Changes to Objective</p> <ul data-bbox="505 279 1409 468" style="list-style-type: none"> <li data-bbox="505 279 1409 390">• Most comments expressed a general agreement with the increase to the threshold, while others supported a stage 2 threshold higher than 60% <li data-bbox="505 401 1409 468">• Some recommended additional order types (referrals for EP, diet for EH) <p data-bbox="456 516 824 546">EP/EH: Clarification Needed</p> <ul data-bbox="505 556 1382 745" style="list-style-type: none"> <li data-bbox="505 556 1382 623">• Clarification is needed for tests such as echocardiograms and ultrasounds; are these imaging considered radiology orders? <li data-bbox="505 634 1382 701">• Similarly, are anatomical pathology orders included under the “laboratory” order type? <li data-bbox="505 711 1382 745">• Exclude controlled substances, similar to e-prescribing objective <p data-bbox="456 793 1024 823">EP/EH: Disagree with Changes to Objective</p> <ul data-bbox="505 833 1422 1400" style="list-style-type: none"> <li data-bbox="505 833 1422 900">• Most commenters disagreeing with proposed changes would be fine with either raising the threshold or adding lab/radiology <li data-bbox="505 911 1422 1400">• Concerns regarding medication orders: <ul data-bbox="578 951 1422 1213" style="list-style-type: none"> <li data-bbox="578 951 1422 1094">○ There are many appropriate non-CPOE situations, such as verbal orders during surgery and nurse-administered protocol-orders that will affect some hospitals and practices more than others <li data-bbox="578 1104 1422 1171">○ Patient preferences, and complex medications requiring dose compounding and extensive instructions are not appropriate <li data-bbox="578 1182 1422 1213">○ Duplicative with e-prescribing standard <li data-bbox="505 1224 1422 1400">• Concerns regarding the addition of laboratory/radiology orders: <ul data-bbox="578 1264 1422 1400" style="list-style-type: none"> <li data-bbox="578 1264 1422 1375">○ Some specialties use specialized labs and radiology procedures that have to be on paper. The threshold is too high, since this is common practice for many specialties. <li data-bbox="578 1386 1422 1400">○ Verbal/protocol orders are common practice in many offices

TOPIC	Drug-Drug & Drug-Allergy Interaction Checks
STAGE 1 FINAL RULE	The EP/EH has enabled this functionality for the entire reporting period
HITPC PROPOSED STAGE 2	Employ drug-drug interaction checking and drug-allergy checking on appropriate evidence-based interactions
POINTS	<p>Key Points:</p> <ul style="list-style-type: none"> • Support for recommendation: About 2/3 of commenters expressing an opinion supported stage 2 approach and half of those thought it should be advanced even more aggressively (stage 3 expectations on drug-age and drug-dose in stage 2) • More clarity on definitions <ul style="list-style-type: none"> ○ Clarity around “employ” v “enable” ○ Clarity on measurement and definitions for “appropriate evidence based interactions” ○ Inclusion of “elderly” definition with specific high-risk parameters • Lack of consensus on addressing evidence-based sources <ul style="list-style-type: none"> ○ Mix of opinions about whether AHRQ/ONC/CMS should provide sources and/or define a high-risk drug lists vs. individuals determining their own sources • Concern about “alert fatigue” <ul style="list-style-type: none"> ○ Many comments suggested EP/EH ability to customize alerts <p>Clarity on Definitions:</p> <ul style="list-style-type: none"> • It is unclear what is meant by “employ” (versus “enable” as used in Stage 1), when such checking should occur, and how compliance would be assessed • Request clarity, definitions and measurement for terms “appropriate evidence based interactions” • Interactions needs to be more explicit in how “elderly” is defined and parameters established specific to how the high risk conditions are identified • Clarification on how the measure is monitored for compliance

TOPIC	Drug-Drug & Drug-Allergy Interaction Checks
POINTS, continued	<p data-bbox="444 237 997 268">Evidence Based Sources & Considerations</p> <ul data-bbox="444 279 1386 716" style="list-style-type: none"> <li data-bbox="444 279 1386 428">• Drug interaction evidence should consider all possible sources, including package inserts, case reports, post-marketing studies, aggregated safety reports, controlled trials and consensus-based interactions (rules, knowledge) <li data-bbox="444 436 1386 506">• AHRQ/ONC/CMS to provide sources and/or define a minimum number of high-risk drugs (perhaps 10) to begin with <li data-bbox="444 514 1386 583">• Individuals to determine the evidence-based source (e.g., tools such as First databank, Multim, Thomson Reuters, etc.) <li data-bbox="444 592 1386 716">• Some thought drug databases should undergo a certification process periodically that ensures they are evidence-based, up-to-date and reliable. <p data-bbox="444 772 1183 804">Criterion Considerations Offered by Some Commenters:</p> <ul data-bbox="444 814 1386 1392" style="list-style-type: none"> <li data-bbox="444 814 1386 926">• Dose range checking is age specific and so could be used to account for medication doses including a drug at no dose appropriate for the elderly <li data-bbox="444 934 1386 1003">• Drug-drug/drug-allergy interaction checks--also need drug-age interaction checks <li data-bbox="444 1012 1386 1123">• Drug laboratory checking (based on laboratory monitoring rules engines to be identified) should be moved from Proposed Stage 3 to Stage 2 <li data-bbox="444 1131 1386 1281">• Information obtained during the radiology-patient interaction (radiopharmaceuticals) should be used to augment the active allergy list to include IV or oral contrast materials used which are known or suspected to have caused a patient reaction <li data-bbox="444 1289 1386 1392">• Chemotherapy orders should be removed because they are very complex and it may be unrealistic to include any requirements related to them in Stage 2

TOPIC	e-Prescribing
STAGE 1 FINAL RULE	(EP only) More than 40% of all permissible prescriptions written by the EP are transmitted electronically using certified EHR technology.
HITPC PROPOSED STAGE 2	50% of orders (outpatient and hospital discharge) transmitted as eRx.
POINTS	<p>Key Points:</p> <ul style="list-style-type: none"> • Most commenters agreed with the EP objective. • For EH e-Prescribing: many commenters recommended its introduction with a lower threshold in Stage 2 or possibly as a menu item. <ul style="list-style-type: none"> ○ EH: Many of the commenters needed clarity regarding whether the inclusion of discharge medications in the standard extends this core requirement to hospitals. <p>EP Agreement:</p> <ul style="list-style-type: none"> • There was general agreement with the objective • Most commenters asked that the following Stage 1 approaches be extended to Stage 2: <ul style="list-style-type: none"> ○ Maintain existing exclusions, especially the exclusion for <100 prescriptions/provider ○ Retain the faxing option ○ Allowance for routing to an internal pharmacy ○ Continue to remove controlled substances from in the measure denominator <p>EP Concerns and Proposed Amendments:</p> <ul style="list-style-type: none"> • Similar to Stage 1 comments, some requested exception for rural areas where e-prescribing not widely available • A large number expressed the desire for greater alignment among incentive programs involving e-prescribing (PQRS, CMS e-prescribing) • Some commenters believe that the threshold is too high because there remain situations when it is not practical to e-prescribe <ul style="list-style-type: none"> ○ Patient preferences (e.g., OTC and samples) ○ Compounded doses ○ Complex dosing regimens

TOPIC	e-Prescribing
POINTS, continued	<p>EH Agreement: (For clarity, this objectives should be called out separately for EPs and EHs).</p> <ul style="list-style-type: none"> • Hospitals and large hospital organizations agreed with including eRx. However, a large majority expressed concern with the 50% threshold. <ul style="list-style-type: none"> ○ Some suggested 40% for Stage 2 and an alignment of thresholds for EPs and EHs of around 80% for Stage 3. ○ Many other hospitals suggested the inclusion of language that allowed for patient preference, suggesting this language would give every hospital the capability to meet this objective. ○ Most inpatient/hospital outpatient practices do not have e-prescribing capability, thus the threshold should be lowered. ○ Some suggested this be a menu item rather than core for Stage 2.

TOPIC	Record Demographics
STAGE 1 FINAL RULE	Record demographics for more than 50% of all unique patients. (preferred language, gender, race, ethnicity, date of birth)
HITPC PROPOSED STAGE 2	80% of patients have demographics recorded and can use them to produce stratified quality reports
Points	<p>Key Points:</p> <ul style="list-style-type: none"> • Specify that demographic information may be interfaced to an EHR as well as directly entered • Strong feedback that the ability to produce stratified reports based on demographics may have a greater health care impact – particularly on identifying and reducing certain health disparities – when combined with other information from the EHR • Significant concerns and considerations on the usage, definition, and context around race and ethnicity criteria. <ul style="list-style-type: none"> ○ Need capacity to record mixed race and ethnicity. <ul style="list-style-type: none"> ▪ Consider difficulties in definition around mixed-race patients with a clear definition of the relationship between race and ethnicity. ○ Currently race and ethnicity standard tables are not comprehensive enough to include locally relevant choices ○ Strong suggestions to require early implementation of the IOM’s recommendations for the standardized collection of race, ethnicity and language data: significant downstream opportunities here (e.g., these data are essential for other MU objectives and for communities to achieve the stated goal of reducing health disparities) • Consider using documentation standards used by the National Center for Health Statistics (NCHS) • Focus on measures with known disparities (e.g., “disparities-sensitive” conditions identified by NQF) • Recommendation to add employment-specific data elements to EHRs, including Occupation and Industry • Recommend disability status be required

TOPIC	Record Demographics
Points, continued	<p>Clarifications:</p> <ul style="list-style-type: none"> • . Concerns regarding demographics captured in non-clinical or practice management systems such as Registration and ADT systems; need to define in which system entry is appropriate, and at which point • Clarify whether the EP/Hospital must only be capable of using the demographic data to produce stratified quality reports or must produce a stratified quality reports • Pediatric considerations: <ul style="list-style-type: none"> ○ Recording of date of birth information should be sensitive enough to allow for the recording at intervals of less than 1 day (e.g. 12 hours) <p>Suggestions on Definition:</p> <ul style="list-style-type: none"> • Generally commenters asked for more specificity, expansion of criteria and that it include historical context: <ul style="list-style-type: none"> • Work with ONC, CMS and OCR to provide standard definitions to resolve the industry confusion on demographic terms (e.g. race) • Define “stratified” —Need further clarification on what constitutes a stratified quality report; is this measure just about producing the report? <ul style="list-style-type: none"> ○ Suggestion to re-phrase "...to produce stratified quality reports" as follows: "...to produce quality reports as defined in the quality metrics section" ○ Comment that stratification of quality reports should be part of the objective on quality reporting measures, not the objective on recording demographics <p>Suggestions on Threshold:</p> <ul style="list-style-type: none"> • Comments fell into two primary categories: <ul style="list-style-type: none"> ○ Raise threshold to 100%: primary feedback among these responses is to maintain Stage 1 criteria but raise percentage to 100% ○ Maximum threshold should be 80%: primary feedback here is to add additional criteria but cap the threshold at 80%

TOPIC	Clinical Quality Measures & Question 5
STAGE 1 FINAL RULE	Report CQMs electronically: For 2011, provide aggregate numerator, denominator, and exclusions through attestation; for 2012, electronically submit the CQMs
HITPC PROPOSED STAGE 2	Continue as per Quality Measures Workgroup and CMS (MU WG noted in the MU RFC that it was awaiting more guidance from QM WG)
QUESTION 5	For future stages of meaningful use assessment, should CMS provide an alternative way to achieve meaningful use based on demonstration of high performance on clinical quality measures (e.g., can either satisfy utilization measures for recording allergies, conducting CPOE, drug-drug interaction checking, etc, or demonstrate low rates of adverse drug events)?
CQM POINTS	<p>Key Points:</p> <ul style="list-style-type: none"> • Group practice reporting option is overwhelmingly preferred; commenters noted that this is especially important for emerging integrated delivery system models like ACOs and PCMHs • Timing: Many commenters expressed concern over the tight timeframe for transitioning to stage 2 especially for vendors to program and test the e-measures and for providers to implement; most of these comments came from physicians, hospitals and EHR vendors • Relevance of measures (most of these comments came from providers and vendors as well): <ul style="list-style-type: none"> ○ Many commenters expressed a need for CMS and HHS to move forward with leveraging clinical data from EHRs for measure reporting but measures should be outcomes-focused and need risk adjustment for providers taking care of low socioeconomic status populations or populations with linguistic or cultural differences that may impede adherence (e.g., readmissions measures or mortality measures) ○ Other comments address the difficulty of implementing the proposed measure concepts particularly for small providers ○ The measures in stage 1 are complex and the specifications require workflow redesign • Support for measures: <ul style="list-style-type: none"> ○ Measurement of care would improve overall quality of care ○ Outcomes-driven measurement in the context of pay-for-performance would encourage use of evidence-based guidelines ○ Quality measures should be linked to clinical decision support

TOPIC	Clinical Quality Measures & Question 5
Points, continued	<p>Other Comments:</p> <ul style="list-style-type: none"> • Better alignment of CQMs with PQRS, EHR Demonstration Program, ACOs • Better mapping tools to translate unstructured language into the necessary vocabulary sets for measures • Broader range of specialty measures (e.g. pathology) • Measures should be actionable and be linked to real-time decision making workflows
QUESTION 5 POINTS	<p>Main Points:</p> <ul style="list-style-type: none"> • Commenters expressed substantial support for this alternative path to achieve meaningful use based on demonstration of high performance rather than on functional requirements (providers, hospitals, professional societies) <ul style="list-style-type: none"> ○ They believed that the approach was logical and drove HHS “more toward the original goal of the program” ○ Would be preferable since it is more outcomes based and less process based ○ Some commenters felt this would add more flexibility and would be better and more reasonable that the “all or none approach” • Less burden for providers; in particular, specialists would be more desirable including MU compliance <ul style="list-style-type: none"> ○ Quality metrics are far more meaningful than features and functions supported by EHR • Some focused on the potential for it to reduce duplicative reporting burden <ul style="list-style-type: none"> ○ Success would depend on the details of what constitutes “high performance” • A very small minority of comments did not agree with this suggestion/recommendation and would prefer MU objectives to be “quantifiable measures” • Measures should be aligned and harmonized with other CMS programs (e.g., ACOs, PCMHs, PQRS) • Be cognizant of cultural issues and health disparities in selection of measures to be used

TOPIC	Problem List, Medication List, Medication-Allergy List
STAGE 1 FINAL RULE	More than 80% of all unique patients have at least one entry (or an indication that the none are known) recorded as structured data (for each of problem list, medication list, and medication-allergy list)
HITPC PROPOSED STAGE 2	Continue stage 1
POINTS	<p>Key Points:</p> <ul style="list-style-type: none"> • The terms “up-to-date,” “current” and “active” require a clear definition • Need clearer guidance regarding how “up-to-date” will be measured. • Guidance is needed regarding who is required to enter information into lists. • Overwhelming response concerning the lack of and need for clear definitions and standards. <p>General - Related to all 3 Objectives:</p> <ul style="list-style-type: none"> • Clarity needed for definitions of active, current and up-to-date <ul style="list-style-type: none"> • Specify how "up-to-date" will be measured and tracked to meet this requirement • Clarify who is required to enter the information into the lists • Many suggestions offered (ONC staff can provide if interested) • Other commenters asked that up-to-date be deleted because of challenges in defining/measuring it <p>Problem Lists:</p> <ul style="list-style-type: none"> • Thresholds: Many agree with not raising the threshold in Stage 2 , but several believe the percentage should be increased to >90% or 95% in stage 2 since most providers (CDC reports 96.7%) who already use a basic EHR already use this function • Other suggested components for inclusion on the problem list: <ul style="list-style-type: none"> • Substance use screening, assessment, and treatment needs • Nutrition-related problems from the Nutrition Care Process • Pointers (if available) that may lead to adverse events in prescribing (e.g., genotype and addiction history) • Results of imaging and/or interventional procedures problem lists

TOPIC	Problem List, Medication List, Medication-Allergy List
Points, continued	<p>Medication Lists:</p> <ul style="list-style-type: none"> • Thresholds: Similar mix of maintaining threshold vs. increasing to 90% or 95% in stage 2 • Some commenters argued that this objective could be deleted for hospitals as other objectives become part of the core set; updating of the list in the hospital setting will be achieved through medication reconciliation and maintenance of an electronic medication administration record (eMAR), making this objective redundant <p>Allergy Lists:</p> <ul style="list-style-type: none"> • Thresholds: Similar mix of maintaining threshold vs. increasing to 90% or 95% in stage 2 • Some recommend that all allergies (e.g., food, latex, iodine, and other environmental exposures), not just medication allergies, should be included in the list

TOPIC	Record Vital Signs
STAGE 1 FINAL RULE	For more than 50% of all unique patients age 2 and over seen by the EP or admitted to eligible hospital's or CAH's inpatient or emergency department (POS 21 or 23), height, weight and blood pressure are recorded as structured data
HITPC PROPOSED STAGE 2	80% of unique patients have vital signs recorded
POINTS	<p>Key Points:</p> <ul style="list-style-type: none"> • Commenters generally agree with increasing the standard from 50% to 80% from Stage 1 to Stage 2 • Commenters believe that the measure should retain existing data requirements and exclusions <p>EP:</p> <ul style="list-style-type: none"> • Several comments that the threshold could increase to 90-95%, although some others suggest lower thresholds of 50% to 65%, due to frequency and scope of practice concerns • Several suggested increasing the standard to "at every visit" or within a date range ("recorded vital signs per unique patient per year," for example) • Consider revising standard for 2-3-year olds; pediatric BP can be difficult to measure in some toddlers <p>EH Considerations/Clarification Needed:</p> <ul style="list-style-type: none"> • For hospitals, several comments regarding changing the requirement to "per admission" rather than per unique patients

TOPIC	Recording Smoking Status
STAGE 1 FINAL RULE	More than 50% of unique patients over 13 y/o have smoking status recorded as structured data (core)
HITPC PROPOSED STAGE 2	More than 80% of unique patients over 13 y/o have smoking status recorded as structured data (core)
POINTS	<p>Key Points:</p> <ul style="list-style-type: none"> • Comments generally supported the HITPC proposal <ul style="list-style-type: none"> ○ Most agreed with the 80% threshold; most who suggested other thresholds recommended between 90% and 100% ○ Some commenters believe there should be exclusions for sub-specialists • Some expressed support for broadening the objective <ul style="list-style-type: none"> ○ Record second hand smoke exposure ○ Change “smoking status” to “tobacco use” to encompass all tobacco products and other substance abuse ○ Make reporting consistent across all CMS programs (n=5) <p>Clarification & direction on criterion</p> <ul style="list-style-type: none"> • Smoking status variables should be clearly defined, in terms of type of tobacco, amount of use, and period of use <p>Criterion & reporting recommendations</p> <ul style="list-style-type: none"> • Age at which smoking status is first recorded should reflect that the onset of smoking is between 11-13 years of age for many patient populations. <p>Certification & technology considerations</p> <ul style="list-style-type: none"> • In terms of system usability, EHRs should prompt eligible providers when smoking status and secondhand smoke exposure has not been recorded or needs to be updated • In general, physicians should have the ability to overwrite data as it changes – smoking status is an example of where this requirement should be specified • This is an opportunity for the provider to use EHR to set a trigger to follow up with the patient (e.g., via email, text message or phone call) to see if they have followed up or need a referral for smoking cessation or mental health counseling

TOPIC	Clinical Decision Support (CDS)
STAGE 1 FINAL RULE	Implement 1 CDS rule
HITPC PROPOSED STAGE 2	Use CDS to improve performance on high-priority health conditions. Establish CDS attributes for purposes of certification: 1. Authenticated (source cited); 2. Credible, evidence-based; 3. Patient-context sensitive; 4. Invokes relevant knowledge; 5. Timely; 6. Efficient workflow; 7. Integrated with EHR; 8. Presented to the appropriate party who can take action
POINTS	<p>Key Points:</p> <ul style="list-style-type: none"> • Many were not clear what CDS attributes mean and how they will be measured • Physician specialty organizations, vendors, and health systems argue for a flexible CDS objective to allow practices to focus on their unique quality deficits • Many comments, however, expressed an appreciation for efforts to guide physicians and hospitals to effectively use CDS <p>Policy Comments and Concerns:</p> <ul style="list-style-type: none"> • Several comments stated that establishment and accountability of CDS should be left at provider or organization level <ul style="list-style-type: none"> ○ Many expressed concern (including vendors) regarding vendor developed CDS rules that met 8 attributes <ul style="list-style-type: none"> ▪ Thought that this may stifle innovation ▪ May limit flexibility of provider to design own CDS rules specific to their needs ▪ Inappropriate for vendors to be determining CDS that meets 8 attributes • There were several comments regarding ability of specialties to meet these criteria and consideration of specialties in the CDS objective <ul style="list-style-type: none"> ○ Several specialty boards offer or are developing specialty-specific CDS tools – these boards should be consulted and consider recommending these tools be used ○ Focus on “high priority conditions” is not as relevant to effective CDS tools for specialties such as radiology or perioperative care ○ Create a list of specialty-based CDS rules (akin to list of CQMs) ○ Request evidence-based CDS rules from specialty boards/ organizations

TOPIC	Clinical Decision Support (CDS)
<p>Points, continued</p>	<p>Policy Comments and Concerns, continued</p> <ul style="list-style-type: none"> ● About 10% of comments suggested keeping a small number of CDS rules or conditions <ul style="list-style-type: none"> ○ About half of these suggested using the same language as the stage 1 objective (i.e., removing the proposed CDS attributes from objective altogether) ● Several comments suggested additional definitions and attributes of CDS: <ul style="list-style-type: none"> ○ Any system designed to improve clinical decision making related to diagnostic or therapeutic processes of care (AHRQ PSNet) ○ Should include evidence based templates, decision trees, reminders, preventive services guidelines and linked online resources ○ Highlighted importance that CDS attributes are evidence-based, presented in real time and integrated into workflow ○ Should additionally support nursing practice ○ CDS guidance should apply to rx-rx, rx-allergy, rx-condition, rx-age, rx-dose, and rx-lab interactions ○ CDS should be applied to image ordering ○ CDS rules should be evidenced-based or professional organization expert opinion-based ○ Question of whether registry functions are sufficient ○ Should include Pharmacist/Pharmacy Provider EHR (PP-EHR) ○ Guidance from AHRQ e-Recommendations project ● A few commenters asked that objective require documentation when providers choose not to adhere to CDS during point of care

TOPIC	Clinical Decision Support (CDS)
Points, continued	<p data-bbox="467 241 1031 273">Policy Comments and Concerns, continued</p> <ul style="list-style-type: none"> <li data-bbox="467 283 1421 766"> <p data-bbox="467 283 1421 357">● About 10-20% of comments asked that CDS be linked to clinical quality measures</p> <ul style="list-style-type: none"> <li data-bbox="516 367 1421 451">○ Additionally, requested inclusion of ongoing internal testing and monitoring of CDS tools <li data-bbox="516 462 1421 535">○ With a focus on outcomes and guidance to reach outcomes rather than prescriptive process-related requirements <li data-bbox="516 546 1421 766">○ Institute a process for developing criteria and standards for identifying and structuring relevant clinical information for the clinical database <ul style="list-style-type: none"> <li data-bbox="565 682 1421 766">▪ Then adopt a standard set of clinical rules that operate on the clinical standardized database <li data-bbox="467 777 1421 1039"> <p data-bbox="467 777 1421 892">● An estimated 20-30% applauded including guidance in CDS objective to steer practices toward effective use of CDS and suggested should include:</p> <ul style="list-style-type: none"> <li data-bbox="516 903 1421 945">○ prioritizing CDS and avoiding alert fatigue <li data-bbox="516 955 1421 997">○ link to CQMs (see above) <li data-bbox="516 1008 1421 1039">○ ongoing evaluation process <p data-bbox="467 1092 722 1123">Definitional Issues:</p> <ul style="list-style-type: none"> <li data-bbox="467 1134 1421 1608"> <p data-bbox="467 1134 1421 1249">● Approximately 80% of commenters asked for clarification regarding clear definitions of “high-priority health conditions” and/or 8 attributes</p> <ul style="list-style-type: none"> <li data-bbox="516 1260 1421 1344">○ NCQA suggested referring to PCMH 3A that provides methods in identifying high priority conditions <li data-bbox="516 1354 1421 1608">○ Suggested focus for high-priority conditions: <ul style="list-style-type: none"> <li data-bbox="565 1396 1421 1608">▪ Unhealthy behaviors; mental health; substance abuse; nutrition related CDS especially as relates to chronic diseases; immunization; identify areas in patient outcomes and efficiency, including medical errors, patient safety and overuse

TOPIC	Clinical Decision Support (CDS)
Points, continued	<p>Standards & Certification Concerns:</p> <ul style="list-style-type: none"> ● There were several comments addressing the 8 attributes proposed to be included in certification: <ul style="list-style-type: none"> ○ Skepticism of current ability of EHRs to meet these criteria ○ Clarify whether providers will have to attest that they used these attributes effectively ○ Should include a mechanism to update rules ○ If attributes are to be incorporated in stage 2 certification, define process for determining required CDS rules until stage 3 ○ Include clarification allowing CDS via certified EHR modules ○ Clarify how this will be accomplished and measured (if included in objective) ○ EHRA and EPIC suggested alternative certification criteria¹

¹ 1. EHR provides a method of displaying to the provider the source/citation of the CDS (revision of 1 and 2)

2. EHR allows rules to be configured to enable decision support based on the patient's context (clinic visit, currently admitted) (revision of 3)

3. EHR rules respond to information in the chart about the patient's problems, allergies, medications, demographics, and vitals (revision of 4)

4. EHR allows rules to be configured to present decision support at a specific point during the clinical workflow (revision of 5)

5. EHR allows rules to be configured to present decision support to users of certain roles (revision of 8)

6. CDS can be integrated with other with other applicable EHR functionality (revision of 7).

TOPIC	Drug Formulary Checks
STAGE 1 FINAL RULE	The EP, eligible hospital, or CAH has enabled this functionality and has access to at least one internal or external drug formulary for the entire EHR reporting period
HITPC PROPOSED STAGE 2	Move current measure to core
POINTS	<p>Key Points:</p> <ul style="list-style-type: none"> • Comments suggest general agreement to move to core, with existing exclusions <p>Agree with Moving to Core:</p> <ul style="list-style-type: none"> • Agree, but recommend wording the standard as follows: “medication orders are checked against relevant formularies when the formulary is available via the e-prescribing hub the provider uses” • Agree, but meaningful use should include the function of supporting multiple formularies including monthly updates, including Part D PBMs • For EH, defining medications during admission vs. discharge medications would aid in understanding of the standard <p>Concerns with Moving to Core:</p> <ul style="list-style-type: none"> • Review how many EPs were able to meet this requirement in Stage One before moving to core <p>Other: Greater Formulary Availability Would Aid Adoption:</p> <ul style="list-style-type: none"> • Surescripts formularies are frequently challenging in terms of their usefulness and usability; PBMs must standardize and improve data presentation and usability to end-users • Difficult for certain providers who see patients with a large variety of insurance plans and separate formularies, or who see patients whose formularies are not readily available; it is inappropriate to penalize providers for some of these circumstances beyond their control

TOPIC	Record Existence of Advance Directives Question 7 Regarding Advance Directives
STAGE 1 FINAL RULE	Hospital only: Record 50% of unique patients 65+ years old have an indication of an advance directive recorded
HITPC PROPOSED STAGE 2	For EP and EH: 50% of unique patients 65+ years old have recorded in EHR the result of an advance directive discussion and the directive itself if it exists
QUESTION	Question 7: In stage 1, as an optional menu objective, the presence of an advance directive should be recorded for over 50% of patients 65 years of age or older. We propose making this objective required and to include the results of the advance-directive discussion, if available. We invite public comment on this proposal, or to offer suggestions for alternative criteria in this area.
POINTS	<p>Key Points:</p> <ul style="list-style-type: none"> • Complement existing widely-accepted POLST (Physician Orders for Life-Sustaining Treatment) standards, which captures a comprehensive set of information for the patient's "end-of-life" wishes as facilitated by their PCP: user friendly, already implemented statewide in several states <ul style="list-style-type: none"> ○ Moving advance directives to core Meaningful Use objectives would facilitate making information in the POLST system available in emergency situations ○ Strong support for online repositories and standardization • Documentation of AD is largely the responsibility of the primary care provider or attending physician; include exception clause for specialists • Legal Considerations: potential liability if action is taken on outdated ADs, or the actual AD is at odds with what was discussed: consider exemption/limitation of liability; implement review process for updates <ul style="list-style-type: none"> ○ Contemplate state and federal laws for validity, consider legally-based exclusions: (e.g. require registering ADs within a formal registry to be valid) ○ Consider complementing AD requirements with Power of Attorney (requires a legal document as proof): may help to further determine the most recent AD, if multiples • Include more robust specifications on what the documentation requirements include

TOPIC	Record Existence of Advance Directives Question 7 Regarding Advance Directives
Points, continued	<p>Concerns about threshold:</p> <ul style="list-style-type: none"> • Lowering: 50% is challenging due to workflow imposition on PCPs. Consider 10% for Stage 2 or maximum 20% to start • Change the language to >50% of patients >65 years old seen for an annual physical during the reporting period. This requirement should not be all patients >65 in an EHR database • Changes: Consider modifying the objective for EPs to state that "50% of patients 65+ who have the EP documented as the PCP has the result of an AD discussion recorded in the EHR, and the AD itself if it exists. If the EP is not documented as the PCP for any patients in this age range, the EP is excluded from the measure." • The age limitation of 65+ should be removed so that patients of any age with terminal illness can benefit from the system; POLST is critical for patients with serious progressive chronic conditions <ul style="list-style-type: none"> ○ Alternative of a higher percentage goal for more tightly defined subpopulations most likely to benefit from an AD (e.g. 85% of stage three congestive heart failure patients have records indicating their physician has discussed AD with the patient) • Maintain/Increase: increase the percentage of patients >=65 years old for which recording of the existence of advance directives would be required: this group should have these on file <p>Suggestions on Definition:</p> <ul style="list-style-type: none"> • Consider a federal documentation standard <ul style="list-style-type: none"> ○ Specify whether to document the presence of AD ("Yes"/"No") or more detailed information; define to what extent "results of AD discussion" are <ul style="list-style-type: none"> ▪ Most providers won't act upon AD without personally viewing the source document with patient signature ○ Consider including: Living Will yes/no, Durable POA yes/no; provide discrete data cascading options based on yes/no documentation • Clinicians and hospitals should not be penalized for caring for patients who have not created their own Ads • Documentation should include a mechanism that affirms the patient's understanding of and concurrence with the recorded decisions

TOPIC	Record Existence of Advance Directives Question 7 Regarding Advance Directives
Points, continued	<p>EP Considerations: challenges in outpatient settings</p> <ul style="list-style-type: none"> • Primary care vs. specialists: should be responsibility of primary care provider: concerns about specialties in which AD are not routine or relevant; specialists be allowed to attest that this requirement is inappropriate to their practice and able to claim an exclusion, or for EPs who do not believe this requirement is relevant to their scope of practice • For EPs, limit this to active patients and those seen in <24 months • Consider a time dimension in the denominator calculation; this would create a more appropriate objective, adding an appropriate frequency component to encourage “refreshing” this dimension of care • Make this requirement an optional menu set item (as is a new requirement for EPs), the annual physical is when an item such as this should be reviewed • Recommend a functionality to exist prompting an EP to obtain a directive status of “Yes” or “No” and provide direction for patients who answer “No”. It is unnecessary for every EP to have a copy of every patient’s AD in their EM <p>EH Considerations:</p> <ul style="list-style-type: none"> • Against: Recording results of an AD discussion would not be appropriate as an EH criterion since the discussion in question is one that would typically occur between the patient and his or her attending physician, not with hospital personnel – need to specify • For: Should be a MU criteria for hospitals, as this is the site of emergency care • Hospitals need to have a <i>copy</i> of the AD for it to be effective <p>Both EP and EH:</p> <ul style="list-style-type: none"> • Standardization across EH & EP should be a goal for this objective, aligning the requirements

TOPIC	Record Existence of Advance Directives Question 7 Regarding Advance Directives
Points, continued	<p>Storage, Data, and Documentation Semantics:</p> <ul style="list-style-type: none"> • Would this need to be scanned in or discretely stored in the chart or just documented the existence (yes/no) or status? Need to clarify. • Concerns about feasibility of widely disseminating ADs prior to interoperability from HIE (until all HIEs are providing accurate secure data transfer, implementation of this criterion may not be practical (e.g. patient providing a different set of directives to different treating physicians over an extended period of time) • CMS-certified EHRs should be required to enable online documentation and patient / health proxy signature or integrated storage (e.g. scanned signed documents) of advanced directives • Issue of timely and updated information: patients can have AD in the past that are no longer consistent with their wishes; having a means to reliably indicate that a patient’s former wishes are no longer consistent with their current wishes is more important than incorporating elements of their directives into the chart as structured data • Should the AD itself be accessible in the EHR? Mixed feedback. • Consider mandating the AD itself as a scanned document that shows the patient's signature: most providers want to see the source document before acting to assure that it is authentic and current • What types of results or documentation are considered acceptable to indicate a discussion took place? How will patient refusal of an advanced directive discussion be counted in the compliance rate? <p>Considerations for special groups:</p> <ul style="list-style-type: none"> • As a provider of many elderly, the advance directives should be a mandated discussion and part of the record with easy access

TOPIC	Structured lab Data
STAGE 1 FINAL RULE	(Menu) More than 40% of all clinical lab test results ordered during the reporting period are incorporated in certified EHR technology as structured data
HITPC PROPOSED STAGE 2	Move to core but only where results are available
POINTS	<p>Key Points:</p> <ul style="list-style-type: none"> • Mixed opinions regarding whether to move to the core set • Threshold recommendations ranged from 40% to 80% • Consider exclusions for providers who don't order labs • Commenters highlighted the difficulty and expense of interfacing with multiple lab interfaces; the interface expense is not worth the investment for providers who order few or no labs <p>Threshold & Measurement Comments</p> <ul style="list-style-type: none"> • Consider applying this to a limited number of common or important lab results that would be most beneficial to providers • The definition needs to be clearer—percentage of what? <ul style="list-style-type: none"> ○ An order can be for a lab test that includes 1 to many components ○ Is the denominator each individual component or the number of orders issued? • Another approach to the measurement <ul style="list-style-type: none"> ○ For any orders issued electronically, results are reconciled to at least 75% of those orders ○ Orders cancelled, or discontinued must be excluded from counts, since no results are expected ○ Measuring “stored as structured data” is nearly impossible; current transaction structures allow the transmission of data that is fully structured or completely unstructured <p>Expense of Interface:</p> <ul style="list-style-type: none"> • If you have more than one lab provider, interfaces may not work as labs label results differently • Implementing lab interfaces represent additional costs to providers; there must be a concerted effort to push for standardization and lowered costs for these interfaces

TOPIC	Structured lab Data
<p>Points, continued</p>	<p>Expense of Interface, continued</p> <ul style="list-style-type: none"> • Interface issues mean that some physicians cannot control performance on this measure <ul style="list-style-type: none"> ○ For physicians to receive and incorporate lab results as structured data, it would require the laboratory having a bi-directional interface with an EHR system ○ While many larger labs and hospital-based labs may have this capability, many smaller labs do not <p>Clarification & Direction on Criterion and Standards:</p> <ul style="list-style-type: none"> • Some suggest that systems be required to conform to the LOINC standards as part of the certification requirements • Transmission versus data storage: The transmission of the data is required to be in the HL7 2.5 standard; as long as there is not a requirement to also use that standard for data storage, stakeholders will be able to maintain their legacy system for this information • Some comment that the constantly changing landscape of lab vocabulary makes the Committee’s current proposal regarding lab results infeasible; hospitals should not be required to achieve this objective until a national lab vocabulary is implemented • It is unclear what “but only where results are available” means in Stage 2 • Some believe that this measure should include radiology, cancer, genetic tests

TOPIC	Generate Patient Lists for Clinical Priority Areas
STAGE 1 FINAL RULE	Generate at least one report listing patients with specific condition (menu)
HITPC PROPOSED STAGE 2	Generate patient lists for multiple patient-specific parameters (core)
POINTS	<p>Key Points:</p> <ul style="list-style-type: none"> • General agreement to move to core set, though some thought there should be exclusions for certain specialists • Clarify definitions and intent <ul style="list-style-type: none"> ○ Clearly define and provide examples for “parameters” and “high-priority health” (n=5) ○ Clarification on intent of measure and define how EP/EH will measure and report on guideline <p>“High-priority health conditions” and/or “parameters”</p> <ul style="list-style-type: none"> • The most prevalent suggestions were: <ul style="list-style-type: none"> ○ The goals of this objective should be determined by the EP/EH based on diseases and conditions being treated ○ We strongly urge that these lists include 1) all state-specific reportable disease conditions, and 2) immunizations that are next-due, due, and past-due; we further urge you to specify the parameters that you want EHRs to meet so that they develop ones that are pertinent to public health • Some suggested harmonizing with the Recording Demographics objective to focus on key populations <p>Certification and technology considerations</p> <ul style="list-style-type: none"> • This objective should also support permitting EHRs to link to external registries and other sources (e.g. CDW), without requiring those external sources or tools to be certified • There was some concern that the HITPC/ONC/CMS should stress that this capability be a component of Meaningful Use certification by software providers; substantial software enhancements are likely required to ensure that disease registry functionality is available as a component of a certified EHR • List generation and query system should be adaptable and allow users to specify the search criteria as well as variables displayed on the "list" • Administrative coding lexicon (such as ICD-9) should be decoupled from the concept of the clinical problem list, and that instead the requirement be rewritten to better recognize that clinical diagnoses (and not billing information) is what is actually needed

TOPIC	Generate Patient Lists for Clinical Priority Areas
Points, continued	Additional Considerations <ul style="list-style-type: none"> • Support for this objective both for general assessment and management of patient populations • Support for this objective for potential development and alignment with quality assurance and measures • Support for this measure as a way of supporting clinical trials research as serving population health goals

TOPIC	Patient Reminders
STAGE 1 FINAL RULE	(EP only) More than 20% of all unique patients 65+ or <5 years old were sent an appropriate reminder during the EHR reporting period
HITPC PROPOSED STAGE 2	Make core requirement
POINTS	<p>Key Points:</p> <ul style="list-style-type: none"> • Most agreed that this requirement can be moved to the core set for Stage 2 • Some commenters recommended raising the threshold and others suggested lowering it • Comments suggest maintaining this objective just for EPs • Respondents who wanted it to remain a menu set were worried that there was not enough time to properly program this measure properly into the EHR before Stage 2; some also worried that reporting on this measure would be difficult to normalize because of a lack of standardization in measuring the number of active patients that actually receive the reminders <p>Issues regarding definitions:</p> <ul style="list-style-type: none"> • Receives: <ul style="list-style-type: none"> ○ A few respondents asked that ONC define “receives” because providers should not be penalized for patients that do not want to receive reminders, or for those who do not check their mode of receiving reminders (portals, PHRs, etc) ○ A couple comments suggested that a confirmation of receipt should be employed for this measure • Active Patient: <ul style="list-style-type: none"> ○ All comments concerning the definition of an “active” patient stated that establishing this definition is a vital step ○ Suggestions for “active” patients ranged from those seen twice in the report period/year to those who have been seen at least once in the last 3 years ○ One comment stated that the definition of “active” patient will depend on the definition of “follow-up” ○ A number of comments brought point out that it may be difficult to attest to “active” patients that were not seen during the reporting period

TOPIC	Patient Reminders
<p>Points, continued</p>	<p>Issues regarding definitions-- Active Patient, continued</p> <ul style="list-style-type: none"> ○ One commenter suggested that “active” patient should be defined by type of EP; whereas all patients should be defined as active patients for primary care physicians, “active” patients for specialty EPs should be those that are currently receiving care <p>Delivery of Reminder:</p> <ul style="list-style-type: none"> ● A few comments suggested that the mode of reminder deliver should be based on patient preference; they stated that future research can be done to explore most effective evidence-based methods for patient reminder communications ● Preferences may depend on demographic factors ● A couple said that the requirement of patient preferences, in how they want to receive reminders, should be kept reasonable; if there are too many required options, this would be too onerous and cost prohibitive for EPs ● A couple respondents stressed that reminders should be sent to caregivers as well ● A couple comments recommended that the reminder be sent to patients in their primary language and should be written in a low literacy level <p>Age Restrictions for Reminders:</p> <ul style="list-style-type: none"> ● There were conflicting opinions about whether to maintain the age constraints or include all patients; some commenters thought that populations who would greatly benefit from better preventive and/or follow-up care were being left out ● A couple respondents suggested that patient reminders should be a required EHR feature where reminders are generated and sent automatically <p>Other Issues:</p> <ul style="list-style-type: none"> ● A few stressed that this measure be only for those specialties with continual care responsibilities for patients ● A few respondents also suggested that the solution for specialty EPs who have patients who need life-long follow up may be to allow registries to get involved; thus, reminders from registries should be allowed to be included for this measure ● A couple commenters stressed that specialty EPs do not send preventive reminders and should not be included in the requirement for this measure ● A couple respondents thought that this requirement should focus initially on one type of reminder (i.e., immunizations)

TOPIC	Electronic Notes & Question #1
STAGE 1 FINAL RULE	N/A (New)
HITPC PROPOSED STAGE 2	30% of visits have at least one electronic EP note; 30% of EH patient days have at least one electronic note by a physician, NP, or PA
QUESTION #1	How can electronic progress notes be defined in order to have adequate specificity?
PONITS	<p>Key Points:</p> <ul style="list-style-type: none"> • Overall, the majority of comments expressed support for including the proposed objective in stage 2, but requested more definition surrounding the objective with a warning to not be overly prescriptive • Most commenters rejected the caveat allowing scanned notes • “SOAP” format most cited in defining electronic notes <p>Policy Comments and Concerns:</p> <ul style="list-style-type: none"> • Roughly 80% of commenters believed scanned notes should not be acceptable <ul style="list-style-type: none"> ○ Citing issues of illegibility, no search capabilities, does not allow for natural language processing (NLP) solutions, possible compromise of security of data and increased cost without meaningful exchange of information • Although expressing support for the concept, a few commenters thought that this objective is premature due to the lack of provider readiness and requested that electronic note (incorporating structured data) threshold be decreased to 10% • Without NLP, structured notes with discrete data elements should be incentivized • Several commenters asked that transcribed notes be included • EP: should also consider PA and NP notes as is included in EH objective • EH: <ul style="list-style-type: none"> ○ A few commenters requested denominator be unique patients vs. patient days ○ Suggested definition be expanded to include admission notes, procedure notes, consult notes (and discharge summary) • Medical liability should be taken into consideration in that overly structured formats may not allow for adequate documentation

TOPIC	Electronic Notes & Question #1
Points, continued	<p data-bbox="391 237 646 268">Definitional Issues:</p> <ul data-bbox="440 283 1437 499" style="list-style-type: none"> <li data-bbox="440 283 1437 363">• Please clarify that narrative notes must be searchable; further define “narrative” and “structured” <li data-bbox="440 373 1437 499">• Should be defined – one option to include a range of permissible formats and note types, e.g., progress notes, operative notes; another suggestion – any relevant note by acceptable source (e.g., physician, NP, PA, etc.) <p data-bbox="391 554 964 585">Format and Content of Note (Question #1):</p> <ul data-bbox="391 600 1437 1751" style="list-style-type: none"> <li data-bbox="391 600 1437 814">• Approximately 1/3 of respondents to question #1 suggested “SOAP” format (Subjective, Objective, Assessment , Plan) <ul data-bbox="488 688 1437 814" style="list-style-type: none"> <li data-bbox="488 688 1437 814">○ Other components: Source of note, informed consent, special instructions, patient preferences, confidential flags, information from previous note <li data-bbox="391 825 1437 993">• The majority of commenters suggested that a combination of structured and unstructured entries be allowed so as to avoid overly structured data that does not allow for narrative assessment; it was also noted that free text entries can and should be searchable <li data-bbox="391 1003 1437 1486">• Several commenters encouraged the use of structured data where appropriate to stimulate use of clinical decision support and population health management analytics and a few commenters also noted that structured data within electronic notes may evolve with natural language processing <ul data-bbox="488 1234 1437 1486" style="list-style-type: none"> <li data-bbox="488 1234 1437 1486">○ Examples of what might be included as structured data: symptoms; vital signs; allergies; medications; problems/conditions; relevant physical exam findings; relevant lab, radiology, pathology, procedural and other diagnostic test results; with an opportunity to include pertinent family, past medical and social history as structured data to trigger CDS <li data-bbox="391 1497 1437 1707">• Many respondents asked that the HITPC stay away from being overly prescriptive in this objective, especially because progress notes vary widely across specialties and for different types of visits and patient populations (e.g., acute visit vs. well visit vs. visit for patient with chronic illness); it was felt that specific content of note should be left up to the provider <li data-bbox="391 1717 1437 1751">• Suggest multi-stakeholder group workshop to define

TOPIC	Medication orders automatically tracked via electronic medication administration record
STAGE 1 FINAL RULE	N/A (New)
HITPC PROPOSED STAGE 2	(EH only) 30% of EH medication orders automatically tracked via electronic medication administration record
POINTS	<p>Key Points:</p> <ul style="list-style-type: none"> • Overall feedback to this new objective was positive, but the majority of commenters requested clarification of definition and scope • Many suggested that this objective be tied to CPOE to encourage closed loop medication administration • Some expressed concern that, although very important in patient safety, this objective will require significant hospital investment in time and cost in order to implement <p>Policy Comments and Concerns:</p> <ul style="list-style-type: none"> • Provide guidance in valid methodologies, technologies or techniques without being prescriptive • Provide evidence associated with the objective (e.g. from AHRQ) <ul style="list-style-type: none"> ○ <i>There are several studies that showed decreased medication errors –especially among serious medication errors and significant cost savings with eMAR systems²</i> • Recommendation that integrated administration system of EHR, CPOE, bar code reader and infusion pump for IV medications be required for this objective in order to ensure closed loop medication administration • Significant number of comments both requesting bar coding be included and requesting that it not be required • Appropriate as long as medications can be tracked using local codes • Recommend adding back the closed-loop medication management objective • Increase stage 2 threshold to 50% due to “enormous patient safety gains” • Include in menu set <ul style="list-style-type: none"> ○ Requires additional capital investment

² Due to specific technical issues that arose in reviewing comments on this objective, staff sought additional input from the literature and two experts. This input appears in italics here to differentiate it from direct public comments.

TOPIC	Medication orders automatically tracked via electronic medication administration record
Points, continued	<p>Policy Comments and Concerns, continued</p> <ul style="list-style-type: none"> • Several comments addressed that although very important to patient safety, objective requires significant investment in equipment and technology apart from EHR and may be beyond technical or financial capabilities of CAHs • In order to allow time for investment and implementation of new technology, percentages should reflect a “partial roll-out” as many hospitals implement this technology incrementally by department • Requirements for this measure should match that of CPOE • Some pediatric subspecialties (e.g., ophthalmology) may not be able to meet this objective <p>Definitional Issues:</p> <ul style="list-style-type: none"> • A more explicit definition of “electronic medication administration recording” would be helpful <ul style="list-style-type: none"> ○ Clarify “automatically” and which technologies (e.g., bar coding, RFID, other electronic tracking methods) are acceptable to meet the objective ○ Provide specifics on what should be recorded; current definition unclear as to how a hospital would monitor or attest <ul style="list-style-type: none"> ▪ What of the 5 (or 7) rights³ should be subject to automated recording vs. manual entry through electronic medication administration ▪ Define standards for the 5 (or 7) rights; recognize that “right time” is not straightforward as importance varies among different medications ▪ <i>From expert consult: Ensuring the 5 rights is difficult to capture and not always critical for medication safety (as in “right time” example above); recommendation that objective focus on the use of eMAR technology</i> ○ Clarify that this only applies to inpatient medication orders in stage 2 so that there is no confusion regarding discharge medications ○ Clarify whether recording should be done at bedside or if an integrated eMAR is sufficient

³Five Rights: right patient, right route, right dose, right time, right medication (Additional two: right reason, right documentation)

TOPIC	Medication orders automatically tracked via electronic medication administration record
Points, continued	<p>Definitional Issues, continued</p> <ul style="list-style-type: none"> ○ Numerator and denominator should be reconsidered because one order is often placed for multiple doses of a medication, but medication administration is per dose; recommendation to measure doses administered vs. medication ordered ○ Suggested definitions <ul style="list-style-type: none"> ▪ order, dispense, and administer within the EHR ▪ 30% medication orders managed using an electronic process from order through administration without paper or verbal transcription steps, with checking the five rights of administration, and appropriate user notification when errors occur ▪ Barcode medication administration/verification for 20% unique EH patients receiving non-IV medication with key events recorded in eMAR accessible by all team members ▪ x% of scheduled and PRN medication administrations are recorded in an electronic medication administration record using an electronic identification checking process (e.g., bar codes, RFID, etc.) ▪ From expert consult: ideally enter numerator as doses administered and recorded in eMAR system and denominator <i>as total doses dispensed</i> <ul style="list-style-type: none"> • <i>A non-100% threshold will account for doses dispensed that are not bar coded (e.g., topical medications) and doses refused by patient</i> • <i>Lack of standards requiring intra-institutional interoperability between pharmacy and EHR may prevent certified products from being able to electronically report out denominator (doses dispensed; denominator would have to be inputted manually from pharmacy data if pharmacy and EHR systems are not linked</i> <p>Standards and Certification:</p> <ul style="list-style-type: none"> • Some comments stated that certification and standards criteria to support this measure must be included • Other commenters expressed that the objective should clearly exempt eMAR systems from certification requirements and ensure that standards for information are flexible enough to accommodate existing systems • From expert consult: the market is small enough that certifying products will not likely result in any stifling of innovation; large EHR vendors (Cerner, McKesson) have integrated eMAR into their products

TOPIC	Electronic Copy of Health Information
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TOPIC	Electronic Copy of Health Information
STAGE 1 FINAL RULE	Provide patients with an electronic copy of their health information (including diagnostic test results, problem list, medication lists, medication allergies), upon request
HITPC PROPOSED STAGE 2	Continue Stage 1
POINTS	<p>Key Points:</p> <ul style="list-style-type: none"> • A vast majority of commenters agree with this objective and believe it should remain in the core set • Most comments asked for clearly a defined objective and combining this with other measures <p>Agree But with Some Adjustments:</p> <ul style="list-style-type: none"> • Many comments suggested this objective be part of the patient portal objectives or combined other such similar objectives • Patient should have access to all of their personal health/clinical information, whether it is medical, diagnostics, claims, prescriptions, behavioral, or otherwise and not limited • Many suggestions to also include screening and prevention information, and disease management alerts allowing patients to engage with services in self-care <p>Concerns:</p> <ul style="list-style-type: none"> • A few commenters voiced concern over the cost of supplies (e.g., flash drives) for a larger number of patients • How will forthcoming rules from OCR and HIPAA change the requirements to provide patients with copies of their medical records? <p>Clarification:</p> <ul style="list-style-type: none"> • Commenter asked to clarify that this objective only includes information stored in the EHR as CCD • A large number of commenters across the industry have asked for a clear definition for what information is to be included in this measure and that it be aligned with the Standards and Certification Rule • Many commenters wondered if providing this information via the patient portal would fulfill this objective

TOPIC	Electronic Copy of Health Information
Points, continued	Suggestions: <ul style="list-style-type: none"><li data-bbox="477 279 1373 359">• Health information intended for patients should be written in the patient's primary language and for low health literacy.<li data-bbox="477 369 1435 403">• Should be accessible in alternate formats for patients with disabilities.

TOPIC	Clinical Summaries & Discharge Instructions
Stage 1 Final Rule	(EP only) Clinical summaries provided to patients for more than 50% of all office visits within 3 business days (EH only) More than 50% of all discharged patients who request an electronic copy of their discharge instructions are provided it
HITPC Proposed Stage 2	(EP only) Patients have the ability to view and download relevant information about a clinical encounter within 24 hours of the encounter. Follow-up tests that are linked to encounter orders but not ready during the encounter should be included in future summaries of that encounter, within 4 days of becoming available. Data are available in human-readable and structured forms (HITSC to define) (EH only) Electronic discharge instructions for hospitals (which are given as the patient is leaving the hospital) are offered to at least 80% of patients (patients may elect to receive only a printed copy of the instructions)
POINTS	<p>Key Points for Both Objectives:</p> <ul style="list-style-type: none"> • There is general support for both of these objectives • Many commenters request changes in the time frame, allowing more flexibility as chart completion by the end of each work day is not common practice • A majority have asked for clear definitions of included data elements • Clarify which data elements should be incorporated as codified structured data and which as a more narrative form or what degree of flexibility should be presumed in this requirement • Include language translations, literacy level options as well as access for patients with visual, motor and other disabilities • Strong recommendation that data elements included in the clinical summaries be contained in the CCD/CCR, to increase the transferability of data <p><u>Specific to Clinical Summary:</u></p> <p>Key Points:</p> <ul style="list-style-type: none"> • A majority also asked for modifications in the data elements being recorded to reduce the workflow and software changes this objective would require • The majority of commenters suggested extend the 24 hour timeline to 36 hours or 72 hours

TOPIC	Clinical Summaries & Discharge Instructions
Points, continued	<ul style="list-style-type: none"> • Recommendations for the Timeframe: <ul style="list-style-type: none"> • A few suggested longer: <ul style="list-style-type: none"> ○ Some physicians do not have continuous access to EHRs, due to movement between hospitals and clinics, high case loads, etc ○ Rushing time allotted for chart completion may result in information being inaccurate & incomplete, thus providing limited use for patients • Policy Recommendations: <ul style="list-style-type: none"> • A few suggested patient demographics, like date of birth and sex, is excess and would be a repeat of other information already known to the patient • Issues for Further Clarification: <ul style="list-style-type: none"> • Clarify the boundaries of an “encounter” <ul style="list-style-type: none"> ○ A good number of commenters asked how pre/post encounter orders will eventually get linked back to the summary and how patients will be informed of pending results linked to an encounter • Provide clarity on the definition of “human readable” and “structured” forms of data—the data should be appropriately patient-friendly • Clarify if all immunizations or just immunizations from one visit be included in clinical summaries for encounters • Accessibility: <ul style="list-style-type: none"> • Consider adolescent privacy issues: parents/legal guardians should have the ability to download relevant information for children up to age 13; after age 13, parents/legal guardian should only be allowed to download specified information while protected information (may be variable by state law) is not available (such as reproductive, gender, drug issues) • For elderly and chronically ill patients, allow access to family/caregivers

TOPIC	Clinical Summaries & Discharge Instructions
<p>Points, continued</p>	<p>Accessibility, continued</p> <ul style="list-style-type: none"> • Strongly consider privacy/security issues to prevent inappropriate (or illegal) disclosures of patient health information <p>• Other General Comments:</p> <ul style="list-style-type: none"> • A few vendors are worried that data manipulation to “filter” or “organize” information by date, encounter, etc is functionality that cannot be added realistically to patient portal solutions in such a short time frame <ul style="list-style-type: none"> ▪ Providers asked for an option for sensitive information to be provided face to face, i.e. critical health information, discussion of treatment plans that may not be appropriate for a clinical summaryThe denominator should allow for physician discretion for withholding certain information, i.e., mental health issues • The implementation timeframe for Stage 2 closely aligns with the ICD-10-cm/PMS implementation date—this could result in further complications for coding system changes <p><u>Hospital Discharge Instructions Specific Comments</u></p> <p>Key Points:</p> <ul style="list-style-type: none"> • Clarification is needed on what the specific electronic medium for providing the summary is • Objective should include electronic access to the discharge summary through a portal with download capability. • Some offered that the stage 1 rule was sufficient to manage this intent; the capability to distribute electronically does not add much value and is dependent on patient preference (some patients don’t want electronic copies) <ul style="list-style-type: none"> ○ Some suggest stage 2 criteria should maintain the same wording as stage 1 but indicate an increase in the percentage requirement • Clarification is needed that the criterion only applies to patients being discharged from an inpatient stay

TOPIC	Clinical Summaries & Discharge Instructions
<p>Points, continued</p>	<p>Hospital Discharge Instructions Specific Comments Key Points, continued</p> <ul style="list-style-type: none"> • Data Elements/Format of Discharge Summaries: <ul style="list-style-type: none"> • One comment that the HITPC and HITSC need to determine the critical components for a structured medication list • One suggestion to incorporate the CMS core clinical quality measures into the discharge instruction requirements as structured data elements to ensure that more patients receive the information routinely <p>Patient Access to the Discharge Summary:</p> <ul style="list-style-type: none"> • Some want the HITPC to make it clear that acceptable methods for providing electronic copy of discharge instructions include the patient portal or the secure exchange of relevant information from the EHR to the patient’s PHR • Clarification was requested reflecting that the objective is met if the required percentage of patients is offered the ability to view and download an inpatient discharge summary at the time of discharge and not that a percentage of patients must sign up and perform such access <ul style="list-style-type: none"> ○ Related: Providers generally expressed negative feedback that the objective changed from being based on the number of patients who requested and received electronic copies to being based on “all patients”– requiring hospitals to “offer” electronic copies to at least 80% of patients <p>Language Access to Discharge Summary:</p> <ul style="list-style-type: none"> • The discharge instructions should be in the primary language of the patient and should be written at a literacy level accessible to patients with low health literacy and accessible in alternate forms for patients with disabilities

TOPIC	Patient-Specific Educational Resources
Stage 1 Final Rule	Use certified EHR technology to identify patient-specific education resources and provide those resources to the patient if appropriate for more than 10% of unique patients
HITPC Proposed Stage 2	Continue Stage 1
POINTS	<p>Key Points:</p> <ul style="list-style-type: none"> • The majority of commenters agree with the objective and believe it should be included in stage 2 with an increased threshold • Commenters also believe this objective is an important function of care and technology • Some concerns were expressed around the quality and standards for the education and the certification process. <p>Policy Suggestions:</p> <ul style="list-style-type: none"> • Comments that focused on the threshold have suggested an increase to 25%-50% • Those who addressed it suggested that this objective be moved from the menu set to the core set <p>Clarifications Requested:</p> <ul style="list-style-type: none"> • A lot of comments requested clarification on the tracking of this objective: How will the EHR track the delivery of the information? • Some also expressed confusion/concerns around the role of the EHR in recommending information or actually providing it • A large number agreed with the need for clear definition around the term “specific” • Another common theme asked for replacing “if appropriate” with a clear set of expectations <p>Accessibility:</p> <ul style="list-style-type: none"> • A few comments requested that stage 2 ensure language access, either through translation services or an interpreter • A large number also suggested stage 2 push for more accessible formats (patient portals and other online access) especially for patients with disabilities

TOPIC	Patient-Specific Educational Resources
<p>Points, continued</p>	<p>Certification:</p> <ul style="list-style-type: none"> • A big concern has been the interpretation of the standards criteria which has resulted in less “patient-specific” information • Some commenters feared the educational resources would be produced by distrusted sources; some have asked that the information be clinically reviewed by a non-biased sources • Others expressed concern with EHR technology that allows advertising in the product • A few asked that the resources be linked to preventive care guidelines for different care objectives <p>General Comments:</p> <ul style="list-style-type: none"> • A few commenters have asked that this objective be consolidated into other objectives • Others suggested that this information be delivered to the patient upon discharge and with the discharge summary • One comment recommends more explicit requirements to support provider workflow through context-aware retrieval and automated documentation, which will reduce burden of adoption for clinicians

TOPIC	Hospital Portals
STAGE 1 FINAL RULE	N/A (New)
HITPC PROPOSED STAGE 2	(EH) 80% of patients offered the ability to view and download via a web-based portal, within 36 hours of discharge, relevant information contained in the record about EH inpatient encounters. Data are available in human-readable and structured forms (HITSC to define). (A web portal as defined as online access to health information. Therefore all web portals defined as such are subject to HIPPA rules and regulations.)
POINTS	<p>Key Points:</p> <ul style="list-style-type: none"> • Many comments agree with making the content available in both human readable and structured data building off of the Stage 1 approach • The vast majority are asking for clarification that 80% means that 80% could have access • Greater clarity also is required around what information from the most recent discharge is expected to be included in the PHR • A majority of comments suggest that 36 hours is not sufficient for the complexity of the hospital data to be included; however, alternatives to make that timeline work were proposed • Many organizations have not yet addressed the infrastructure requirements to support patient portal technologies, raising questions about the threshold <p>Support and Proposed Additions:</p> <ul style="list-style-type: none"> • Many commenters requested that this should include other objectives like “provide electronic copy of health information and provide electronic copy of discharge instructions” • A few asked that the hospital be required to follow-up with patients about the portal use • Some suggested a different numerator: Made available to all patients, and not require reporting on a percentage that must be measured and accounted for • A few favored a broader definition for providing online access to the patient (not necessarily a PHR-type approach) • Some requested that the portal be available to other caregivers

TOPIC	Hospital Portals
<p>Points, continued</p>	<p>Suggestions for Addressing Time Requirement for Provision of Data:</p> <ul style="list-style-type: none"> • Only include information that is available at the time of upload • Allow more time for hospital staff to review before pushing to patient • Allow more time for discrete data to be coded <p>Concerns Raised about Difficulty to Measure:</p> <ul style="list-style-type: none"> • How to track if the patient was “offered” the ability • Tracking and managing patient usage will require too many resources and may be difficult • Questions around tracking patients across multiple settings of care without a unique identifier <p>Concerns about Lack of Standards and Technology:</p> <ul style="list-style-type: none"> • PHR standards and technology are immature – Not every EHR will be able to link to a PHR • Adoption rates of PHRs are extremely low – this might indicate a lack of demand <p>Other General Concerns:</p> <ul style="list-style-type: none"> • A majority of commenters suggested that 80% is too high of a threshold; suggestions ranged from making it available to 50% and only requiring registration, to making it a menu item. • Some expressed concerns about the sensitivity of the information in the record for younger populations • A few requested that patients retain the right to decline and not be included in the measurement • Providers should retain the right to exclude sensitive information • Patients may have to manage multiple PHRs and sources if the PHR was offered by the hospital; some clarification will need to be made concerning the ability to export the data to the patients preferred PHR

TOPIC	Hospital Portals
Points, continued	<p>Clarifications Requested:</p> <ul style="list-style-type: none"> • Clarify whether 80% means that 80% could have access if they want it (would be able to sign up for a patient portal) or whether 80% must actually sign up • Clarify and define what exactly goes into the portal (relevant, human readable) • Many suggested only include elements contained in the CCD rather than require additional reporting forms • First provide a well defined discharge summary, and then transition this into PHR by stage 3

TOPIC	Electronic Access (EP)
STAGE 1 FINAL RULE	(EP only) More than 10% of all unique patients seen by the EP are provided timely (available to the patient within 4 business days of being updated in the certified EHR technology) electronic access to their health information subject to the EP’s discretion to withhold certain information
HITPC PROPOSED STAGE 2	Patients have the ability to view and download (on demand) relevant information contained in the longitudinal record, which has been updated within 4 days of the information being available to the practice. Patient should be able to filter or organize information by date, encounter, etc. Data are available in human-readable and structured forms (HITSC to define).
POINTS	<p>Key Points:</p> <ul style="list-style-type: none"> • There was a mixed level of support for this objective • Many commenters expressed concern regarding the lack of industry standards for longitudinal record, as well as the software changes required to meet the goals of this objective <p>Concerns about Functionality/Technology Upgrades:</p> <ul style="list-style-type: none"> • Many commenters were concerned about being able to provide the functionality within this time frame • Many were concerned that longitudinal data has an institutional focus—so there will be a huge technological burden to consolidate data across multiple provider settings/systems • Many were concerned about the high expense associated with installing and maintaining patient portals including long-term data storage/retention, especially for small practices • A few recommended that there be a requirement of standard EHR data storage/transfer protocols • Many recommended that we remove the “filter” or “organize” options because of time frame and complexity of this functionality

TOPIC	Electronic Access (EP)
Points, continued	<p data-bbox="475 237 808 268">Clarifications Requested:</p> <ul data-bbox="526 283 1442 947" style="list-style-type: none"> <li data-bbox="526 283 1442 493">• Definition of a “longitudinal record”—is it from birth to death or from the time the patient entered a given facility; how far back it should go; is there a length requirement; will different providers records be linked to one another; will registry information be included etc.? <li data-bbox="526 508 1442 808">• Definition of “relevant information”—include demographic information, future appointments, referrals, results of referrals, orders, interventions, services, and procedures for the patient, vital signs and diagnostic test results/laboratory tests over time, immunization status, progress towards self-management goals, list of care team/providers with contact information and summary of encounters in the past year <li data-bbox="526 823 1442 947">• Which data elements should be incorporated as codified structured data and which has a more narrative form and what degree of flexibility should be presumed in this requirement <p data-bbox="475 1003 727 1035">Accessibility Issues</p> <ul data-bbox="526 1050 1442 1711" style="list-style-type: none"> <li data-bbox="526 1050 1442 1173">• Some suggested replacing the words "view and download" with "receive in electronic form" to allow other routes for data to get to patients <li data-bbox="526 1188 1442 1262">• Include language translations, literacy level options as well as access for patients with visual, motor and other disabilities <li data-bbox="526 1276 1442 1535">• Consider adolescent privacy issues- parents/legal guardians should have the ability to download relevant information for children up to age 13; after age 13, parents/legal guardian should only be allowed to download specified information while protected information (possibly variable by state law) is not available (such as reproductive, gender, drug issues) <li data-bbox="526 1549 1442 1623">• Family/ caregivers of elderly and chronically ill patients should be allowed access <li data-bbox="526 1638 1442 1711">• Strongly consider privacy/security issues to prevent inappropriate (or illegal) disclosures of patient health information

TOPIC	Electronic Access (EP)
Points, continued	Other Items <ul style="list-style-type: none"><li data-bbox="509 279 1414 310">• A few recommended no display of encounters older than one year<li data-bbox="509 323 1430 489">• One provider recommended inclusion of available newborn screening results and indication of any additional actions required to complete newborn screening including review of pending results and confirmatory testing

TOPIC	Patient-Provider Secure Messaging
STAGE 1 FINAL RULE	N/A (Proposed new objective)
HITPC PROPOSED STAGE 2	EPs: Online secure patient messaging is in use
POINTS	<p>Key Points:</p> <ul style="list-style-type: none"> • Most of the comments on this proposed objective expressed support for its inclusion • Some commenters support the idea of patient-provider secure messaging, but are concerned that it is burdensome to clinicians to have this expectation without reimbursement changes (i.e., commenters agree that it provides for a more efficient care communication & management tool in many situations but should be associated with some direct reimbursement) • Some commenters indicated that this should be about electronic communication and be expanded to include SMS/texting in order to meet a broader range of the public (especially certain vulnerable populations); other commenters agree that this is best way to communicate with vulnerable populations, but it would raise new security challenges • Inclusion of this objective should ensure that a range of messaging approaches be permissible, and that should be signaled early (i.e., by the NPRM) in order to allow sufficient time for this new functionality • Some commenters noted that ONC’s Direct Project security protocols make this objective easily achievable because they enable the simple, direct and secure transport of health information between health care providers and their patients • Standards for this objective will be important in order to: <ul style="list-style-type: none"> ○ Require the EHR to generate reports on patient messaging, e.g., frequency of patient messages and the proportion that the provider (or their designee) responded to ○ Make such messaging more effective, so long as multiple methods are allowed and the specific content flexibility need for provider/patient communication is considered

TOPIC	Patient-Provider Secure Messaging
<p>Points, continued</p>	<p>Argument for Support:</p> <ul style="list-style-type: none"> • Specialty medical society believes medical care can be enhanced and unnecessary visits can be reduced via secure messaging • EHR vendors generally support the new objective • Can be especially important for ongoing management of special care needs, such as children identified in newborn screening as children with special needs • It will certainly be critical in the new era of ACOs, medical home, and perhaps other care models where messaging with patients will be necessary <p>Argument in opposition:</p> <ul style="list-style-type: none"> • Burdensome relative to the benefit for providers that serve populations that have low Internet adoption <p>Other Issues:</p> <ul style="list-style-type: none"> • Vendors believe that this objective should be measures via provider attestation and leave actual usage to providers' discretion, in significant part due to reimbursement issues • One commenter recommended that the threshold be set at 50% of patients who designate their preference for communication as electronic • Some commenters expressing support for this objective stated that it is important that the communication be in appropriate language and literacy level and meet the full range of accessibility needs of the population being served (including those with disabilities) • Some concerns that the objective needs better definition, though no specific recommendations for operationalizing that specificity were proposed • Further clarification regarding the requirements and expectations are required as this function is currently not reimbursable nor are there standards to support this • Some commenters suggested that secure messaging with other providers in the office should qualify

TOPIC	Patient-Provider Secure Messaging
<p>PROPOSED OPTIONS</p>	<ol style="list-style-type: none"> 1. Measurement alternatives: <ol style="list-style-type: none"> a. Attestation to it being deployed b. Build standards & certification criteria that ensure that secure messaging and provider responsiveness to their patients can be tracked; measure example suggested is 80% of inbound patient messages are responded to within 24 hours c. Measurement of usage by patients/families 2. Consider expanding to being about communication via multiple media (e.g., to include SMS, phone, etc.), but would also need to determine how that affects “secure” part of “secure messaging” 3. More definition is required around the scope of the objective (e.g., what’s included in secure messaging) <ul style="list-style-type: none"> • Because of the reimbursement issues associated with secure messaging, public comment suggests that HHS might consider how future payment methodologies should account for care provided without in-person encounters, as well as how it fits in with HHS’s other payment/delivery system reform initiatives (e.g., ACOs, PCMH, etc.)

TOPIC	Patient Preferences for Communication
Stage 1 Final Rule	N/A (New)
HITPC Proposed Stage 2	Patient preferences for communication medium recorded for 20% of patients
POINTS	<p>Key Points</p> <ul style="list-style-type: none"> • There was general support for inclusion of this objective in stage 2, though quite varied opinions on how to define and measure it • Most commonly among the comments, suggested communication media were: <ul style="list-style-type: none"> ○ Email, text message, PHR, phone call, fax, web portal ○ Recommendation not to include fax or voicemail as they are not as secure as other currently available electronic methods ○ Generally mail, phone, secure email, and patient portal are the most recommended • Some comments that communication medium options should be left to the provider’s discretion • Some comments that EP and/or EH might not be able to support all communication media (might be too resource-intensive) • Suggestions that the committee specifically define or limit the set of acceptable communication medium <p>Supporting All Types of Patient Preferences</p> <ul style="list-style-type: none"> • Some comments that providers have different types of communication with patients <ul style="list-style-type: none"> ○ Patients might prefer to have appointment reminders in one format, and lab results in another, and it may be infeasible to record all possible permutations of a patient’s preference in the EHR ○ One suggestion was that this objective be satisfied if the patient has at least one communication medium preference recorded in the EHR ○ Other comments say that patients should be able to choose multiple channels (email, text) for different purposes (reminders, prescriptions) in different languages • A few comments that the objective of recording and being aware of patient preference is a positive step in patient engagement; however, concern that recording any preferred communication medium may set an expectation that an EP or EH can actually support all communication media

TOPIC	Patient Preferences for Communication
<p>Points, continued</p>	<p>Requiring Care Provider Compliance with Patient Preference</p> <ul style="list-style-type: none"> • Comment that recording patient preference for communication medium without requiring health care providers to comply with these preferences is not sufficient <p>Time Issues</p> <ul style="list-style-type: none"> • Suggestions that details, including value sets, must be specified with enough lead time for EHRs to incorporate such values in their features and for providers to adjust to the new values and map over any old data • If the HITPC does not plan to dictate what the values should be, specifying that it will be to the EHR developer and provider’s discretion early on would be a valuable signal to the marketplace <p>Secure Email through the National Direct Project</p> <ul style="list-style-type: none"> • One comment that HITPC consider postponing this as an MU objective until after it has been demonstrated that the National Direct Project is successful and has wide adoption • Because many patients will choose email as an option, the National Direct Project is necessary to ensure that this relatively low-tech solution is sufficiently secure for the communication of medical information

TOPIC	HIE Test & Question 9
STAGE 1 FINAL RULE	Performed at least on test of certified EHR technology's capacity to electronically exchange key clinical information
HITPC PROPOSED STAGE 2	Connect to at least three external providers in —primary referral network (but outside delivery system that uses the same EHR) or establish an ongoing bidirectional connection to at least one health information exchange
QUESTION	What additional MU criteria could be applied to stimulate robust information exchange?
POINTS	<p>Key Points:</p> <ul style="list-style-type: none"> • The majority of commenters conditioned support for the proposed stage 2 criteria on requested clarification and addressing of concerns • Definitions/Language Clarifications: <ul style="list-style-type: none"> ○ Connection: Bidirectional - define level of facility or group ○ Primary referral network: 3 external providers with same external network or 3 separate external networks using NHIN Direct? ○ External Providers: A single physician outside of the practice or a lab or radiology center? ○ Different EHR = different vendor? If so, why? Lack of control and trend towards affiliation/consolidation makes it highly likely that a primary referral network will be using the same EHR ○ Provider directories: Context, content, and vocabularies • Emphasize the purpose of such exchange (i.e., to share clinical data either for referral purposes, with registries, for medication reconciliation or simply require exchange of a CCD with providers)

TOPIC	HIE Test & Question 9
Points, continued	<p>Specific Alternatives/Caveats Offered:</p> <ul style="list-style-type: none"> • Some commenters recommended that providers should be able to opt out of requirement in certain circumstances of for specific reasons: <ul style="list-style-type: none"> ○ Ability/access to conduct health information exchange with 3 providers ○ It takes years just to get business associate agreements in place with external providers, let alone having the trust framework and financial resources for health information exchange ○ Does not seem relevant for a multi-specialty group ○ Attest to and prove that an agreement was in place between an external referral network and that progress was underway to create a connection • Connection to a specific entity to satisfy Stage 2 requirement: <ul style="list-style-type: none"> ○ Bi-directional connection to one Accountable Care Organization ○ NHIN Direct, NHIN or Nw-HIN ○ State or regional HIE (multiple commenters): <ul style="list-style-type: none"> ▪ If an HIE exists that meets the requirements, communication should be established; if an HIE does not exist for the region, the communication should be with an authorized party ▪ Creating individual ties with other providers is inconsistent with establishing a strong HIE base and investments already made ▪ Not be required to join an HIE (one or two comments) ○ State-designated entities (could include State Smokers' Helpline) <p>Concerns:</p> <ul style="list-style-type: none"> • Timing dependent on two issues <ul style="list-style-type: none"> ○ Industry may not ready until Stage 3 (for Stage 2 criteria) ○ States not prepared for bidirectional exchange • Some commenters believe that the proposed objective is too aggressive (3 providers and bidirectional – limit to unidirectional) • Comment that there should not be a penalty for proven modes of exchange (e.g., query-based exchange)

TOPIC	HIE Test & Question 9
Points, continued	<p>Other Recommended Revisions to Stage 2 Proposal:</p> <ul style="list-style-type: none"> • Reword to say "Connect to at least three external providers outside the delivery system that do not use the same installation of an EHR, or establish an ongoing bidirectional connection to at least one health information exchange" • Include required successful transmission and receipt of the data • Less consistent approach: Revise to establish a connection with providers who would be most useful to network with (ambiguous requirement that limits the choices do not add benefit for the objective) • Content of information to be exchanged: <ul style="list-style-type: none"> ○ Exchange all data and not just specific summaries or use cases (include point of origination, but institutions should not differentiate between their own data and data from external sources) ○ Should be determined by providers, based on clinical needs • Require that the EP connect to at least 20 percent of the providers in his/her primary referral network, which may be a smaller or larger number depending on the environment in which care is delivered • Recommend considering, instead of proposal, the amount of patient records the EP/EH has made available for standards-based interoperable exchange • Alter language to include connectivity that will be achieved through alternative means such as web-based EHRs or other pipeline connectivity solutions • Consider the IDS model when thinking about health information exchange • Adopt Direct protocol to facilitate this requirement and interoperability

TOPIC	HIE Test & Question 9
Points, continued	<p>Question 9 - Potential Additional MU Criteria for Robust Information Exchange:</p> <ul style="list-style-type: none"> • Multiple commenters recommended no additional criteria and/or to remain flexible (use of menu set) • Establish bidirectional exchange, including the ability to query for data, beyond directed exchange, specifically with public health agencies • Multiple commenters recommended national standards and/or integration for patient consent and authorization (including patient matching and patient consent, patient preauthorized permission for approved/disapproved patient information exchange, and consistency across states) • CCD/CCR: <ul style="list-style-type: none"> ○ Not both CCD and CCR ○ A measure including the preparing, sending, receiving and importing of the necessary CCD/CCR documents from the practices' certified EHR to every other certified EHR natively within the application ○ Require emergency department to obtain a CCD for some percentage of patients where that patient's information is not otherwise available in the EH's HER • Require greater use of HIEs: <ul style="list-style-type: none"> ○ Support patient and family engagement health policy priorities objectives (e.g., HIEs can facilitate communication between EP EHR and patient PHR) ○ Could be used to help an EP satisfy different requirements of MU if, in each of the measures, language was added to the effect of, "or establish an ongoing bidirectional connection to at least one health information exchange with this functionality enabled" • Establish a standard time limit for transmission of key health information between providers when referrals are made for consultation, diagnostic testing, or inpatient care

TOPIC	HIE Test & Question 9
<p>Points, continued</p>	<p>Question 9 - Potential Additional MU Criteria for Robust Information Exchange, continued</p> <ul style="list-style-type: none"> • Adopt measure stating: “Enable a user to electronically record and display patients’ insurance eligibility, and submit insurance eligibility queries to public or private payers and receive an eligibility response in accordance with the applicable standards and implementation specifications” • Require connection to a health plan’s health and wellness program • Consider including electronic reporting of clinical data necessary to fulfill evolving ABMS Maintenance of Certification (MOC) requirements as one criterion for meaningful use • Include accessibility standards (disability) • Include more on specialty and subspecialty components of a patient's care • Include proposed population measures for HIE grantees <p>More Clinically-Specific Additional MU Criteria:</p> <ul style="list-style-type: none"> • Include a pre-natal summary require exchange from the ambulatory setting to the labor and delivery suite • Exchange newborn screening information • Exchange laboratory data • Include radiation and chemotherapy dose information and provide to researchers, clinicians and patients • Pre-operative evaluations in the ambulatory setting should be sent to the anesthesiologist, surgeon, and other members of the operating team • Exchange information from radiology and other imaging centers with EPs • Include functional assessment, social history, and family history in longitudinal care plan • Include pain scores and difficult airway status (anesthesiology providers) • Use Pharmacist/Pharmacy Provider Electronic Health Record (PP-EHR) functional profile and have a pharmacist review the medication usage across the spectrum of care

TOPIC	HIE Test & Question 9
<p>Points, continued</p>	<p>Other Recommendations to Improve Exchange:</p> <ul style="list-style-type: none"> • Harmonizing MU and value-based purchasing quality measures as well as PQRS reporting requirements • Clear adoption roadmap, including for electronic quality measures. • Focus on electronic transmission for Stage 2 • Rely on open, consensus-based standards development processes, such as those undertaken by HL7 Clinical Document Architecture or the Open Data Center Alliance • Centralized or coordinated set of directories should be established to provide reliable access to the complete relevant data set on a patient • Information validation by a 3rd party • Information reconciliation – a means by which patients can flag and correct data in their health record and that identifies such input as coming from the patient • Usability testing of EHRs that ensures healthcare data is captured accurately and in a manner that will enable health information exchange • Include elements from the medical home model, ACOs, and legal health record

TOPIC	Medication Reconciliation
STAGE 1 FINAL RULE	Perform 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 inpatient or emergency department (menu)
HITPC PROPOSED STAGE 2	Medication reconciliation conducted at 80% of care transitions by receiving provider (transitions from another setting of care, or from another provider of care, or the provider believes it is relevant)
POINTS	<p>Key Points:</p> <ul style="list-style-type: none"> • Overall, there was support for the objective conceptually but concern expressed over the increase in threshold secondary to burden for providers to meet the objective • Majority of commenters recommended the objective be moved to core without increasing threshold • Majority of comments requested clearer definitions surrounding care transitions and relevant encounters • Many comments requested alignment with Joint Commission 2011 requirements <p>Policy Comments and Concerns:</p> <ul style="list-style-type: none"> • About 30% of comments requested alignment with 2011 Joint Commission requirements now in effect for 2011 hospital accreditation • Many commenters recommended medication reconciliation be moved to core, but considering the changes in workflow required and burden on providers, recommend threshold being between 50% and 65% • Several comments asked how medication reconciliation will be measured within an EHR • Two comments requested that language needs be addressed and translated medication instructions documented when necessary • While very important, AAP notes that this may not be necessary for well-child visits with healthy children

TOPIC	Medication Reconciliation
<p>Points, continued</p>	<p>Policy Comments and Concerns, continued</p> <ul style="list-style-type: none"> • A few comments addressed non-prescription medications and a subset of these recommended they be included in the medication reconciliation • Questions arose regarding the extent to which effective medication reconciliation depends on HIE and standard medication databases such as RxNorm <ul style="list-style-type: none"> ○ Cited the burden on physician without this functionality ○ Concern regarding relying on patients for notification of care transition and for accurate medication reconciliation ○ Expressed difficulty for specialists to meet this requirement • A couple comments asked to consider the pharmacist role in medication reconciliation <p>Definitional Issues:</p> <ul style="list-style-type: none"> • Approximately 80% of comments asked for clear definitions of “care transition” and/or “relevant” encounter <ul style="list-style-type: none"> ○ Many thought that providers should not have to document “relevant” encounter (or conversely when a transition is not thought to be “relevant”) ○ Recommendation that this be limited to “critical care transitions” such as hospital discharge or transfer of care between primary care providers or providers within the same specialty ○ Recommendation that care transitions should include: Intake, transfers, prescribing events, dispense of medication samples • Several comments addressed timing of medication reconciliation (e.g., within 24 hours of admission vs. within course of admission vs. discharge), highlighting importance of medication reconciliation at discharge <ul style="list-style-type: none"> ○ One comment pointed out that, at times, medication reconciliation is appropriate to be performed by transitioning provider (e.g., at patient discharge) vs. receiving provider • A couple comments asked whether networks such as SureScripts are excluded from requirement of medication reconciliation since they are not a clinical provider

TOPIC	Provide Summary of Care Record
STAGE 1 FINAL RULE	Provide summary of care record for more than 50% of transitions of care or referrals
HITPC PROPOSED STAGE 2	Move to Core from Menu
POINTS	<p>Key Points:</p> <ul style="list-style-type: none"> • Most support this objective, but request a clear and precise definition for four terms: <ul style="list-style-type: none"> ○ Summary of care ○ Transition ○ Referral ○ Electronic • Many commenters suggested a lower threshold for electronic summary of care records for stage 2 <p>Consensus on Items To Be Included in “Summary of Care Record”:</p> <ul style="list-style-type: none"> • Diagnosis/prognosis for active/resolved problems • Names and dosage of prescriptions • Treatment recommendation • Interdisciplinary care team members • Care provided by specialists such as anesthesiologists • Newborn screening data • Patient perspectives and patient-reported outcomes to measure for comparison of EP and EH performance on behavioral and psychological issues • Long-term and post-acute care (LTPAC) including discharge instructions and follow-up needed <p>Recommendations for Lowering the Threshold:</p> <ul style="list-style-type: none"> • A handful of commenters suggested reducing the threshold in stage 2 from 50% to 25% <ul style="list-style-type: none"> ○ Rationale from commenters to reduce threshold include: <ul style="list-style-type: none"> ▪ More time is required to allow health information exchange (HIE) vehicles to mature ▪ To account for uncertainties in the occurrence of a transition/referral of care ▪ More time for the issuance of definitions for standards

TOPIC	Provide Summary of Care Record
Points, continued	<p>Clarification:</p> <ul style="list-style-type: none"> ● Clarify who will have access to summary of care records; suggestions include: <ul style="list-style-type: none"> ○ Registries of primary providers, surgeons, radiation oncologists, medical oncologists, and other specialties to improve the completeness of cancer registry abstracts ○ Public health agencies in order to identify adverse effects from vaccine delivery, outbreak investigations, as well as otherwise unexplained critical illnesses ○ People with limited English proficiency, low literacy levels and visual, motor and other disabilities ○ Include a minimum age of 18 years for access to patient portals to secure parent/guardian privileges <p>Other Comments and Suggestions:</p> <ul style="list-style-type: none"> ● Information should be made available within four days of the patient encounter ● Use a standard format such as CCD or CCR to allow easy and inexpensive transferability when migrating between vendors or clinics ● Ensure cultural appropriateness based on demographic data ● Include reporting mechanisms that accounts for both push-based and query-based interoperability <ul style="list-style-type: none"> ○ Rationale for this includes: <ul style="list-style-type: none"> ▪ Will not place all the responsibility on the transitioning provider (as though all interoperability were push-based), and will account for models of health information exchange make information available to be pulled by the receiving provider (query-based) ▪ Avoids inappropriately penalizing providers in geographic areas where adoption by other providers is low, or providers in areas where a state HIE is not sufficiently advanced to support the current requirements

TOPIC	List of Care Team Members
STAGE 1 RULE	N/A (Proposed new objective)
HITPC PROPOSED STAGE 2	List of care team members (including PCP) available for 10% of patients in EHR
POINTS	<p>Key Points:</p> <ul style="list-style-type: none"> • Commenters are divided on this topic; many note the potential for a list of care team members to improve care coordination, while others question the clinical reason to document and share the care team • For many commenters, their preference for whether to include in stage 2 depended on whether they saw this objective as helping to pave the way for delivery system reforms in care coordination or whether those delivery system reforms would address the need for this objective on their own • Of those that specifically signaled support or opposition, a slight majority expressed support • A large portion of commenters felt that they first needed a better definition of a care team and a data set for tracking EP and EH care team members • Even supporters of including this new objective request minimal initial data requirements <p>Agreement with proposed objective</p> <ul style="list-style-type: none"> • Valuable for care coordination. Considering the future vision for this to be included in HIE, look to CCD (Continuity of Care Document) / CCR (Continuity of Care Record) standards would be informative here. • Relevant dates of care team membership and contact information for providers would increase usability. • Clarify patient care team inclusion criteria. Providers to include in the definition of a care team may include: <ul style="list-style-type: none"> ○ EP: PCP, if available. Specialists as needed. Licensed professionals only preferred. ○ EH: Admitting, Attending, Referring providers. Shift changes in hospitals make this a prohibitive requirement for nursing staff. Specialists/therapists as needed.

TOPIC	List of Care Team Members
<p>Points, continued</p>	<p>Disagreement with proposed objective</p> <ul style="list-style-type: none"> ● Those disagreeing with including this objective in stage 2 generally thought this standard should be defined now and included as a menu item in stage 3. <ul style="list-style-type: none"> ○ PCMH and ACO models for team-based care would help to define models for patient care teams in electronic records. ○ Many vendors do not offer care team functionality, suggesting a need for software development time requirements for EP and EH. ○ Only care team members who are in the organization should be considered. Maintaining lists of external providers is not feasible until state or national provider directories are available (ELPD, ILPD?) ● Some provider types (mental health, for example) have concerns about privacy if this data were made available through PHR or HIE.

TOPIC	Longitudinal Care Plan
STAGE 1 FINAL RULE	N/A (New)
HITPC PROPOSED STAGE 2	Record a longitudinal care plan for 20% of patients with high-priority health conditions
POINTS	<p>Key Points:</p> <ul style="list-style-type: none"> • Given the current lack of detailed specifications, the timelines involved, and the lack of industry standards in this area, the majority of commenters asked that this objective not be included in Stage 2 <ul style="list-style-type: none"> ○ They recommend that standards for longitudinal care plans be developed promptly (by CMS, NQF, others) and the be considered for Stage 3 • A minority of commenters recommended inclusion of the objective due to its importance in supporting care coordination, but agree that more clarity is required regarding the definition • In addition to the definition of a longitudinal care plan, commenters asked for more clarity around definitions and measurement <p>Clarify Longitudinal Care Plan and High Priority Health Condition Definitions</p> <ul style="list-style-type: none"> • A majority of commenters have suggested a lack of clear professional standards for care planning and suggest more research is needed to develop the concept; they also suggested that the HITPC recommend that HHS and others pursue the development of appropriate standards for Stage 3 • Several commenters asked for clarity around who will be responsible for authoring and updating the care plan <ul style="list-style-type: none"> ○ EP (e.g., physician care plan across multiple visits) vs. an EH (e.g., a nursing care plan for the stay) • Alignment of requirements for EH and EP is critical if organizations are to meet this standard • For ambulatory care they could include diabetes, CHF, asthma, COPD, and HIV, cancer

TOPIC	Longitudinal Care Plan
<p>Points, continued</p>	<p>Clarify Longitudinal Care Plan and High Priority Health Condition Definition, continued</p> <ul style="list-style-type: none"> • A large number of commenters asked for a clear definition of “High Priority Health Condition” stating that is currently unclear <ul style="list-style-type: none"> ○ Some suggest considering conditions defined for CMS Value Based Purchasing ○ Concerns from specialty physicians and pediatric physicians regarding needing inclusive definitions of high priority conditions • What is the structured data requirement? • Will the denominator only include active patients? <p>Criterion Considerations Offered by Commenters Who Supported Objective:</p> <ul style="list-style-type: none"> • Several commenters suggest including longitudinal care plans is a valuable addition to MU standards • Most cite data elements already included in other MU specifications (problem list, allergies, etc.) as important components of the longitudinal care plan and can be used for ease of implementation • Most common elements suggested include: <ul style="list-style-type: none"> ○ Diagnoses; Medications; Allergies; Goals of care; Barriers to care; Family/ socioeconomic status/issues; DME and supplies needed; Follow-up and/or specialty visits, Diagnostic and screening tests and Imaging; Safety Measures, Diet and Nutrition. Care Team Members • It was also pointed out that the existing standards for care plans include: <ul style="list-style-type: none"> ○ Patient Plan of Care (PPOC), an inpatient nursing standard; Continuity of care documents (CCR and CCD standards); and OASIS and MDS standards • In pediatric settings, longitudinal care plans are already developed for children with chronic illnesses such as ADHD, asthma, obesity, genetic conditions, and developmental and educational delays • Limit the scope to certain encounter types for ease of understanding and achieving the measure • Some suggest priority for integrating interdisciplinary teams: physicians, nursing, and allied health members

TOPIC	Longitudinal Care Plan
Points, continued	Other Concerns: <ul style="list-style-type: none">• Less valuable until HIEs are functional, since the 'longitudinal' nature of the plan would be confined to providers sharing an EHR

TOPIC	Immunization Reporting to Public Health Agencies
STAGE 1 FINAL RULE	EH and EP: Performed at least one test of certified EHR technology's capacity to submit electronic data to immunization registries and follow up submission if the test is successful
HITPC PROPOSED STAGE 2	EH and EP: Mandatory test. Some immunizations are submitted on an ongoing basis to Immunization Information System (IIS), if accepted and as required by law
POINTS	<p>Key Points:</p> <ul style="list-style-type: none"> • Even Split Regarding Core versus Menu Set: <ul style="list-style-type: none"> ○ Many comments suggested leaving this as a menu set option as opposed to core; however, just as many commented that they supported moving this to core for both EPs and EHs as standards are mature • Exceptions <ul style="list-style-type: none"> ○ This measure should be removed from NIST certification for perioperative providers and other providers who do not administer immunizations, especially for providers who are not legally allowed to administer immunizations <p>Clear Standards</p> <ul style="list-style-type: none"> • Standards from ISDS work for EH reporting, but need a definitive implementation guide that does not vary regionally • Adopt a single standard, preferably HL7 2.5.1 for submission of data • A few commenters stated that the lack of clear implementation specifications makes it is unclear that the data needed for immunization reporting would be available within an EHR; these commenters argue that these measures should be removed until more mature standards are in place • Specific variations of the implementation guides were called out such as some states rejecting messages because they lack data noted as optional in the implementation guide • Need further definition of what "some Immunization data" means; remove the word "some"

TOPIC	Immunization Reporting to Public Health Agencies
<p>Points, continued</p>	<p>Certification and Guidance:</p> <ul style="list-style-type: none"> • As state regulations and law vary, the language should read “as required by the state”, not “as required by law” <ul style="list-style-type: none"> ○ This clarification should be made regarding ongoing submission of data • Some states also have timeframe limitations for when the data should be submitted; suggestions were also made to standardize these requirements across states • Methods of measurement for success should also be defined • Further clarification is needed on what constitutes an acceptable test <ul style="list-style-type: none"> ○ Some noted that the local health authority should provide guidance on this ○ Other comments noted that there need to be more national standards for an acceptable test ○ Some suggest a successful test of 25% of all immunizations administered during a one month time frame <p>State and Local Health issues</p> <ul style="list-style-type: none"> • Many states do not have the capacity to accept Immunization data in an HL7 format; many states still utilize csv or other legacy methods • Need to retain the exclusion if Public Health Department cannot receive the data • Financial support needs to be made available to the Public Health entities to allow them to build the infrastructure to accept the data on onboard providers seeking to meet MU; without this support many comments suggested delaying moving this measure to core until Stage 3 <p>Other Comments:</p> <ul style="list-style-type: none"> • The cost of creating the interfaces to send the data to Public Health is prohibitive and should be covered by state or federal agencies • Many comments requested guidance on the transport layer for sending immunization data • One comment noted that nurses should be included in the list of professionals allowed to review immunization data • The receiver of the data should be clarified as reference to registries was removed

TOPIC	Electronic Lab Reporting to Public Health Agencies
STAGE 1 FINAL RULE	EH: Performed at least one test of certified EHR technology's capacity to provide electronic submission of reportable lab results to public health agencies and follow up submission if the test is successful
HITPC PROPOSED STAGE 2	EH: move Stage 1 to core EP: lab reporting menu; ensure that reportable lab results and conditions are submitted to public health agencies either directly or through their performing labs (if accepted and as required by law)
POINTS	<p>Key Points:</p> <ul style="list-style-type: none"> • Core versus Menu Set: <ul style="list-style-type: none"> ○ Generally comments supported moving this to core for hospitals and some suggested core for both EPs and EHs; many comments suggested removing this measure for EPs ○ Many comments noted the duplication of having EPs submit lab data when the performing labs are already required to report to Public Health ○ Some noted that the additional clinical information could come from the EP EHR for stage 3; however, comments also noted that a large number of reportable conditions could be diagnosed in a physician office without involvement of an external lab. ○ Reportable labs should be submitted from laboratory systems and not the EHR (even for EHs) ○ If EPs are required to submit, would de-duplication be a provider responsibility? ○ Others noted that reportable conditions should be moved to a separate meaningful use measure for EPs and not require ELR for EPs • Exception: <ul style="list-style-type: none"> ○ Exceptions should continue to remain in place in states where the data cannot be accepted by a Public Health agency

TOPIC	Electronic Lab Reporting to Public Health Agencies
Points, continued	<p data-bbox="464 241 678 268">Clear Standards</p> <ul data-bbox="516 283 1421 766" style="list-style-type: none"> <li data-bbox="516 283 1421 409">• Comments noted the importance of a single implementation guide followed closely by all state/local health agencies accepting data <li data-bbox="516 420 1421 546">• Data elements were suggested as mandatory parts of the ELR message including occupation, workplace, school, race, ethnicity, primary language and parent/guardian contact information <li data-bbox="516 556 1421 682">• Specific variations of the implementation guides were called out such as some states rejecting messages because they lack data noted as optional in the implementation guide <li data-bbox="516 693 1421 766">• Some comments suggested that vendors do not support 2.5.1 and many health departments only accept 2.3.1 for ELR <p data-bbox="464 829 831 856">Certification and guidance::</p> <ul data-bbox="516 871 1421 1396" style="list-style-type: none"> <li data-bbox="516 871 1421 997">• Further guidance is required on the meaning of “as required by law,” especially given some states use other regulatory guidance to enforce reporting <li data-bbox="516 1008 1421 1039">• Methods of measurement for success should also be defined <li data-bbox="516 1050 1421 1123">• Further clarification is needed on what constitutes an acceptable test <ul data-bbox="609 1144 1421 1312" style="list-style-type: none"> <li data-bbox="609 1144 1421 1218">○ Some noted that the local health authority should provide guidance on this <li data-bbox="609 1228 1421 1312">○ Other comments noted that there need to be more national standards for an acceptable test <li data-bbox="516 1323 1421 1396">• Clarify that “follow-up submission” implies production status reporting or some other clearly defined success measure

TOPIC	Electronic Lab Reporting to Public Health Agencies
Points, continued	<p data-bbox="467 241 850 268">State and Local Health issues</p> <ul data-bbox="516 285 1414 856" style="list-style-type: none"> <li data-bbox="516 285 1414 405">• Many states do not have the capacity to accept Immunization data in an HL7 format; many states still utilize csv or other legacy methods <li data-bbox="516 422 1414 495">• Need to retain the exclusion if Public Health Department cannot receive the data <li data-bbox="516 512 1414 632">• LOINC and SNOMED codes required by the implementation guide may be difficult for an EH or EP to send and for a health agency to accept <li data-bbox="516 648 1414 856">• Financial support needs to be made available to the Public Health entities to allow them to build the infrastructure to accept the data on onboard providers seeking to meet MU; without this support, many comments suggested delaying moving this measure to Core until Stage 3 <p data-bbox="467 915 704 942">Other Comments:</p> <ul data-bbox="516 959 1386 1079" style="list-style-type: none"> <li data-bbox="516 959 1386 1079">• There were many suggestions for inclusion of other types of lab data to be reported including cancer, pathology and newborn screening results

TOPIC	Syndromic Surveillance Reporting to Public Health Agencies
STAGE 1 FINAL RULE	EH and EP: Performed at least one test of certified EHR technology's capacity to provide Syndromic surveillance data to public health agencies and follow up submission if the test is successful
HITPC PROPOSED STAGE 2	EH and EP: Move to core
POINTS	<p>Key Points:</p> <ul style="list-style-type: none"> • Core versus Menu Set: <ul style="list-style-type: none"> ○ Majority of comments supported moving to core for EH ○ Majority of comments supported leaving as menu set or removing all together for EP • Clear Standards <ul style="list-style-type: none"> ○ Clear standards need to be developed for syndromic surveillance from both an EP and EH viewpoint. ○ Standards from ISDS work for EH reporting, but need a definitive implementation guide that does not vary regionally ○ Adopt a single standard, preferably HL7 2.5.1 for submission of data • Certification and guidance: <ul style="list-style-type: none"> ○ Need guidance on what constitutes an acceptable test; single test should be acceptable per state when multiple hospitals share a single instance of certified software ○ Additionally, clarification is needed on what is meant by "submit if accepted" ○ Method needed to measure success of meeting this measure.

TOPIC	Syndromic Surveillance Reporting to Public Health Agencies
Points, continued	<p data-bbox="477 239 867 268">State and Local Health issues:</p> <ul data-bbox="526 285 1421 810" style="list-style-type: none"> <li data-bbox="526 285 1421 405">• Address privacy issues associated with syndromic surveillance including state laws and regulations that may prohibit sharing of this data with Public Health <li data-bbox="526 422 1421 499">• Many states do not have the capacity to accept syndromic surveillance data, especially from EPs <li data-bbox="526 516 1421 594">• Need to retain the exclusion if Public Health Department cannot receive the data <li data-bbox="526 611 1421 810">• Financial support needs to be made available to the Public Health entities to allow them to build the infrastructure to accept the data on onboard providers seeking to meet MU; without this support many comments suggested delaying moving this measure to Core until Stage 3 <p data-bbox="477 869 716 898">Other Comments:</p> <ul data-bbox="526 915 1421 1035" style="list-style-type: none"> <li data-bbox="526 915 1421 951">• Include cancer registry data <li data-bbox="526 961 1421 1035">• Have a national clearinghouse for submittal of all syndromic surveillance data

TOPIC	Security and Privacy
STAGE 1 FINAL RULE	Conduct or review a security review analysis and implement security updates as necessary and identified deficiencies as part of risk management process
HITPC PROPOSED STAGE 2	(N/A) [Additional privacy and security objectives under consideration via the HIT Policy Committee’s Privacy & Security Tiger Team]
POINTS	<p>Key Points:</p> <ul style="list-style-type: none"> • Consistency across initiatives is key: maintain streamlined security and privacy policies per NHIN Conditions of Trust and Interoperability • Consider identifying which services or functionality may be restricted by individuals for disclosure: Ensure the capability to place restrictions on certain data that has been merged into an EHR from various sources (e.g., genetic testing results not available to their insurance company) • Patient identity issues: The majority of the “identity” cards issued by the nation’s public and private health plans do not prove the identity of the patient in the health system <ul style="list-style-type: none"> ○ Business practices may include asking for a photo ID at registration, but they are not always followed ○ Consider addressing this in the privacy/security framework • Include recommendations for system backups, offsite storage, standardized understanding of technical safety and physical safeguards for EHR systems • A comprehensive privacy and security framework also should include trusted network design characteristics; distributed, rather than centralized, network architecture and strong security safeguards like encryption can reduce the risk and consequences of data breach <p>Legal and Statutory Considerations:</p> <ul style="list-style-type: none"> • Consider state laws, statutes, and regulations in design and implementation of federal standards <ul style="list-style-type: none"> ○ Consider state laws which may preempt the disclosure of behavioral issue (diagnosis, prescriptions, etc.) requiring the hospital or provider to restrict this information from being disclosed

TOPIC	Security and Privacy
Points, continued	<p data-bbox="456 237 1068 268">Legal and Statutory Considerations, continued</p> <ul style="list-style-type: none"> <li data-bbox="602 283 1369 537">○ Consider requirements under the Civil Rights Act and Executive Order 13166, Sec. 504 of the Rehabilitation Act, and the Americans with Disabilities Act regarding provision of culturally appropriate health services, including language services, and access to patients with disabilities <li data-bbox="505 552 1338 625">● Proceed with careful coordination with the HIPAA regulation expansion <li data-bbox="505 640 1369 762">● Work closely with the Privacy and Security Policy Tiger Team regarding objectives around protections for HIV and behavioral health records <li data-bbox="505 777 1393 940">● Require EPs and EHS to work with the HIEs to perform periodic security audits to ensure stored and exchanged data is secure, as well as networks and transmission protocols are in compliance with the standards set forth by the federal government <ul style="list-style-type: none"> <li data-bbox="602 955 1385 1119">○ State level HIEs should work with the local HIEs, EPs and EHS to ensure a set of compliance protocols are available for use that are consistent with state and federal regulations <p data-bbox="456 1134 797 1165">Technical Considerations:</p> <ul style="list-style-type: none"> <li data-bbox="505 1180 1357 1344">● Expand the privacy and security components to address the quality and integrity of “cut and paste” data which may create privacy issues where providers copy information from one patient’s chart to another <li data-bbox="505 1358 1373 1522">● Further define "access to the record" including how the patient is able to gain access into the system/database, which is critical in determining and developing security protocols for logical access to their data <li data-bbox="505 1537 1377 1701">● Significant concerns around the technology to support stage 2 initiatives of patient portal access and making parts of the chart accessible to patients (e.g., discharge instructions, clinical summaries) <li data-bbox="505 1715 1276 1879">● Input from different vendors of security devices such as SmartCards that provide user-specific encryption and identity/password securities: Consider impact of device technologies to implement stronger security/privacy

TOPIC	Security and Privacy
Points, continued	<p data-bbox="456 239 805 270">Suggestions on Definition:</p> <ul data-bbox="505 285 1393 1262" style="list-style-type: none"> <li data-bbox="505 285 1393 405">• Consider delineating by different groups regarding security and access to one’s patient data (e.g., adolescents, pediatrics, diminished mental state, etc.) <li data-bbox="505 422 1393 495">• Need to distinguish between functionality requirements and provider requirements that are independent of functionality <li data-bbox="505 512 1393 585">• Concerns expressed that time to adequately test and release security and privacy initiatives is critical <li data-bbox="505 602 1393 989">• Access and understanding of data privacy is of critical importance; one recommendation suggested the following Stage 2 standard: <ul data-bbox="602 737 1393 989" style="list-style-type: none"> <li data-bbox="602 737 1393 989">○ “Ensure that communications with consumers and patients regarding the privacy of their health information and, particularly, the choices and decisions they need to make regarding consents, directives and authorizations are done in a manner that is culturally appropriate and meets their linguistic and literacy needs” <li data-bbox="505 1005 1393 1167">• Criteria for which there is no policy defining use (e.g., hash function, encryption) should explicitly state that they not be required of every EHR/EHR Module where it may inhibit the patient care and workflow <li data-bbox="505 1184 1393 1262">• Define what “adequate privacy and security protections” means for all relevant standards <p data-bbox="456 1320 886 1352">Suggestions on Implementation:</p> <ul data-bbox="505 1367 1393 1444" style="list-style-type: none"> <li data-bbox="505 1367 1393 1444">• Robust and thorough testing in these areas should be monitored and regulated to ensure adequate testing

TOPIC	Question # 2: Accessibility for People with Disabilities
QUESTION	For patient/family access to personal health information, what standards should exist regarding accessibility for people with disabilities (e.g., interoperability with assistive technologies to support those with hearing, visual, speech, or mobile impairments)?
POINTS	<p>Key Points:</p> <ul style="list-style-type: none"> • PHRs and other HIT technology should adhere to the standards set forth in Section 508 of the Rehabilitation Act for accessible Electronic and Information Technology • Many specific and detailed considerations were provided by commenters <p>General Suggestions on Readability:</p> <ul style="list-style-type: none"> • PHRs and patient portals should offer adjustable font sizes and text to speech in the patient’s preferred language • Suggestion that all icons, fonts, and color schemes pass readability and usability tests for staff of all ages, in difficult lighting environments, and when treating patients <p>Vendor-Related Comments:</p> <ul style="list-style-type: none"> • Comment that EHR vendors be required to meet the Americans with Disabilities Act standards for electronic and written communication • Suggestion that EHR program developers create programs to allow for online log-in using voice recognition programs, use of a reading pen, and on-screen keyboards, mouse connected to word prediction programs, and other assistive devices <p>Physician Burden:</p> <ul style="list-style-type: none"> • Some concern expressed that these standards could burden small physician practices

TOPIC	Question # 2: Accessibility for People with Disabilities
Points, continued	<p>Issues of Scope:</p> <ul style="list-style-type: none"> • Comment that there are many standards already in existence for accessibility and this is a more appropriate question for the HIT Standards Committee • Suggest that HITSC make specific suggestions which could then be evaluated for feasibility along particular timelines; many standards may require additional development and would not be reasonable for MU timelines <p>Standards to Consider:</p> <ul style="list-style-type: none"> • Suggestion to consider the W3C Web Content Accessibility Guidelines (WCAG 2.0 AA) which is an internationally recognized and sanctioned set of robust technical standards that flexibly encompasses information technology as it evolves to provide programs, services and information • Suggestion that ONC consult the National Institute of Standards and Technology regarding the standards used for voting technology, including those that are accessible to individuals with disabilities, and discuss the adaptability of those standards to EHRs <p>Specific Disability-Related Accommodations:</p> <ul style="list-style-type: none"> • Comments on the provision of specific disability-related accommodations: <ul style="list-style-type: none"> ○ Visual Impairments: <ul style="list-style-type: none"> ▪ Text-to-speech software, screen readers ▪ Alternative forms of media, such as audiotapes ▪ Alternative formats, such as screen enlargements and accompanying printed materials in large print and Braille ▪ Auditory descriptions, video description ▪ User-adjusted formats (e.g., text that can be enlarged by the user)

TOPIC	Question # 2: Accessibility for People with Disabilities
Points, continued	<p data-bbox="459 241 1403 281">Specific Disability-Related Accommodation, continued:</p> <ul style="list-style-type: none"> <li data-bbox="516 289 1403 506">○ Hearing Impairments: <ul style="list-style-type: none"> <li data-bbox="565 323 1403 363">▪ Text captioning <li data-bbox="565 365 1403 436">▪ Telecommunications Relay Service (TRS) with ASL interpreter and/or text input <li data-bbox="565 438 1403 506">▪ User-adjusted formats (e.g., sounds that can be amplified by the user) <li data-bbox="516 520 1403 592">○ Speech Impairments: <ul style="list-style-type: none"> <li data-bbox="565 562 1403 592">▪ Availability of email communication <li data-bbox="516 606 1403 772">○ Mobility Impairments: <ul style="list-style-type: none"> <li data-bbox="565 640 1403 680">▪ Alternative keyboard and mouse system <li data-bbox="565 682 1403 722">▪ Speech input system <li data-bbox="565 724 1403 772">▪ Wheelchair accessibility <li data-bbox="516 787 1403 858">○ Impairments in manual dexterity: <ul style="list-style-type: none"> <li data-bbox="565 829 1403 858">▪ Avoid real-time chat communication requiring keyboard input <li data-bbox="516 873 1403 1039">○ Learning disabilities affecting reading ability: <ul style="list-style-type: none"> <li data-bbox="565 907 1403 947">▪ Simple and clear language <li data-bbox="565 949 1403 989">▪ Screen enlargements <li data-bbox="565 991 1403 1039">▪ Auditory descriptions <li data-bbox="516 1054 1403 1220">○ Photosensitive seizure disorders <ul style="list-style-type: none"> <li data-bbox="565 1096 1403 1220">▪ Compliance with Section 508 of the Rehabilitation Act, which requires flickering confined to 2-55 Hertz per second cycles to avoid seizure-inducing flickering effects <li data-bbox="516 1234 1403 1892">○ For all disabilities <ul style="list-style-type: none"> <li data-bbox="565 1276 1403 1400">▪ Use of the 21st Century Communications & Video Accessibility Act of 2010, P.L. 111-260 as a model, including hearing-aid compatibility of all telephones <li data-bbox="565 1402 1403 1474">▪ Compliance with the Web Accessibility Initiative guidelines, http://www.w3.org/WAI/ <li data-bbox="565 1476 1403 1661">▪ Compliance with the United States Access Board’s Electronic and Information Technology Accessibility Standards, http://www.access-board.gov/sec508/standards.htm <li data-bbox="565 1663 1403 1787">▪ Compliance with the United States Access Board’s Telecommunications Act Accessibility Guidelines, http://www.access-board.gov/telecomm/rule.htm <li data-bbox="565 1789 1403 1892">▪ Use as a resource of the AccessIT database on electronic and information technology, http://www.washington.edu/accessit/

TOPIC	Question # 3: Reducing Barriers to Patient Access
QUESTION	What strategies should be used to ensure that barriers to patient access – whether secondary to limited internet access, low health literacy and/or disability – are appropriately addressed?
POINTS	<p>Key Points:</p> <ul style="list-style-type: none"> • Better access to the internet (municipal free wifi), computers (public libraries), and educational services to help patients learn how to use these technologies <ul style="list-style-type: none"> ○ Provide access in public areas such as libraries, hospital waiting areas, and public health clinics where people could go to obtain internet access to view their records ○ Foster improved privacy requirements for public use computers such as in libraries • Coordinate with other agencies working on various elements of patient access like the FCC, CDC, and AHRQ • Some comments stated that issues affecting patient access to HIT are unrelated to MU and should be addressed separately <p>Suggestions for Improving Patient Access:</p> <ul style="list-style-type: none"> • Suggestion to provide patients who do not otherwise have access with in-office access to their electronic data • Comment that currently only 54% of adults with disabilities use the internet, compared with 81% of adults without disabilities <ul style="list-style-type: none"> ○ Costs of internet access and assistive technology needed to effectively use the internet and electronic technology are very high ○ Complexity of setup, upgrade and use of assistive technology is another barrier • Suggestion that MU objectives include consideration of mechanisms to assist people with disabilities and aging people to help overcome the costs of access and assistive technology • Suggested strategy is to support cloud-based assistive technology and accessibility features (see http://gpil.org)

TOPIC	Question # 3: Reducing Barriers to Patient Access
Points, continued	<p>Issues of Scope:</p> <ul style="list-style-type: none"> • Suggestion that HITPC be clear about the scope and intent of any requirement in this area and be aware of what the current state of the market is before getting too deeply into enumerating requirements for it <p>PHR/EHR functionality:</p> <ul style="list-style-type: none"> • Suggestions that CMS/ONC could make recommendations on PHR/EHR functionality to mitigate barriers to patient access • Another area to address these barriers are the working definitions of the patient-centered medical home and accountable care organizations <p>Associated Costs with Improving Access:</p> <ul style="list-style-type: none"> • Some concern that engineering the EHR software to accommodate low literacy/disabilities could make it prohibitively expensive and/or more difficult for care providers to understand and use <p>Data Collection:</p> <ul style="list-style-type: none"> • Critical component of a long-term strategy to address barriers to patient access is data collection; a data-based system that does not collect data on the health characteristics and accessibility needs of patients with disabilities essentially treats people with disabilities as if they are invisible <ul style="list-style-type: none"> ○ Section 4302 of the ACA mandates the collection of data on “disability status for applicants, recipients, or participants” by “any federally conducted or supported health care or public health program, activity or survey” ○ In addition, Section 4302 requires the collection of additional information related to specific, known barriers to healthcare that affect individuals with disabilities and that contribute to the health and health care disparities they experience

TOPIC	Question # 3: Reducing Barriers to Patient Access
Points, continued	<p>Threshold Requirement for Internet Access:</p> <ul style="list-style-type: none"> • Suggestion that in recognizing the internet access limitation, ONC and CMS should never require 100 percent delivery of patient information electronically, so that healthcare providers can accommodate the needs of patients without fear of reprisal by the government <p>Alignment with other Efforts to Improve Patient Access</p> <ul style="list-style-type: none"> • Recommendation that HHS conduct a study of this issue that includes a catalog of existing federal programs both within and outside HHS to address these important needs <ul style="list-style-type: none"> ○ Similar suggestion that ONC and CMS conduct focus groups with consumers, patients, family caregivers, and others who play a role in helping consumers and patients access and interpret information ○ Following focus groups, ONC and CMS should share information with consumer and patient advocacy and support organizations (e.g., HIT regional extension centers), EHR vendors, providers and other identified stakeholders to determine how best to implement solutions

TOPIC	Question # 4: Experiences Incorporating Patient-Reported Data
QUESTION	What are providers' and hospitals' experiences with incorporating patient-reported data (e.g., data self-entered into PHRs, electronically collected patient survey data, home monitoring of biometric data, patient suggestions of corrections to errors in the record) into EHRs?
POINTS	<p>Key Points:</p> <ul style="list-style-type: none"> • Divergent opinions on the value of patient-reported data • Even many opponents of general incorporation of patient-reported data believe that “results of structured electronic surveys and objective data collected by biometric devices” generally can be trusted and can be helpful • Supporters believe that it is critically important to incorporate patient-reported data into the EHR for the following reasons: <ul style="list-style-type: none"> ○ Many errors or omissions exist in clinicians' records, and the best way to ensure that these data are corrected is to have patient/families review for accuracy and suggest corrections; they believe this is a big patient safety issue ○ Some important data about a patient's health and care management can only be obtained via patient report (e.g., behavioral and social data) ○ Behavioral and social indicators probably play an equal or more important role than medical data in determining health outcomes; therefore, lack of incorporation is perhaps the biggest current shortcoming of EHRs in addressing the behavioral drives of health that currently plague US health care system ○ Other important data can be obtained more comprehensively, more efficiently, and/or more accurately (e.g., home blood pressure monitoring) ○ In some cases, it is the only way to ensure that high-risk patients get appropriately monitored (e.g., pulse oximetry for infants with critical congenital heart disease (CCHD))

TOPIC	Question # 4: Experiences Incorporating Patient-Reported Data
Points, continued	<p>Key Points, continued</p> <ul style="list-style-type: none"> • Opponents of the concept believe that patient-reported data: <ul style="list-style-type: none"> ○ Include incomplete or deliberately falsified data ○ Unstructured data that are hard to use systematically ○ Offer no clinical value (e.g., “The general notion that patient self-entered data is clinically useful for a majority of patient encounters is absurd”) • Some providers fully support patient/family-reported data entry, but it should be in a segregated field, and then providers can seek clarifications via secure messaging or at a future visit; patient-reported outcome data, however, should be incorporated directly • Providers have some liability concerns if data are not segregated/clearly demarcated <p>Vendors generally agree with this approach</p>
PROPOSED OPTIONS	<ol style="list-style-type: none"> 1. Distinguish types of patient-reported data <ol style="list-style-type: none"> a. Providers generally will trust structured data from electronic surveys and biometric devices b. Providers have differing views on the value and utility of less structured patient/family-reported data 2. For the latter category, consider having a process for segregating patient-reported data <ol style="list-style-type: none"> a. All clinical data could be tagged with a source b. Providers could review all data before incorporating into their own EHRs

TOPIC	Question # 6: Group Reporting Option
QUESTION	Should Stage 2 allow for a group reporting option to allow group practices to demonstrate meaningful use at the group level for all EPs in that group?
POINTS	<p>Key Points:</p> <ul style="list-style-type: none"> • Almost half the commenters that commented on this topic expressed a general agreement with providing this option (without further comment) • Strong support for group reporting as an option/choice per practice • The ability to break down individual and group reporting should be maintained as well as qualifying on both the group and individual level. • Some thought this should only be an option for quality measure reporting • Some conditioned support on the size of the group practice or other conditions • A few expressed disagreement with this option for Stage 2, while others requested studies before providing this option <p>Supporting Rationale:</p> <ul style="list-style-type: none"> • Commenters often cited that a group reporting option will reduce administrative burden • Many commenters expressed an opinion that permitting group reporting may harness EP competition that will improve performance with peers within the group practice • Commenters also stated that this option would: <ul style="list-style-type: none"> ○ Facilitate physician teamwork and care coordination ○ Be consistent with group practice reporting available under PQRS ○ Be helpful for specialists and community health centers ○ Allow the “EHR accepters” to bring along the “non EHR accepters” for reporting purposes ○ Serve to shine a light on system-level performance, thus creating incentive to invest in system-wide improvement programs <p>Concerns:</p> <ul style="list-style-type: none"> • Allows an organization to implement MU selectively, which does not advance the goals of MU • Accountability: <ul style="list-style-type: none"> ○ Group practice reporting could mask individual clinicians’ performance and quality ○ Fairness - “non accepters” could bring down the whole group • Logistics for large group reporting differ from those of a small office • Supporting alternate methods of meaningful use demonstration could impose additional software requirements in an already compressed and dangerous development timeline for Stage 2

TOPIC	Question # 6: Group Reporting Option
Points, continued	<p>Clarifications:</p> <ul style="list-style-type: none"> • Define group practice (size, legal entity, tax ID, same EHR implementation and pattern of use, same as for PQRS, specialty inclusion, etc.) • Can groups choose the option before reporting period begins, at the end, or switch at any point? • Clarification needs to be provided as to whether the intent is to enable reporting functionality with no impact on reporting requirements or to modify reporting requirements and be quantitative at the group level, i.e., percentage by group not by EP • What impact is there if the group has multiple specialties with differing measures? • How will non-reporting EPs within a group be captured? • How would the regulations handle providers in the same practice using different modules from different vendors to achieve MU or one provider having an exception for eRx and another not? <p>Other Comments:</p> <ul style="list-style-type: none"> • If a group is on a single EHR, then all of the EHR capability requirements could be submitted once for the entire group, and those use measures that are associated with individual providers could be reported on an individual provider basis • Performance Standards: <ul style="list-style-type: none"> ○ Establish minimum performance standards to avoid a scenario where a small number of high-performing providers overshadow a large number of underperformers in their group ○ Group standards should be no lower than individual standards ○ Group reporting should include a higher level of engagement than a specific provider to help address inequity concerns about the burden of proof for an individual versus a member of a group; for example: <ul style="list-style-type: none"> ▪ Providers should have a twenty-five percent (25%) engagement level in Stage 2 for patients to access their information ▪ With a group reporting option, we would recommend that this level be thirty-percent (30%) in Stage 2 ▪ Medicaid – Allow states the option to permit the definition of organization to be calculated at the department/specialty level

TOPIC	Question # 8: Elements of Care Plans & Summaries
QUESTION	What are the reasonable elements that should make up a care plan, clinical summary, and discharge summary?
POINTS	<p>Key Points:</p> <ul style="list-style-type: none"> • The principle concern from the comments suggest that elements ultimately identified be easily accommodated through the use of the CCD and not require additional document types <ul style="list-style-type: none"> ○ Given this constraint, many providers have suggested that this information come from clinical data standards, be evidence-based and should not be developed based on this comment period alone • A majority of comments also asked that all forms contain a standard format and provided the flexibility for more specific condition specific forms <ul style="list-style-type: none"> ○ This information should be determined with input from multiple stakeholders <p>Items General to All Three Documents (Care Plans & Both Summaries):</p> <ul style="list-style-type: none"> • Areas of Consensus: <ul style="list-style-type: none"> ○ List of all medications with appropriate instructions ○ Patient specific educational resources with clear appreciate care instructions for care givers and family members ○ The documents must be accessible to patients with disabilities ○ Care team with defined roles and responsibilities and contact information ○ Problem Lists ○ Diagnostic tests ordered and treatments • Other items for consideration: <ul style="list-style-type: none"> ○ List of active diagnosis (prioritized for clinical summary) ○ Refer to CDA HL7 standards ○ Reflect patient preferences (including acceptance and denied resources)

TOPIC	Question # 8: Elements of Care Plans & Summaries
Points, continued	<p>Elements in Care Plan:</p> <ul style="list-style-type: none"> • Areas of Consensus: <ul style="list-style-type: none"> ○ Long and short-term goals with timeframe <ul style="list-style-type: none"> ▪ Steps to accomplish goals ▪ Continued progress ○ Vital signs ○ Pain score and functional status ○ Home care instructions ○ Longitudinal care plan with action steps, priorities, goals, and timelines <ul style="list-style-type: none"> ▪ Family and patient involvement ▪ Goals should be linked to objectives and services • Other items for consideration: <ul style="list-style-type: none"> ○ AD status ○ Community resources ○ Links to standards of care ○ Newborn screening ○ DMEs and Supplies ○ ADLs ○ Follow up care ○ Safety Measures ○ Diet and Nutrition ○ Functional Limitations ○ Activity Permitted ○ Orders for Follow up care and Treatment ○ Any home care visits ordered- PT/OT/Speech/Home Health Aid ○ Rehabilitation Potential ○ Discharge plans ○ Consider using OASIS and MDS - tools as a guide to create a standard for longitudinal care plan ○ Psychosocial and family needs

TOPIC	Question # 8: Elements of Care Plans & Summaries
Points, continued	<p>Discharge Instructions:</p> <ul style="list-style-type: none"> • Areas of Consensus: <ul style="list-style-type: none"> ○ Provisions for follow up care ○ Diet ○ Patient’s condition on discharge ○ Information provided to patient/family regarding discharge instructions (activities and any special instructions) ○ Summary of the care, treatment, and services provided • Other items for consideration: <ul style="list-style-type: none"> ○ Clinical referrals ○ Chief complaint ○ History ○ Reason for hospitalization ○ Invasive procedures performed ○ Patient’s disposition at discharge <p>Clinical Summary:</p> <ul style="list-style-type: none"> • Items for consideration: <ul style="list-style-type: none"> ○ Allergies ○ Treatment expectations with patient feedback option ○ Clinical strategies ○ Patient motivation and possible obstacles ○ Contacts

TOPIC	Question # 10: Need for Stepping-Stone Objectives for Stage 3?
QUESTION	There are some new objectives being considered for stage 3 where there is no precursor objective being proposed for stage 2 in the current matrix. We invite suggestions on appropriate stage 2 objectives that would be meaningful stepping-stone criteria for the new stage 3 objectives.
POINTS	<p>Key Points:</p> <ul style="list-style-type: none"> • Overall, there was considerable resistance to incorporating additional stage 2 objectives for the purpose of stepping stones to stage 3 [Staff note: In many comments (outside of responses to Q#10), vendors and providers specifically requested both more lead time and specific guidance regarding where stage 3 is going for long-term planning purposes] • The majority of comments asked that the proposed stage 3 objectives be more clearly defined • Specific recommendations for stage 2 stepping stones generally included test cases, pilots and research to determine effectiveness and feasibility of implementation, rather than adding objectives in stage 2

TOPIC	Question # 10: Need for Stepping-Stone Objectives for Stage 3?
Points, continued	<p data-bbox="467 233 911 270">Policy Comments and Concerns:⁴</p> <ul style="list-style-type: none"> <li data-bbox="467 281 1370 541"> <p>• Several commenters believe that stage 2 stepping stones to stage 3 recommended objectives are not necessary</p> <ul style="list-style-type: none"> <li data-bbox="565 373 1159 411">○ There are ample new objectives in stage 2 <li data-bbox="565 417 1370 541">○ Achievement of MU is not necessarily a linear process and innovation will allow for the introduction of new stage 3 objectives <li data-bbox="467 554 1297 592">• There were several responses addressing the issue of timing <li data-bbox="467 598 1300 768">• Several commenters, in concordance with AMA comments, suggested that information exchange infrastructure must be developed and readily accessible in order to implement the suggested stage 3 objectives <li data-bbox="467 779 1378 903">• A few commenters expressed disappointment that the patient and family engagement objectives proposed in stage 3 are not instead included in stage 2 <li data-bbox="467 913 1344 1037">• A few comments addressed usability regarding these new objectives and suggested researching ways these objectives can effectively be incorporated into workflow <li data-bbox="467 1050 1370 1178">• One vendor recommended 12-18-month lead time for developing technology associated with the majority of proposed stage 3 objectives

⁴ Note that many of these address standards and certification as some of the technology required for these objectives has not yet been developed

TOPIC	Question # 10: Need for Stepping-Stone Objectives for Stage 3?
Points, continued	<p data-bbox="459 241 1036 273">Policy Comments and Concerns, continued</p> <ul style="list-style-type: none"> <li data-bbox="459 283 1156 315">● Stage 2 stepping stone suggestions per objective: <ul style="list-style-type: none"> <li data-bbox="565 325 1047 357">○ Electronic self-management tools <ul style="list-style-type: none"> <li data-bbox="662 367 1356 535">▪ Provide information on evidence-based tools that have been shown to improve patient and family engagement (and ensure effectiveness of tools before including as MU objective) <li data-bbox="662 546 1356 630">▪ Consider tools that can be offered outside of EHR <ul style="list-style-type: none"> <li data-bbox="760 598 1226 630">● Test PHR as distribution medium <li data-bbox="662 640 1356 724">▪ Develop or recommend tools for 1-2 high priority conditions such as diabetes, asthma, CHF <li data-bbox="662 735 1242 808">▪ Include self-management tools in clinical summaries <li data-bbox="565 819 1023 850">○ Exchange information with PHR <ul style="list-style-type: none"> <li data-bbox="662 861 1339 945">▪ Stage 2 certification: Ability to easily identify and segregate PHR collected data <li data-bbox="662 955 966 987">▪ Test of functionality <li data-bbox="565 997 982 1029">○ Patient-reported experience <ul style="list-style-type: none"> <li data-bbox="662 1039 1372 1165">▪ Provide standards on data collected, how to report, and standards for communication if collected via PHR or other form <li data-bbox="662 1176 1388 1302">▪ In stage 2, define data to be collected and how/what will be reported; patient access would be defined in stage 3 <li data-bbox="662 1312 1339 1396">▪ Recommend pilots in stage 2 to determine need, appropriateness and effectiveness <li data-bbox="662 1407 1356 1701">▪ Alignment and Collaboration <ul style="list-style-type: none"> <li data-bbox="760 1438 1356 1617">● ABIM offered collaboration on designing and testing reliability and feasibility of this objective in light of ABIM’s extensive work with patient experience surveys <li data-bbox="760 1627 1356 1701">● Align with NCQA/AHRQ patient experience surveys

TOPIC	Question # 10: Need for Stepping-Stone Objectives for Stage 3?
<p>Points, continued</p>	<p>Policy Comments and Concerns, continued</p> <p>Stage 2 stepping stone suggestions per objective, continued:</p> <ul style="list-style-type: none"> ○ Upload and incorporate patient-generated data <ul style="list-style-type: none"> ▪ S&I initiative to define data, establish message format, transport it and demonstrate that the requirement is addressed through an initial implementation ▪ Develop/ require software that tags patient information ○ Public health button <ul style="list-style-type: none"> ▪ Establish system for local notification and meet criteria by “functionally enabled” system ▪ Some commenters expressed that this may impede progress/ stifle innovation <ul style="list-style-type: none"> • Goal should be for automatic transmission of information without manual processing ○ Patient-generated data to public health agencies (feedback generally negative) <ul style="list-style-type: none"> ▪ S&I initiative to define data, establish message format, transport it and demonstrate that the requirement is addressed through an initial implementation ▪ Determine authentication of information and mechanism for reconciliation of conflicting reports ▪ Generate use cases for this objective ▪ Public will need to be educated on specific data and methods for reporting – this may be achieved with a transparent, collaborative initiative through ONC ▪ Some commenters suggested that this is not under the purview of EHs or EPs nor in the scope of certified EHRs

TOPIC	Question # 10: Need for Stepping-Stone Objectives for Stage 3?
<p>Poins, continued</p>	<p>Definitional Issues</p> <ul style="list-style-type: none"> ● Although no new objectives should be added, substantial public work may be done to serve as a valid and reliable signal to the market <ul style="list-style-type: none"> ○ Electronic self-management tools <ul style="list-style-type: none"> ▪ Define set of tools and require one ○ Exchange information with PHR <ul style="list-style-type: none"> ▪ Develop a structure of defining what information should be exchanged – standards-based data exchange and limited data sets; data from PHR should remain in an inalterable state so cannot be changed within EHR ▪ Define message, transport and access approaches ▪ Clarify that providers will not be required to exchange information with advertising based PHRs that do not have a business associate relationship with the healthcare provider ○ Patient-reported experience <ul style="list-style-type: none"> ▪ Several comments raised concern and cautioned that this objective if implemented must ensure patient confidentiality ○ Upload and incorporate patient-generated data <ul style="list-style-type: none"> ▪ Define what data will be received, message format(s) and transport; test one for certification ▪ Define mechanisms, transport and standards for the following: electronically collected patient survey data, biometric home monitoring data, and patient suggestions of corrections to errors in the record <ul style="list-style-type: none"> ● Consider how patient will make corrections, how the data will present in EHR (suggest segregated data), how it will be structured, how the provider will be alerted of a patient correction and response time required of provider (suggest referencing HIPAA guidelines)

TOPIC	Question # 10: Need for Stepping-Stone Objectives for Stage 3?
Points, continued	<p data-bbox="456 233 1403 275">Definitional Issues, continued</p> <ul style="list-style-type: none"> <li data-bbox="565 285 1403 583">○ Public health button <ul style="list-style-type: none"> <li data-bbox="662 327 1403 541">▪ Define notifiable conditions, outbound message format and transport; define inbound alerts, follow-up requests, any specifics on how alerts are expected to be displayed, and the nature and specific action to be taken on follow-up requests <li data-bbox="662 552 1403 583">▪ Define how this objective would be measured <li data-bbox="565 642 1403 810">○ Patient-generated data to public health agencies <ul style="list-style-type: none"> <li data-bbox="662 684 1403 810">○ Define data to be gathered and how (during visit or via portal), and message format and transport standards for submission

TOPIC	Timing of Stage 2 MU
POINTS	<p>Key Points:</p> <ul style="list-style-type: none"> • Many commenters expressed concern over the tight timeframe for transitioning to stage 2, focusing on feasibility, development, testing and HIT safety. Most of these comments came from: <ul style="list-style-type: none"> ○ Hospitals/health systems ○ Physicians ○ EHR vendors • Many commenters expressed support for moving forward with the current proposed timeline in order to ensure that the escalator maintains an adequate trajectory to appropriately advance beyond the data capture and sharing focus of stage 1, and that sufficient incentive dollars remain to encourage stage 2 and 3 MU. Most of these comments came from: <ul style="list-style-type: none"> ○ Consumers ○ Purchasers ○ Health plans and disease/care management organizations ○ HIT advocates (e.g., coalitions, technology companies) • Timing issues were also reflected in comments many specific proposed MU objectives; that is, concerns about implementing new functionalities were often placed in the context of the current proposed timeframe <p>Detailed Argument for Slowing Down Timeline:</p> <ul style="list-style-type: none"> • Ensure adequate timelines to achieve transitions; the proposed timeline does not allow sufficient time for safe development, testing and release of new functionalities, distribution of upgrades, and training of user on the new features • Learn fully from provider experience in implementing stage 1; it is important to understand how real-world providers (from a wide variety of settings) are doing with stage 1 prior to raising the bar • Coupled with other changes in the health information sector (e.g., ICD-10, HIPAA 5010 transaction standards, state-level HIEs, etc.), MU changes have the potential to overwhelm providers

TOPIC	Timing of Stage 2 MU
Points, continued	<p data-bbox="467 237 1235 268">Detailed Argument for Slowing Down Timeline, continued</p> <ul style="list-style-type: none"> <li data-bbox="516 281 1382 491">▪ A short timeframe for implementing new MU objectives may cause some providers (particularly those with fewer resources) to not continue on the path toward meaningful use of EHRs- this is particularly problematic because Medicare providers can't "skip a year" <p data-bbox="467 506 1065 537">Detailed Argument for Maintaining Timeline:</p> <ul style="list-style-type: none"> <li data-bbox="467 552 1382 852">• Stage 1 focused primarily on data capture and sharing whereas the major benefits of EHRs in quality, safety, and efficiency will be achieved by advanced clinical processes (the stated focus of stage 2) and improved outcomes (the stated focus of stage 3); there is a pressing need to demonstrate EHR benefits, and they cannot be realized if rapid progress is not made in advancing MU expectations <li data-bbox="467 867 1382 1077">• Delays in implementation of additional functionality (e.g., more advanced quality measures and interoperability standards) will hinder health reform and interoperability efforts; the escalator approach is required to allow for effective delivery system reforms being considered by CMS <li data-bbox="467 1092 1382 1209">• Extending transition from stage 1→2 would set precedent for stage 2→3 transition, and could make it more difficult to ever progress beyond stage 2 <li data-bbox="467 1224 1382 1434">• According to HITECH statute, no incentives can be paid to providers after 2016, which means that there would be little or no positive incentives (as opposed to penalties) to drive providers to stage 3 (and potentially fewer dollars would be at stake for stage 2 depending on timing specifics)

TOPIC	Standards for Certification Criteria
NOTE	Although the HITPC RFC did not solicit comments on standards criteria generally (they were identified as issues with a few specific proposed objectives), ONC staff identified comment submissions that offered suggestions for standards and summarized them in this document.
POINTS	<p>Key Points:</p> <ul style="list-style-type: none"> • The current timeline (stage 2 final rule release in mid-2012 and stage 2 slated to begin in October 2012 (hospitals) or January 2013 (EPs) does not provide sufficient time for vendors/developers to make necessary modifications or successfully implement a new system, particularly in light of regulatory pressures surrounding 5010 and ICD-10 • Align objectives, measures, certification criteria and standards in proposals • Standardized data elements are critical to interoperability and nationwide exchange of health information (e.g., cardiovascular vocabulary and data elements for syndromic surveillance) and implementation guides • Interoperability standards should be either HL7 v2.x type, or (preferably) XML standards (consistent with PCAST) • Overly specific and comprehensive standards for EHR functionality and use risks slowing innovation in the development of new EHR technologies and ways to use and leverage EHR technology • Complete the CCD/CCR initiative and specify the required documents (will provide more portability) or use only CCD • Consider the development of standards for usability testing. <p>Granular Points:</p> <ul style="list-style-type: none"> • Adopt standards/code sets for: <ul style="list-style-type: none"> ○ Procedure reporting ○ Patient assessments for home health agencies (HITSP) ○ Functional disease registries (method of designating medical home vs. non-continuity patients), unless PopHealth is able to meet these requirements for EHRs ○ Medication allergies (UNII 3 for food and potentially medication allergies is not consistently used in medication or non-medication allergy databases) ○ Lab results ○ Exchanging data with PHRs (HITSP C32 CDA or evolution) ○ Recording medication and medical devices provided to patients (GS1 GTIN standards)

TOPIC	Standards for Certification Criteria
Points, continued	<p>Granular Points, continued</p> <ul style="list-style-type: none"> • A CCD, at a minimum, should contain the patient’s problem list, medication list, allergy list, and recent laboratory results • Adopt: MEDCIN for clinical structured knowledge base, LOINC for Lab data, RxNORM/NDC for Rx data, and SNOMED CT for clinical data (e.g., problems) • A standard set of tags should be enforced that capture at a minimum the source, version, privacy, and perhaps validity information that must guide the safe and compliant use of the tagged data • Use Pharmacist/Pharmacy Provider Electronic Health Record (PP-EHR) functional profile • Public Health Agencies <ul style="list-style-type: none"> ○ Support and leverage “Direct” as a transport method to public health (and HIEs) ○ Allow public health data, such as immunizations administered, to leave the EHR in a CCD format as long as the specific public health data can be transformed into the appropriate HL7 version for the public health agency to accept the data ○ Define explicitly what kinds of conditions (by ICD-9CM) need to be reported so that vendors can automate the capture of such data ○ Define a standard for county-level public health agency communication ○ Allow direct reporting from Laboratory Information Systems (LIMS) (certify it) • Focus on the S&I Framework (use for care plans), Nw-HIN, Direct Project, and State HIE funding on facilitating the clear standards and standards-based transport mechanisms needed for robust exchange, including bi-directional and query-based exchange. • EHR systems should include a standardized interface for receiving and distributing narrative dictation • Mandate the ability to exchange data and mandate the exchange of the consolidated pharmaceutical list (the master medication record) and require the ability to produce and send a copy of the Clinical Data Record, C 32 or C64, as minimum data • Map development has not yet occurred between SNOMED CT and ICD-10-CM/PCS; therefore, some Stage 2 requirements may not have valid mapping tools for linking EHR systems’ data with the contemporary coding systems that will be in place October 1, 2013