

Draft Recommendations Meaningful Use Stage 3

Meaningful Use Work Group

Paul Tang, chair

George Hripcsak, co-chair

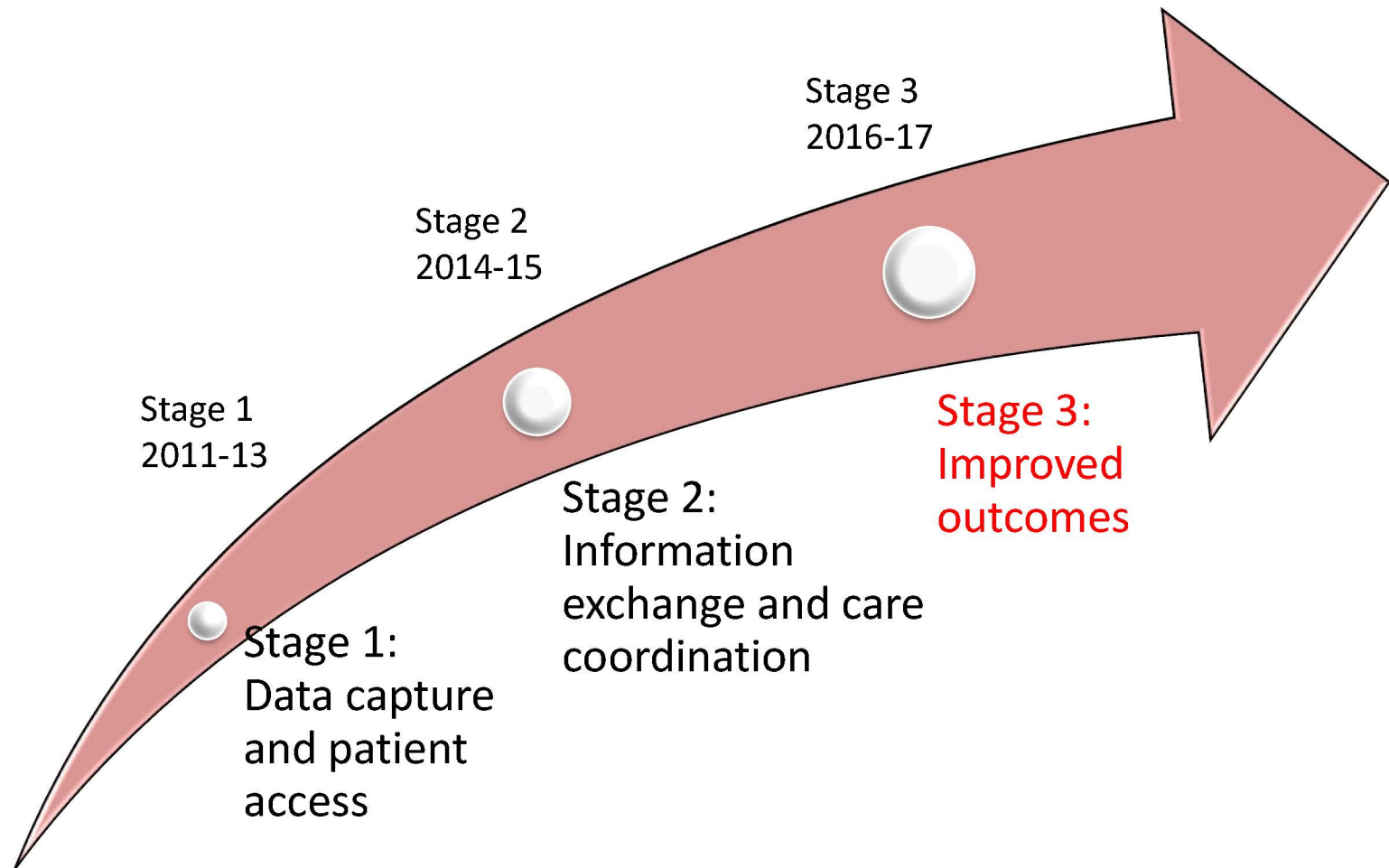
Meaningful Use Workgroup Membership

- **Paul Tang, Chair**, Palo Alto Medical Center
- **George Hripcsak, Co-Chair**, Columbia University
- **David Bates**, Brigham & Women's Hospital *
- **Christine Bechtel**, National Partnership for Women & Families *
- **Neil Calman**, The Institute for Family Health
- **Tim Cromwell**, Department of Veterans Affairs
- **Art Davidson**, Denver Public Health Department *
- **Paul Egerman**, Software Entrepreneur
- **Marty Fattig**, Nemaha County Hospital (NCHNET)
- **Joe Francis, MD**, Veterans Administration
- **Leslie Kelly Hall**, Healthwise
- **David Lansky**, Pacific Business Group on Health
- **Deven McGraw**, Center for Democracy & Technology
- **Marc Overhage**, Siemens Healthcare
- **Greg Pace**, Social Security Administration
- **Marty Rice**, HRSA
- **Robert Tagalicod**, CMS/HHS
- **Charlene Underwood**, Siemens *
- **Michael H. Zaroukian**, Sparrow Health System
- **Amy Zimmerman**, Rhode Island Department of Health and Human Services

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Stages of Meaningful Use

Improving Outcomes



Original Principles for MU Recommendations

- Supports **new model of care** (e.g., team-based, outcomes-oriented, population management)
- Addresses **national health priorities** (e.g., NQS, prevention, Partnerships for Patients, Million Hearts)
- **Broad applicability** (since MU is a floor)
 - Provider specialties (e.g., primary care, specialty care)
 - Patient health needs
 - Areas of the country
- Not "topped out" or **not already driven by market forces**
- **Mature standards** widely adopted or could be widely adopted by 2016 (for stage 3)

Lessons from Stages 1

Implications for Stage 3

Stage 1 Experience

- **Substantial increase in adoption** rates and effective use
- **Mandatory floor** creating network effects
- **Thresholds** consistently **exceeded**
- **Consistent use** across the years
- **Reporting** requirements have considerable costs and **burden**
- Prescriptive, “**forced march**” **impacts** available resources for **innovation** or to address **local priorities**

Implications for Stage 3

- Creating **critical mass** of users and data in electronic form
- **Rising tide** is floating boats (e.g., setup for patient engagement, HIE)
- Once **MU functionality** is implemented, it is **used**
- **Gains** from stage 1 (and 2) will **persist**
- **Stage 3: Simplify** and reduce **reporting** requirements
- **Stage 3: Rely** more heavily on **market pull** (e.g., new payment incentives); **promote** innovative approaches i.e., **reward good behavior**

Additional Goals for Stage 3

- Address key gaps (e.g., information exchange, patient engagement, reducing disparities) in EHR functionality that the market will not drive alone, but are essential for all providers
- Simplify MU objectives where higher level objective implies compliance with subsumed process objectives
- Consider alternative pathway where meeting performance and/or improvement thresholds deems satisfaction of subset of relevant MU functionality implicitly required to achieve performance/improvement

Simplification/Consolidation Work

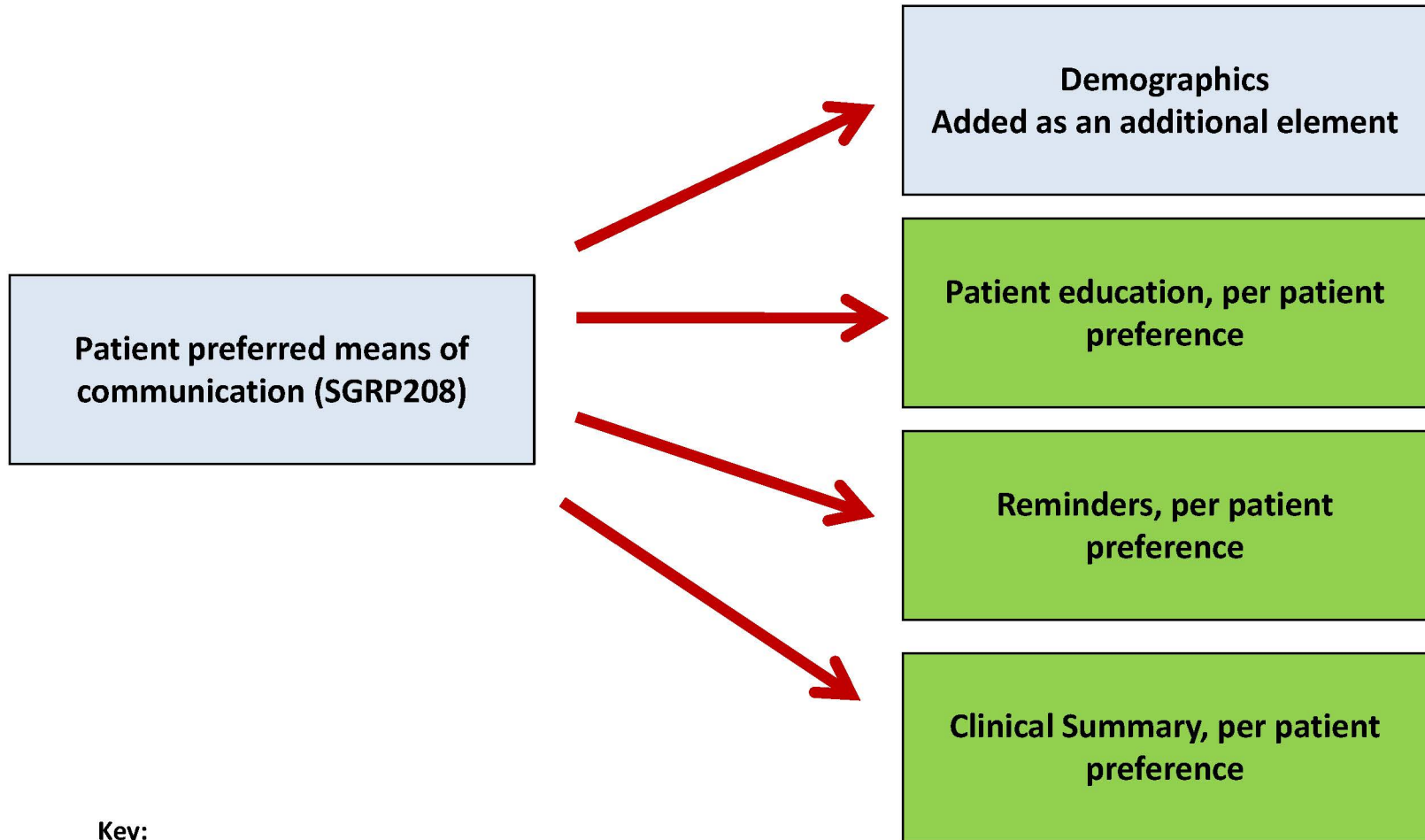
Simplification/Consolidation Summary

- 43 objectives, simplified to 27 (3 of the 26 are proposed for a future stage)
- All criteria included in certification
 - Focus on advanced uses (e.g. recording data vs. use data)
 - Credit for objectives that should be standard of practice after stages 1 and 2

Types of Simplification/Consolidation

1. Advanced within concept of another objective
2. Duplicative concepts - objective becomes certification only
3. Demonstrated use and can trust that it will continue

1 - Advanced within Concept of Another Objective

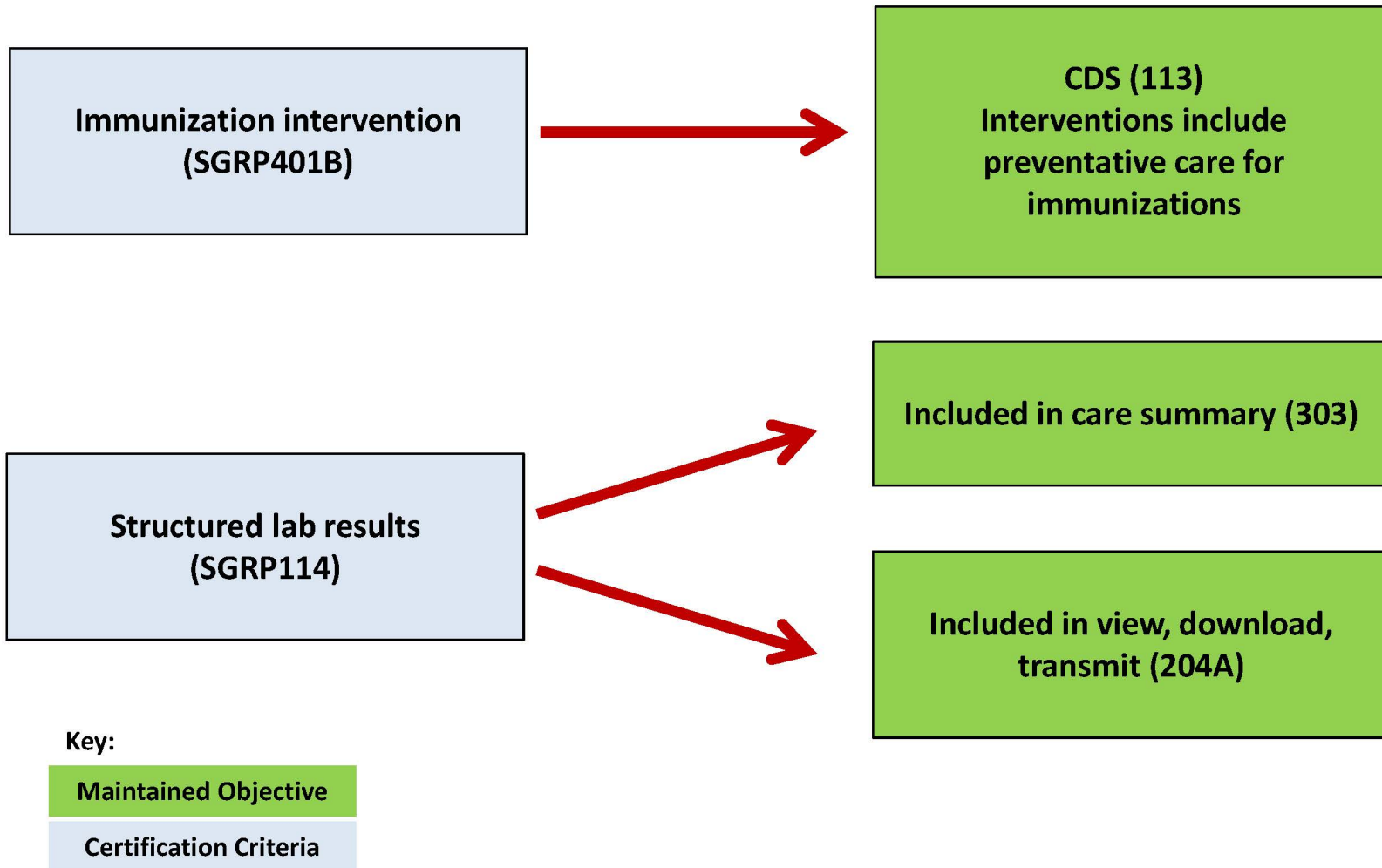


Key:

Maintained Objective

Certification Criteria

2 - Duplicative Concepts



3 - Demonstrated Use

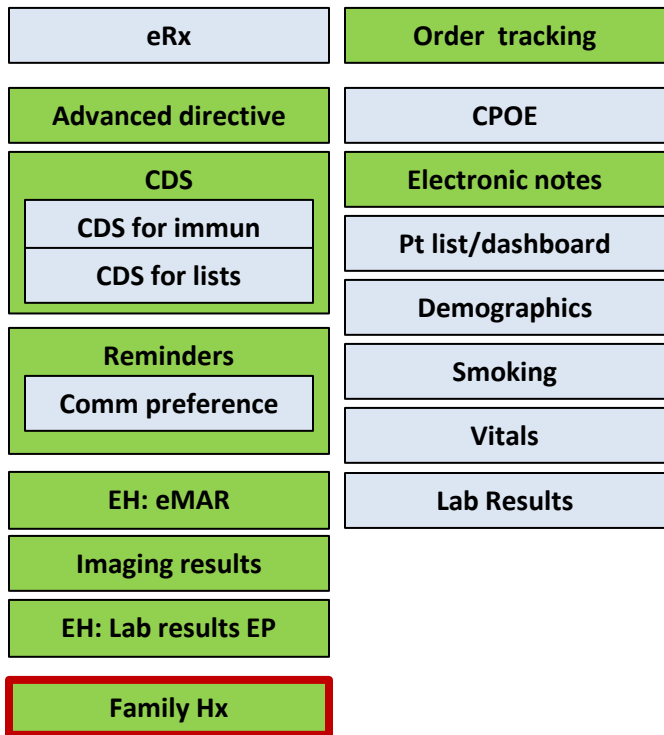
- Patient lists and dashboards (SGRP115)
 - Needed for population management and quality measurement
 - How to measure use?
 - Existing external drivers that will drive use (new models of care)

Simplification/Consolidation Summary

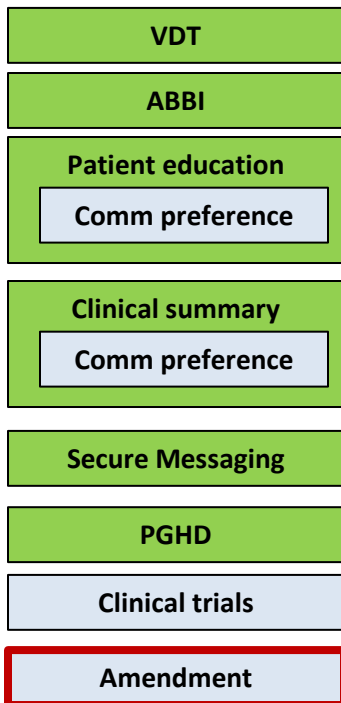
ID#	RFC Concept	Status after Consolidation
SGRP101	CPOE	Certification Only - meds included in reconciliation (302), labs and rad included in order tracking (122))
SGRP103	eRx transmission and formulary	Certification Only - Demonstrated use by MU3
SGRP104	Demographics	Certification Only (new items: SOGI, O/I codes, pt comm pref)
SGRP105	Problem list	Certification Only - included in care summary and VDT
SGRP106	Active med list	Certification Only - included in care summary and VDT
SGRP107	Active med allergy list	Certification Only - included in care summary and VDT
SGRP108	Vitals	Certification Only - included in care summary and VDT
SGRP109	Smoking status (13 or older)	Certification Only - included in care summary and VDT
SGRP112	Advance directive	Maintain
SGRP113	CDS	Maintain (add immunization CDS (401B))
SGRP114	Lab tests as structured data	Certification Only - included in care summary and VDT
SGRP115	Patient lists and dashboards	Certification Only - Demonstrated use by MU3
SGRP116	Reminders for follow-up	Maintain
SGRP117	EH: eMAR	Maintain
SGRP118	Imaging results (ECGs)	Maintain
SGRP119	Record family Hx	Maintain, but also include in VDT (204A) and care summary (303)
SGRP120	Record electronic notes	Maintain
SGRP121	EH: Provide lab results to EPs	Maintain
SGRP122	Order Tracking	Maintain (CPOE merged here)
SGRP123	UDI	Newly added
SGRP130	CPOE for referrals	Certification Only - integrate in ToC care summary (303)
SGRP204A	VDT, ABBI	Maintain (add fam hx (119), amendments (204D))
SGRP204B	PGHD	Maintain
SGRP204D	Amendment to record online	Certification Only - integrate into VDT (204A)
SGRP205	Clinical summary	Maintain (per pt preference)
SGRP206	Patient education	Maintain (per pt preference)
SGRP207	Secure messaging	Maintain
SGRP208	Communication preferences	Certification Only - integrate into pt ed, clinical summary, reminders
SGRP209	Identify clinical trials	Certification Only
SGRP302	Reconcile meds, med allg, probs	Maintain
SGRP303	Care summary	Maintain
SGRP304	FUTURE - Care plan	Future Stage
SGRP305	Referral loop	Maintain
SGRP308	Notification of health event	Maintain
SGRP125	FUTURE - RxHx adherence, PDMP	Future Stage
SGRP127	FUTURE - Interdisc problem list	Certification Only - included into reconciliation (302)
SGRP401A	Immunization registry	Maintain
SGRP401B	CDS from immunization Hx	Certification Only - integrate into CDS (113)
SGRP402A	Submission of ELR	Maintain
SGRP402B	Case reports to PHA	Certification Only
SGRP403	Syndromic surveillance data	Maintain
SGRP404	Cancer registry	Merged registry objectives
SGRP405	Specialty registry	
SGRP407	FUTURE - HAI rpts NHSN	
SGRP408	FUTURE - Adverse rpt to FDA/CDC	Future Stage

Simplification/Consolidation – Another View

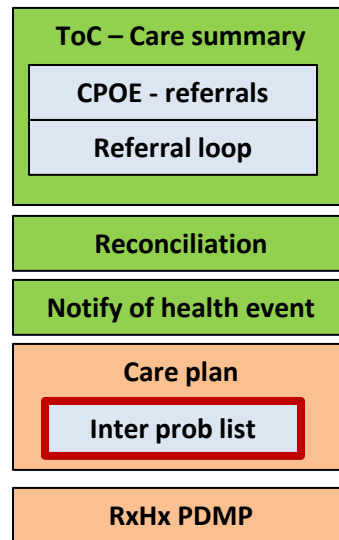
Quality, safety, reducing health disparities



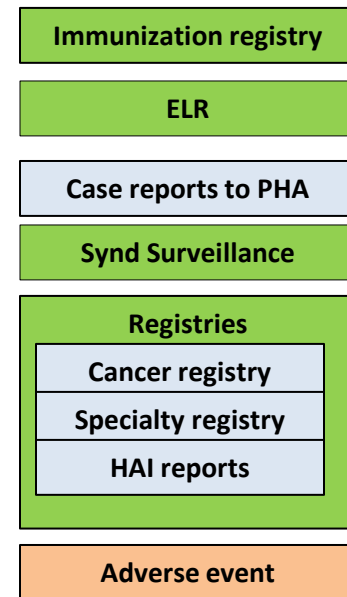
Engaging patients & families



Improving care coordination



Population & public health



Key:

Maintained Objective

Certification Criteria

Future Stage

Changed after consolidation work

Simplification Update

- Reviewing items consolidated and categorizing into the following
 - Removal
 - removal as a use requirement
 - Implication
 - no reporting requirement, but there is an expectation that it will continue to happen
 - Consolidation
 - consolidated with another item and it needs to be measured
- Goal is to simplify and reduce reporting requirements

Subgroup 1: Improving quality, safety, efficiency and reducing health disparities

David Bates, Subgroup Lead

George Hripcsak, MU WG Co-Chair

SGRP112: Advance Directive

Stage 2 Final Rule	Stage 3 Recommendations
<p>EH MENU Objective: Record whether a patient 65 years old or older has an advance directive</p> <p>EH MENU Measure: More than 50 percent of all unique patients 65 years old or older admitted to the eligible hospital's or CAH's inpatient department (POS 21) during the EHR reporting period have an indication of an advance directive status recorded as structured data.</p>	<p>Ensure standards support in CDA by 2016</p> <p>EP MENU/EH Core Objective: Record whether a patient 65 years old or older has an advance directive</p> <p>EP MENU/EH Core Measure: More than 50 percent of all unique patients 65 years old or older admitted to the eligible hospital's or CAH's inpatient department (POS 21) during the EHR reporting period have an indication of an advance directive status recorded as structured data.</p>

SGRP113: Clinical Decision Support

Stage 2 Final Rule	Stage 3 Recommendations
<p>EP/EH Objective: Use clinical decision support to improve performance on high-priority health conditions</p> <p>Measure:</p> <p>1. Implement five clinical decision support interventions related to four or more clinical quality measures at a relevant point in patient care for the entire EHR reporting period. Absent four clinical quality measures related to an EP, eligible hospital or CAH's scope of practice or patient population, the clinical decision support interventions must be related to high-priority health conditions. It is suggested that one of the five clinical decision support interventions be related to improving healthcare efficiency.</p> <p>2. The EP, eligible hospital, or CAH has enabled and implemented the functionality for drug-drug and drug-allergy interaction checks for the entire EHR reporting period.</p>	<p>Objective: Use clinical decision support to improve performance on high priority health conditions</p> <p>Measure:</p> <p>1. Implement 15 clinical decision support interventions or guidance related to five or more clinical quality measures that are presented at a relevant point in patient care for the entire EHR reporting period. The 15 CDS interventions should include two or more of one or more interventions in each of the following areas, as applicable to the EP's specialty:</p> <ul style="list-style-type: none"> • Preventive care (including immunizations) • Chronic disease management, including hypertension* (e.g., diabetes, coronary artery disease) • Appropriateness of lab and radiology orders • Advanced medication-related decision support** (e.g., renal drug dosing) • Improving the accuracy or completeness of the problem list for one or more chronic conditions <p>2. The EP, eligible hospital, or CAH has enabled the functionality for drug-drug and drug-allergy interaction checks for the entire EHR reporting period.</p> <p>Certification criteria:</p> <p>1. Ability to track CDS triggers, how the provider responded to improve the effectiveness of CDS interventions, and the reason for overriding</p> <p>2. Ability to flag preference-sensitive conditions, and provide decision support materials for patients.</p> <p>3. Capability to check for a maximum dose in addition to a weight based calculation.</p> <p>4. Use of structured SIG standards</p> <p>5. Ability for EHRs to consume external CDS interventions from central repositories (e.g., rules for drug-drug interactions, rules for reporting diseases for public health departments immunization recommendations and rules, preference-sensitive care lists)</p> <p>6. Ability to use structured information within systems to support clinicians' maintenance of up-to-date accurate problem lists, med lists, and med allergy lists. Systems provide decision support about additions, edits, and deletions for review and action, but would not automatically add anything to these lists without professional action.</p> <ul style="list-style-type: none"> • EHR systems should provide functionality to code medication allergies including its related drug family to code related reactions. Adapt and further develop existing standards to define the nature of reactions for allergies (i.e. severity). <p><small>* This will assist in achieving the CDC's goal of improvements in hypertension control. **Kuperman, GJ. (2007) Medication-related clinical decision support in computerized provider order entry systems a review. <i>Journal of the American Medical Informatics Association: JAMIA</i>, 14(1):29-40. *** Phansalkar, S., van der Sijs, H., Tucker, A., Desai, A., Bell, D., Teich, J., Middleton, B., Bates, D (2012). Drug-drug interactions that should be noninterruptive in order to reduce alert fatigue in electronic health records. <i>Journal of the American Medical Informatics Association: JAMIA</i>, 2013;20:3 489-493</small></p>

SGRP116: Reminders

Stage 2 Final Rule	Stage 3 Recommendations
<p>EP Objective: Use clinically relevant information to identify patients who should receive reminders for preventive/follow-up care and send these patients the reminder per patient preference.</p> <p>Measure: More than 10% of all unique patients who have had two or more office visits with the EP within the 24 months before the beginning of the EHR reporting period were sent a reminder, per patient preference when available</p>	<p>EP Objective: Use clinically relevant clinical, social, or family history information (beyond demographics) to identify patients who should receive reminders for preventive/follow-up care</p> <p>EP Measure: More than 20% of all unique patients who have had one office visit with the EP within the 24 months prior to the beginning of the EHR reporting period were sent a reminder for preventive or follow-up care (does not include appointments), in the format of the patient's preference (e.g., telephone, text, email), if the provider has the technical capability.</p> <p>Exclusion: Specialists may be excluded for prevention reminders (could be more condition specific).</p> <p>Certification criteria: HITSC to identify what the communication preferences options should be for this objective . Providers should have the ability to select options that are technically feasible, these could include: Email, text, patient portal, telephone, regular mail.</p>

SGRP117: eMAR

Stage 2 Final Rule	Stage 3 Recommendations	Proposed for Future Stage	Questions / Comments
<p>EH Objective: Automatically track medications from order to administration using assistive technologies in conjunction with an electronic medication administration record (eMAR)</p> <p>Measure: More than 10 percent of medication orders created by authorized providers of the eligible hospital's or CAH's inpatient or emergency department (POS 21 or 23) during the EHR reporting period for which all doses are tracked using eMAR.</p>	<p>EH Objective: Automatically track medications from order to administration using assistive technologies in conjunction with an electronic medication administration record (eMAR)</p> <p>Measure:</p> <p>1) More than 30% 50% of medication orders created by authorized providers of the eligible hospital's or CAH's inpatient or emergency department (POS 21 or 23) during the EHR reporting period are tracked using eMAR.</p> <p>2) Mismatches (situations in which a provider dispenses a medication and/or dosing that is not intended) are tracked for use in quality improvement.</p>		

Imaging - 118

Stage 2 Final Rule	Stage 3 Recommendations	Proposed for Future Stage	Questions
<p>MENU Objective: Imaging results consisting of the image itself and any explanation or other accompanying information are accessible through Certified EHR Technology.</p> <p>MENU Measure: More than 10 percent of all tests whose result is one or more images ordered by the EP or by an authorized provider of the eligible hospital or CAH for patients admitted to its inpatient or emergency department (POS 21 and 23) during the EHR reporting period are accessible through Certified EHR Technology.</p>	<p>EP MENU/EH CORE Objective: Imaging results consisting of the image itself and any explanation or other accompanying information are accessible through Certified EHR Technology.</p> <p>EP MENU/EH CORE Measure: More than 10 imaging study encounters (anything associated with an order, e.g., radiology, photographs, images of ECG), ordered by the EP or by an authorized provider of the eligible hospital or CAH for patients admitted to its inpatient or emergency department (POS 21 and 23) during the EHR reporting period are accessible (e.g. viewed directly in the EHR or a link to a separate system reached via the EHR) through Certified EHR Technology</p> <p>Certification criteria: CEHRT should be able to display along with the image the radiation exposure associated with the imaging study.</p>	<p>Standards work needed to present imaging and radiation dosing information to the patient including the part of the body was radiated?</p>	<p>What barriers could be encountered in moving this to core?</p>

Family History – 119

No Change

Stage 2 Final Rule	Stage 3 Recommendations
<p>MENU Objective: Record patient family health history as structured data</p> <p>MENU Measure: More than 20 percent of all unique patients seen by the EP or admitted to the eligible hospital or CAH's inpatient or emergency department (POS 21 or 23) during the EHR reporting period have a structured data entry for one or more first-degree relatives</p>	<p>MENU Objective: Record patient family health history as structured data</p> <p>MENU Measure: More than 20 percent of all unique patients seen by the EP or admitted to the eligible hospital or CAH's inpatient or emergency department (POS 21 or 23) during the EHR reporting period have a structured data entry for one or more first-degree relatives</p> <p>Certification criteria: Make sure that every appropriate CDS intervention can take into account family history for outreach (need to move that functionality along as part of preventative outreach).</p>

Electronic Notes - 120

Stage 2 Final Rule	Stage 3 Recommendations
<p>MENU Objective: Record electronic notes in patient records</p> <p>MENU Measure: Enter at least one electronic progress note created, edited and signed by an eligible professional for more than 30 percent of unique patient office visits. Notes must be text-searchable. Non-searchable scanned notes do not qualify but this does not mean that all of the content has to be character text. Drawings and other content can be included with text notes under this measure.</p> <p>MENU Measure: Enter at least one electronic progress note created, edited, and signed by an authorized provider of the eligible hospital's or CAH's inpatient or emergency department (POS 21 or 23) for more than 30 percent of unique patients admitted to the eligible hospital or CAH's inpatient or emergency department during the EHR reporting period.</p> <p>Electronic progress notes must be text-searchable. Non-searchable, scanned notes do not qualify, but this does not mean that all of the content has to be character text. Drawings and other content can be included with text notes under this measure.</p>	<p>CORE EP/EH objective: Record electronic notes in patient records</p> <p>EP: Within four calendar days, record an electronic progress note, authored by the eligible professional, for more than 30 % of unique patient office visits. Notes must be text-searchable. Non-searchable scanned notes do not qualify but this does not mean that all of the content has to be character text. Drawings and other content can be included with text notes under this measure</p> <p>EH: Within four calendar days of admission, record an electronic progress note (excluding the discharge summary) created, edited, and signed by an authorized provider of the eligible hospital's or CAH's inpatient or emergency department (POS 21 or 23) for more than 30 percent of unique patients.</p>

Hospital Labs - 121

Stage 2 Final Rule	Stage 3 Recommendations	Proposed for Future Stage	Questions / Comments
<p>EH MENU Objective: Provide structured electronic lab results to ambulatory providers</p> <p>EH MENU Measure: Hospital labs send structured electronic clinical lab results to the ordering provider for more than 20 percent of electronic lab orders received</p>	<p>EH CORE Objective: Provide structured electronic lab results to eligible professionals.</p> <p>EH CORE Measure: Hospital labs send (directly or indirectly using LOINC) structured electronic clinical lab results to the ordering provider for more than 80% 50% of electronic lab orders received. Will address threshold based upon stage 2 experience.</p>		

Order Tracking - 122

Stage 2 Final Rule	Stage 3 Recommendations
<p>NEW</p>	<p>EP Objective: The EHR is able to assist with follow-up on orders to improve the management of results.</p> <p>EP Measure: 10% of test results, including those which were not completed are acknowledged within 3 business days of when the test was performed.</p> <p>EP Measure: 10% of results (e.g. , consult requests (referrals), laboratory, radiology, pathology) are acknowledged within 3 business days of when the request/test is resulted.</p> <p>Certification Criteria: EHRs must have the ability to:</p> <ul style="list-style-type: none"> • identify abnormal test results as determined by the laboratory • provide the option at ordering time for the provider to indicate a due date for any order • notify the ordering provider when results are available or not completed by a certain time • record date and time that results are reviewed and by whom

UDI - 123

Stage 2 Final Rule	Stage 3 Recommendations
NEW	<p>MENU objective: EPs and EHs should record the FDA Unique Device Identifier (UDI) when patients have devices implanted for each newly implanted device.</p> <p>MENU Measure: EPs and EHs should record the UDI when patients have the device implanted for 80% of patients seen within the EHR reporting period.</p> <p>Definition of a Medical Device (FD&C Act) Section 201(h): "A medical device is: an instrument, apparatus, implement, machine, contrivance, implant, in vitro reagent, or other similar or related article, including a component part, or accessory which is:</p> <ul style="list-style-type: none">• recognized in the official National Formulary, or the United States Pharmacopoeia, or any supplement to them, intended for use in the diagnosis of disease or other conditions, or in the cure, mitigation, treatment, or prevention of disease, in man or other animals, or•intended to affect the structure or any function of the body of man or other animals, and which does not achieve its primary <p>intended purposes through chemical action within or on the body of man or other animals and which is not dependent upon being metabolized for the achievement of any of its primary intended purposes."</p>

CPOE - 101

Stage 2 Final Rule	Stage 3 Recommendations
<p>Eligible Provider (EP) Objective: Use computerized provider order entry (CPOE) for medication, laboratory and radiology orders directly entered by any licensed healthcare professional who can enter orders into the medical record per state, local and professional guidelines</p> <p>Eligible Hospital (EH) Objective: Use computerized provider order entry (CPOE) for medication, laboratory and radiology orders directly entered by any licensed healthcare professional who can enter orders into the medical record per state, local and professional guidelines</p> <p>EP/EH Measure: More than 60 percent of medication, 30 percent of laboratory, and 30 percent of radiology orders created by the EP or authorized providers of the eligible hospital's or CAH's inpatient or emergency department (POS 21 or 23) during the EHR reporting period are recorded using CPOE.</p>	<p>Objective: Use computerized provider order entry (CPOE) for medication, laboratory and radiology orders directly entered by any licensed healthcare professional who can enter orders into the medical record per State, local and professional guidelines to create the first record of the order.</p> <p>CPOE for medications includes drug-drug interaction (DDI) checking for “never” combinations as determined by an externally vetted list.</p> <p>Measure: More than 60% of medication, laboratory, and radiology orders created by the EP or authorized providers of the eligible hospital's or CAH's inpatient or emergency department (POS 21 or 23) during the EHR reporting period are recorded using CPOE</p> <p>Certification Criteria: EHR must be able to consume an externally supplied list of “never” DDIs, using RxNorm and NDF-RT standards along with a TBD DDI reactions value set.</p> <p>Certification Criteria for EPs: EHR must have the ability to transmit lab orders using the lab order and results Interface guidelines produced by the S&I Framework Initiative.</p>

SGRP103: ePrescribing

Stage 2 Final Rule	Stage 3 Recommendations
<p>EP/EH Objective: Generate and transmit permissible prescriptions electronically (eRx)</p> <p>Measure: More than 50% of all permissible prescriptions, or all prescriptions written by the EP and queried for a drug formulary and transmitted electronically using CEHRT.</p> <p>EH MENU Objective: Generate and transmit permissible discharge prescriptions electronically (eRx)</p> <p>EH MENU Measure: More than 10 percent of hospital discharge medication orders for permissible prescriptions (for new, changed, and refilled prescriptions) are queried for a drug formulary and transmitted electronically using Certified EHR Technology</p>	<p>EP Objective: Generate and transmit permissible prescriptions electronically (eRx)</p> <p>EP Measure: More than 50% of all permissible prescriptions written by the EP are compared to at least one drug formulary (reviewed for generic substitutions) transmitted electronically using Certified EHR Technology.</p> <p>EH Objective: Generate and transmit permissible discharge prescriptions electronically (eRx)</p> <p>EH Measure: More than 30% of hospital discharge medication orders for permissible prescriptions (for new or changed prescriptions) are compared to at least one drug formulary and transmitted electronically using Certified EHR Technology</p>

Demographics – SGRP104

Stage 3 Recommendations	Proposed for Future Stage
<p>Certification criteria:</p> <ul style="list-style-type: none"> • Patient preferred method of communication • Occupation and industry codes • Sexual orientation, gender identity (optional fields) • Disability status <ul style="list-style-type: none"> • Differentiate between patient reported & medically determined • Need to continue standards work <p>Certification criteria: HITSC to identify what the communication preferences options should be for the clinical summary, reminders, patient educational material objectives (this will correlate to the patient’s preferred format in each of these objectives). Providers should have the ability to select options that are technically feasible for them, these could include: Email, text, patient portal, telephone, regular mail.</p>	

Problem List- 105

Stage 2 Final Rule	Stage 3 Recommendations	Proposed for Future Stage
<p>Consolidated in summary of care objective Maintain an up-to-date problem list of current and active diagnoses</p>	<p>Certification criteria: EHR systems should provide functionality to help maintain up-to-date, accurate problem list</p> <p>Certification criteria: Use of lab test results, medications, and vital signs (BP, ht, wt, BMI), to support clinicians' maintenance of up-to-date accurate problem lists. Systems provide decision support about additions, edits, and deletions for clinicians' review and action. For example, if diabetes is not on the problem list but hypoglycemic medications are on the medication list: the EHR system might ask the provider whether diabetes should be on the problem list. It would not automatically add anything to the problem list without professional action.</p>	<p>Patient input to reconciliation of problems</p>

Medication List - 106

Stage 2 Final Rule	Stage 3 Recommendations	Proposed for Future Stage	Questions / Comments
<p>Consolidated with summary of care - Maintain active medication list</p>	<p>Certification criteria: EHR systems should provide functionality to help maintain up-to-date, accurate medication list</p> <p>Certification criteria: Use of problems and lab test results to support clinicians' maintenance of up-to-date accurate medication lists. Systems provide decision support about additions, edits, and deletions for clinicians' review. For example, an antibiotic (not for acne) has been on the medication list for over say a month, the EHR system might ask the provider whether the medication is a chronic medication. The system will not make any changes without professional approval.</p>	<p>Certification criteria: Use other EHR data such as medications filled or dispensed, or free text searching for medications to support maintenance of up-to-date and accurate medication lists.</p>	<p>How to incorporate into certification criteria for pilot testing? The intent is that EHR vendors would provide functionality to help maintain functionality for active medication lists, not that they supply the actual knowledge for the rules.</p>

Med Allergy

Stage 2 Final Rule	Stage 3 Recommendations	Proposed for Future Stage	Questions / Comments
<p>Consolidated with summary of care - Maintain active medication allergy list</p>	<p>Certification criteria: EHR systems should provide functionality to code medication allergies including its related drug family to code related reactions.</p>	<p>Contraindications that could include adverse reactions and procedural intolerance.</p>	<p>The intent is that EHR vendors would provide functionality to help maintain functionality for active medication allergy lists, not that they supply the actual knowledge for the rules.</p>

Vitals – 108

Stage 2 Final Rule	Stage 3 Recommendations	Proposed for Future Stage	Questions / Comments
<p>Objective: Record and chart changes in vital signs:</p> <ul style="list-style-type: none"> • Height/length • Weight • Blood pressure (age 3 and over) • Calculate and display BMI • Plot and display growth charts for patients 0-20 years, including BMI <p>Measure: More than 80 percent of all unique patients seen by the EP or admitted to the eligible hospital's or CAH's inpatient or emergency department (POS 21 or 23) during the EHR reporting period have blood pressure (for patients age 3 and over only) and height/length and weight (for all ages) recorded as structured data</p>	<p>Retire measure because it is topped out (achieved 80% threshold). Track progress to improve outcomes via CQM NQF 0018</p>		<p>Do commenters agree with retiring the measure, or should we continue this objective? Continuing the measure would mean an additional number of objectives that providers will need to attest to.</p>

Smoking - 109

Stage 2 Final Rule	Stage 3 Recommendations	Proposed for Future Stage	Questions / Comments
<p>EP/EH Objective: Record smoking status for patients 13 years old or older</p> <p>Measure: More than 80 percent of all unique patients 13 years old or older seen by the EP or admitted to the eligible hospital's or CAH's inpatient or emergency departments (POS 21 or 23) during the EHR reporting period have smoking status recorded as structured data</p>	<p>Retire measure because it is topped out (achieved 80% threshold). Track progress to improve outcomes via CQM NQF 0028</p>		<p>Do commenters agree with retiring the measure, or should we continue this objective? Continuing the measure would mean an additional number of objectives that providers will need to attest to.</p>

Lab results - 114

Stage 2 Final Rule	Stage 3 Recommendations	Proposed for Future Stage	Questions / Comments
<p>EP/EH Objective: Incorporate clinical lab-test results into Certified EHR Technology as structured data</p> <p>Measure: More than 55 percent of all clinical lab tests results ordered by the EP or by authorized providers of the eligible hospital or CAH for patients admitted to its inpatient or emergency department (POS 21 or 23 during the EHR reporting period whose results are either in a positive/negative affirmation or numerical format are incorporated in Certified EHR Technology as structured data</p>	<p>Objective: Incorporate clinical lab-test results into EHR as structured data</p> <p>Measure: More than 80% of all clinical lab tests results ordered by the EP or by authorized providers of the eligible hospital or CAH for patients admitted to its inpatient or emergency department (POS 21 or 23) during the EHR reporting period whose results are either in a positive/negative or numerical format are incorporated in Certified EHR Technology as structured data</p>		

Patient List -115

Stage 2 Final Rule	Stage 3 Recommendations	Proposed for Future Stage	Questions / Comments
<p>EP CORE Objective: Generate lists of patients by specific conditions to use for quality improvement, reduction of disparities, research, or outreach</p> <p>EP CORE Measure: Generate at least one report listing patients of the EP, eligible hospital or CAH with a specific condition.</p>	<p>EP Objective: Generate lists of patients for multiple specific conditions and present near real-time (vs. retrospective reporting) patient-oriented dashboards to use for quality improvement, reduction of disparities, research, or outreach reports. Dashboards are incorporated into the EHR's clinical workflow for the care coordinator or the provider. It is actionable and not a retrospective report.</p>		

CPOE Referrals - 130

Stage 2 Final Rule	Stage 3 Recommendations	Proposed for Future Stage	Questions / Comments
<p>New</p>	<p>Objective: Use computerized provider order entry for consults requests and transfer of care orders directly entered by any licensed healthcare professional who can enter orders into the medical record per State, local and professional guidelines to create the first record of the order.</p> <p>Measure: More than 20% of referrals/transition of care orders created by the EP or authorized providers of the eligible hospital's or CAH's inpatient or emergency department (POS 21 or 23) during the EHR reporting period are recorded.</p>		

Subgroup 2 - Engaging Patients and Families

Christine Bechtel, Subgroup Lead

Paul Tang, MU WG Chair

VDT - 204 A (I)

Stage 2 Final Rule	Stage 3 Recommendations
<p>EP Objective: Provide patients the ability to view online, download, and transmit (VDT) their health information within 4 business days of the information being available to the EP.</p> <p>EP Measure: 1. More than 50 percent of all unique patients seen by the EP during the EHR reporting period are provided timely (within 4 business days after the information is available to the EP) online access to their health information subject to the EP's discretion to withhold certain information. 2. More than 5 percent of all unique patients seen by the EP during the EHR reporting period (or their authorized representatives) view, download, or transmit to a third party their health information.</p> <p>EH Objective: Provide patients the ability to view online, download, and transmit information about a hospital admission</p> <p>1. More than 50 percent of all patients who are discharged from the inpatient or emergency department (POS 21 or 23) of an eligible hospital or CAH have their information available online within 36 hours of discharge 2. More than 5 percent of all patients (or their authorized representatives) who are discharged from the inpatient or emergency department (POS 21 or 23) of an eligible hospital or CAH view, download or transmit to a third party their information during the reporting period.</p>	<ul style="list-style-type: none"> •EPs should make information available within 24 hours if generated during the course of a visit •For labs or other types of information not generated within the course of the visit, it is made available to patients within four (4) business days of information becoming available to EPs •Potential to increase both thresholds (% offer and % use) based upon experience in Stage 2 •Add optional item: family history <p>Note: Depending on experience in Stage 2, CMS may want to give credit to some providers (e.g. specialists) for view/download/transmit where the patient has requested that they prefer info to be sent to a location they specify (such as another provider portal or PHR), rather than only making available information on the provider's portal.</p> <p>Certification Criteria: CEHRT should provide the ability for patients to designate to whom and when a summary of care document is sent to a patient-designated recipient, building upon the Automated Blue Button Initiative (ABBI).</p> <p>Measure: Patient preferences are captured for 50% of unique patients seen within the EHR reporting period. Preferences will indicate to whom and when (i.e. pre-set automated & on-demand) a summary of care document is sent or an indication on no preferences.</p> <p>Examples of designated recipients:</p> <ul style="list-style-type: none"> •a one-time request to send information from specialist to primary care •a standing request to always send an updated care summary when certain events arise, such as a change in medication or the completion of new tests or procedures •No preferences

Amendments - 204 D (I)

Stage 2 Final Rule	Stage 3 Recommendations	Proposed for Future Stage	Questions / Comments
New	Provide patients with an easy way to request an amendment to their record online (e.g., offer corrections, additions, or updates to the record)		

PGHD – 204B

Stage 2	Stage 3 Recommendations
New	<p>EP/EH MENU Objective: Patients have the ability to electronically submit patient-generated health information.</p> <p>EP/EH MENU Measure: Provide the ability to electronically submit patient-generated health information through structured or semi-structured questionnaires (e.g., screening questionnaires, intake forms, risk assessment, functional status) for more than 10 percent of all unique patients seen by the EP during the EHR reporting period.</p> <p>Standards work needed to incorporate and acknowledge PGHD – feedback from HITSC needed.</p> <p>Certification criteria for devices, continue to work with the standards committee. Consumer technology will have information by the end of the August.</p>

Clinical Summary/AVS - 205

Stage 2 Final Rule	Stage 3 Recommendations
<p>EP Objective: Provide clinical summaries for patients for each office visit</p> <p>EP Measure: Clinical summaries provided to patients or patient-authorized representatives within 1 business day for more than 50 percent of office visits.</p>	<p>The clinical summary should be pertinent to the office visit, not just an abstract from the medical record.</p> <p>EP Objective: An office-visit summary is provided to a patient or patient-authorized representative with relevant and actionable information and instructions pertaining to the visit in the format requested as indicated by the patient.</p> <p>EP Measure: An office visit summary is provided to a patient or patient-authorized representative with relevant and actionable information and instructions pertaining to the visit in the format requested as indicated by the patient (e.g., available online, via email, print out of summary, etc.),if the provider has the technical capability within 1 business day for more than 50 percent of office visits.</p> <p>Certification criteria #1: Intent is to make sure the EHR can draw from the range of existing specified information and enable providers to include and exclude data based upon patient needs.</p> <p>Certification criteria #2: HITSC to identify what the communication preferences options should be . Providers should have the ability to select options that are technically feasible, these could include: Email, patient portal, regular mail.</p>

Patient Education - 206 (I)

Stage 2 Final Rule	Stage 3 Recommendations
<p>EP/EH Objective: Use Certified EHR Technology to identify patient-specific education resources and provide those resources to the patient</p> <p>EP CORE Measure: Patient specific education resources identified by CEHRT are provided to patients for more than 10 percent of all unique patients with office visits seen by the EP during the EHR reporting period</p> <p>EH CORE Measure: More than 10 percent of all unique patients admitted to the eligible hospital's or CAH's inpatient or emergency departments (POS 21 or 23) are provided patient- specific education resources identified by Certified EHR Technology</p>	<p>Additional language support: For the top 5 non-English languages spoken nationally, provide 80% of patient-specific education materials in at least one of those languages based on EP's or EH's local population, where publically available.</p> <p>Objective: Provide patient specific educational material in at least one non-English language, in the format preferred by the patient, if the provider has the technical capability</p> <p>Measure: Deliver at least one patient specific educational material to one patient in that patient's preferred non-English language identified by CEHRT and in the patient's preferred format (e.g., online, print-out from CEHRT).</p> <p>Certification criteria #1: Expand the InfoButton standard to include disability status. Disability status needs to be defined and flagged at the point of entry (e.g. registration or appointment gathering).</p> <p>Certification criteria #2: HITSC to identify what the communication preferences options should be . Providers should have the ability to select options that are technically feasible, these could include: Email, patient portal, regular mail.</p>

Secure Messaging - 207

Stage 2 Final Rule	Stage 3 Recommendations	Proposed for Future Stage	Questions / Comments
<p>EP Objective: Use secure electronic messaging to communicate with patients on relevant health information</p> <p>EP Measure: A secure message was sent using the electronic messaging function of Certified EHR Technology by more than 5 percent of unique patients (or their authorized representatives) seen by the EP during the EHR reporting period</p>	<p>Measure: More than 10%* 5% of patients use secure electronic messaging to communicate with EPs</p> <p>Certification requirement: Provide the capability to:</p> <ol style="list-style-type: none"> 1. measure and report the response timeframe 2. for the patient to indicate that no response is needed 3. mode of response (e.g., telephone, secure message) 	<p>Create capacity for electronic episodes of care (telemetry devices, etc) and to do e-referrals and e-consults</p>	<p>*What would be an appropriate increase in threshold based upon evidence and experience?</p>

Communication Preference – 208

Consolidated

Certification ONLY

Stage 2 Final Rule	Stage 3 Recommendations
Not included separately (in reminder objective)	<p>EP and EH Measure: Record communication preferences for 20% of patients, based on how (e.g., the medium) patients would like to receive information for certain purposes (including appointment reminders, reminders for follow up and preventive care, referrals, after visit summaries and test results).</p> <p>Certification criteria: HITSC to identify what the communication preferences options should be for the clinical summary, reminders, patient educational material objectives (this will correlate to the patient’s preferred format in each of these objectives). Providers should have the option to select options that are technically feasible for them, these could include: Email, text, patient portal, telephone, regular mail.</p>

Clinical Trial Query – 209

Stage 2 Final Rule	Stage 3 Recommendations	Proposed for Future Stage	Questions / Comments
<p>New</p>	<p>Certification Criteria: Capability for CEHRT to query research enrollment systems to identify available clinical trials.</p>		<p>The goal of this objective is to facilitate identification of patients who might be eligible for a clinical trial, if they are interested. The EHR would query available clinical trial registries and identify potentially relevant trials based on patient’s health condition, location, and other basic facts. Ultimately, the EHR would not be able to determine final eligibility for the trial; it would only be able to identify possibly relevant trial opportunities.</p>

Subgroup 3 – Improving Care Coordination

Charlene Underwood, Subgroup Lead

Paul Tang, MU WG Chair

Reconciliation - 302

Stage 2 Final Rule	Stage 3 Recommendations	Proposed for Future Stage
<p>EP/EH CORE Objective: The EP/EH who receives a patient from another setting of care or provider of care or believes an encounter is relevant should perform medication reconciliation.</p> <p>EP/EH CORE Measure: The EP, eligible hospital or CAH performs medication reconciliation for more than 50% of transitions of care in which the patient is transitioned into the care of the EP or admitted to the eligible hospital's or CAH's inpatient or emergency department (POS 21 or 23)</p>	<p>EP / EH / CAH Objective: The EP, EH, or CAH who receives a patient from another setting of care or provider of care or believes an encounter is relevant should perform reconciliation for:</p> <ul style="list-style-type: none"> - medications - medication allergies - problems <p>EP / EH / CAH Measure: The EP, EH, or CAH who receives a patient from another setting of care or provider of care or believes an encounter is relevant performs reconciliation for medications for more than 50% of those patients. transitions of care, and it performs reconciliation for medication allergies, and problems for more than 10% of transitions of care in which the patient is transitioned into the care of the EP or admitted to the eligible hospital's or CAH's inpatient or emergency department (POS 21 or 23).</p> <p>Certification criteria : CDS intelligence to ensure lists are accurate (see SGRP113 as well)</p>	<p>Reconciliation of contraindications (any medical reason for not performing a particular therapy; any condition, clinical symptom, or circumstance indicating that the use of an otherwise advisable intervention in some particular line of treatment is improper, undesirable, or inappropriate)</p> <p>Standards work is necessary to address these gaps:</p> <ul style="list-style-type: none"> • There is no defined standard “domain” model for allergy/intolerance/condition/problem nor any practice model that supports a distinction. While there is an ability to articulate differences, these are complex relationships. • There are no well defined universal codes or use of them. The codes in stage 2 like RxNorm and SNOMED are not widely used and not appropriately tailored and in practice, often conflict with codes used for other work / documentation.

§ 170.314 (b)(4) Clinical Information Reconciliation: Enable a user to electronically reconcile the data that represent a patient’s active medication, problem, and medication allergy list as follows. For each list type: (i) Electronically and simultaneously display (i.e., in a single view) the data from at least two list sources in a manner that allows a user to view the data and their attributes, which must include, at a minimum, the source and last modification date. (ii) Enable a user to create a single reconciled list of medications, medication allergies, or problems. (iii) Enable a user to review and validate the accuracy of a final set of data and, upon a user’s confirmation, automatically update the list.

Care Summary - 303

Stage 2 Final Rule

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

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

Data Sets 3, 4, 5

2. The EP, eligible hospital or CAH that transitions or refers their patient to another setting of care or provider of care provides a summary of care record for more than 10% of such transitions and referrals either (a) electronically transmitted using CEHRT to a recipient or (b) where the recipient receives the summary of care record via exchange facilitated by an organization that is a NWHIN Exchange participant or in a manner that is consistent with the governance mechanism ONC establishes for the nationwide health information network.

3. An EP, eligible hospital or CAH must satisfy one of the two following criteria:

(A) conducts one or more successful electronic exchanges of a summary of care document, as part of which is counted in "measure 2" (for EPs the measure at §495.6(j)(14)(ii)

(B) and for eligible hospitals and CAHs the measure at §495.6(l)(11)(ii)(B) with a recipient who has EHR technology that was developed by a different EHR technology developer than the sender's EHR technology certified to 45 CFR 170.314(b)(2); or

(B) conducts one or more successful tests with the CMS designated test EHR during the EHR reporting period.

Stage 3 Recommendations

EP/ EH / CAH Objective: EP/EH/CAH who transfers their patient to another setting of care (including home), requests a consult from a provider in another setting of care, or provides consultation results to a provider in another setting of care provides a summary of care record that pertains to the type of transition:

- Transfers of care from one site of care to another (e.g.. Hospital to SNF, PCP, HHA, etc...; SNF, PCP, etc... to HHA; PCP to new PCP)
- Consult (referral) request (e.g., PCP to Specialist; PCP, SNF, etc... to ED)
- Consult result note (e.g. ER note, consult note))

Items for Inclusion	Transfers of care from one site of care to another	Consult Request	Consult Result Note
1. Concise narrative in support of care transitions (free text e.g., capturing current care synopsis expectations for transition and / or consult (referral))	Required	Required	Required
2. Contact information for professional care team members, including primary care provider, role and contact information (free text is permissible)	Required	Required	Optional
3. Indication of whether there is a designated family or informal caregiver who is playing a significant role in the patient's care (Yes/No)	Required	Required	Optional
4. Overarching patient goals and/ or problem specific goals (free text is permissible)	Required	Optional	Optional
5. Patient Instructions and / or suggested and/or planned interventions for care during transition and / or for 48 hours afterwards (free text is permissible)	Required	Optional	Optional

Measure: The EP, EH, or CAH that transfers their patient to another setting of care (including home), requests a consult from a provider in another setting of care, or provides consultation results to a provider in another setting of care, provides a summary of care record for **6550% of transitions** (consult note, consult request, transfer of care, as indicated above) and at least **30 10%* electronically**.

Certification criteria #1: EHR is able to set aside a concise narrative section in the summary of care document that allows the provider to document clinically relevant rationale such as reason for transition and / or consult request.

Certification criteria#2: Ability to automatically populate a consult request form for specific purposes, including a referral to a smoking quit line.

Certification criteria #3: Care team should include all care team members as defined in the consolidated CDA

Referral loop – 305

Consolidated in Care Summary 303

Stage 2 Final Rule	Stage 3 Recommendations	Proposed for Future Stage	Questions / Comments
New	<p>EP / EH / CAH Objective: EP/EH/CAH to whom a patient is referred acknowledges receipt of external information and provides referral results to the requesting provider, thereby beginning to close the loop.</p> <p>Measure: For patients referred during an EHR reporting period, referral results generated from the EHR, 50% are returned to the requestor and 10% of those are returned electronically*</p> <p>Certification Criteria: Include data set defined by S&I Longitudinal Coordination of Care WG and expected to complete HL7 balloting for inclusion in the C-CDA by Summer 2013: Shared Care Encounter Summary_(Consultation Summary, Return from the ED to the referring facility, Office Visit)</p> <p>Certification Criteria: Include standards for referral requests that require authorizations (or pre-certifications) for procedure, surgery, lab, radiology, test orders</p> <p>*This builds upon the clinical quality measure (CQM) in stage 2 for closing the referral loop,CMS50v1 (NQF TBD)</p>	Continue working to close the loop with an acknowledgement of order receipt and tracking for completion.	The HITPC would appreciate comments on the return of test results to the referring provider.

ID #	Stage 2 Final Rule	Stage 3 Recommendations	Proposed for Future Stage	Questions / Comments
304	New		<p>EP/ EH / CAH Objective: EP/ EH/CAH who transitions their patient to another site of care or refers their patient to another provider of care</p> <p>For each transition of site of care, provide the care plan information, including the following elements <u>as applicable</u>:</p> <ul style="list-style-type: none"> •Medical diagnoses and stages •Functional status, including ADLs •Relevant social and financial information (free text) •Relevant environmental factors impacting patient’s health (free text) •Most likely course of illness or condition, in broad terms (free text) •Cross-setting care team member list, including the primary contact from each active provider setting, including primary care, relevant specialists, and caregiver •The patient’s long-term goal(s) for care, including time frame (not specific to setting) and initial steps toward meeting these goals •Specific advance care plan (Physician Orders for Life-Sustaining Treatment (POLST)) and the care setting in which it was executed. <p>For each consult request, provide a care plan if one exists</p> <ul style="list-style-type: none"> • An up-to-date interdisciplinary problem list inclusive of versioning in support of collaborative care (formerly 127) <p>Measure: The EP, eligible hospital, or CAH that transitions or refers their patient to another site of care or provider of care provides the electronic care plan information for 10% of transitions of care to receiving provider and patient/caregiver.</p> <p>Certification Criteria: Develop standards for a shared care plan, as being defined by S&I Longitudinal Coordination of Care WG. Some of the data elements in the shared care plan overlap content represented in the CDA. Adopt standards for the structured recording of other data elements, such as patient goals and related interventions.</p>	<p>How might we advance the concept of an electronic shared care planning and collaboration tool that crosses care settings and providers, allows for and encourages team based care, and includes the patient and their non-professional caregivers? Interested in experience to date and the lessons learned.</p> <p>Think through these priority use cases:</p> <ol style="list-style-type: none"> 1. Patient going home from an acute care hospital admission 2. Patient in nursing home going to ED for emergency assessment and returning to nursing home 3. Patient seeing multiple ambulatory specialists needing care coordination with primary care 4. Patient going home from either hospital and / or nursing some and receiving home health services <p>What are the most essential data elements to ensuring safe, effective care transitions and ongoing care management? How might sharing key data elements actually improve the communication? Consider health concerns, patient goals, expected outcomes, interventions, including advance orders, and care team members. What data strategy and terminology are required such that the data populated by venue specific EHRs can be exchanged. How might existing terminologies be reconciled?</p> <p>What are the requirements (legal, workflow, other considerations) for patients and their identified team to participate in a shared care plan? Is it useful to consider role-based access as a technical method of implementing who will have access to and be able to contribute to the care plan? How will such access be managed?</p>

Interdisciplinary Prob list – 127

Consolidated

ID #	Stage 2 Final Rule	Stage 3 Recommendations	Proposed for Future Stage	Questions / Comments
127	New	New	Ability to maintain an up-to-date interdisciplinary problem list inclusive of versioning in support of collaborative care	

Notifications – 308

Stage 2 Final Rule	Stage 3 Recommendations	Proposed for Future Stage	Questions / Comments
<p>New</p>	<p>MENU EH Objective: The EH/CAH will send electronic notification of a significant healthcare event in a timely manner to key members of the patient’s care team, such as the primary care provider, referring provider or care coordinator, with the patient’s consent if required.</p> <p>Significant events include:</p> <ul style="list-style-type: none"> •Arrival at an Emergency Department (ED) •Admission to a hospital •Discharge from an ED or hospital •Death <p>EH Measure: For 25 patients with a significant healthcare event (arrival at an Emergency Department (ED), admission to a hospital, discharge from an ED or hospital, or death), EH/CAH will send an electronic notification to at least one key member of the patient’s care team, such as the primary care provider, referring provider or care coordinator, with the patient’s consent if required, within 24 hours of when the event occurs.</p> <p>Certification Criteria: Ability to send/receive notification of a significant healthcare event</p>		<p>Consider making this a modular certification criteria because HIEs offer this functionality.</p>

Future Stage

Med Adherence, PDMP - 125

ID #	Stage 2	Stage 3	Proposed for Future Stage	Questions / Comments
125	New	New	<p>Medication reconciliation: create ability to accept data feed from PBM (Retrieve external medication fill history for medication adherence monitoring)</p> <p>Vendors need an approach for identifying important signals such as: identify data that patient is not taking a drug, patient is taking two kinds of the same drug (including detection of abuse) or multiple drugs that overlap.</p> <p>Certification criteria: EHR technology supports streamlined access to prescription drug monitoring programs (PDMP) data.</p> <p>For example:</p> <ul style="list-style-type: none"> ▪ Via a hyperlink or single sign-on for accessing the PDMP data ▪ Via automated integration into the patient’s medication history <p>Leveraging things like single sign on or functionality that could enable the linkage between PDMPs and prescribers and EDs?</p>	

Subgroup 4 – Population and Public Health

Art Davidson, Subgroup Lead

George Hripcsak, MU WG Co-Chair

Subgroup 4

- Immunization registries – 401A
- Electronic lab reporting – 402A (no change)
- Case reports to public health – 402B (certification only)
- Syndromic surveillance - 403
- Registries - 404/405/407 (merged)
- Adverse event reports – 408 (future stage)
- Immunization CDS - 401B (consolidated with CDS)

Immunization Registry – 401A

Stage 2 Final Rule	Stage 3 Recommendations	Proposed for Future Stage
<p>EP/EH Objective: Capability to submit electronic data to immunization registries or immunization information systems except where prohibited, and in accordance with applicable law and practice</p> <p>EP/EH Measure: Successful ongoing submission of electronic immunization data from Certified EHR Technology to an immunization registry or immunization information system for the entire EHR reporting period</p>	<p>EP/ EH Objective: Capability to receive a patient’s immunization history supplied by an immunization registry or immunization information system, and to enable healthcare professionals to use structured historical immunization events in the clinical workflow, except where prohibited, and in accordance with applicable law and practice.</p> <p>Measure: Documentation of timely and successful electronic receipt by the Certified EHR Technology of vaccine history (including null results) from an immunization registry or immunization information system for 30–10% of patients who received immunizations from the EP/EH during the entire EHR reporting period. at least 10 query results received by the EHR from the immunization registry or immunization information system within the reporting period.</p> <p>Exclusion: EPs and EHs that administer no immunizations or jurisdictions where immunization registries/immunization information systems cannot provide electronic immunization histories.</p> <p>Certification criteria #1: EHR is able to receive and present a standard set of structured, externally-generated, immunization history and capture the act and date of review within the EP/EH practice.</p> <p>Certification criteria #2: Ability to generate a report that the functionality was enabled for the entire reporting period.</p>	<p>EP/EH Objective: Add submission of vaccine contraindication(s) and reason(s) for substance refusal to the current objective of successful ongoing immunization data submission to registry or immunization information systems.</p>

Electronic reportable lab results - 402A

No Change

Stage 2 Final Rule	Stage 3 Recommendations
<p>EH Objective: Capability to submit electronic reportable laboratory results to public health agencies, except where prohibited, and in accordance with applicable law and practice</p> <p>Measure: Successful ongoing submission of electronic reportable laboratory results from Certified EHR Technology to public health agencies for the entire EHR reporting period.</p>	<p>EH Objective (unchanged): No change from current requirement for electronic lab reporting which generally is sent from the laboratory information system</p>

Case reports – 402B

Stage 2	Stage 3	Proposed for Future Stage	Questions / Comments
New	New	<p>EP Objective: Capability to use externally accessed or received knowledge (e.g. reporting criteria) to determine when a case report should be reported and then submit the initial report to a public health agency, except where prohibited, and in accordance with applicable law and practice.</p> <p>Measure: Attestation of submission of standardized initial case reports to public health agencies on 10% of all reportable disease or conditions during the entire EHR reporting period as authorized, and in accordance with applicable state/local law and practice.</p> <p>Certification criteria: The EHR uses external data to prompt the end-user when criteria are met for case reporting. The date and time of prompt is available for audit. Standardized (e.g., consolidated CDA) case reports are submitted to the state/local jurisdiction and the data/time of submission is available for audit.</p>	

Syndromic Surveillance – 403

No Change

Stage 2 Final Rule	Stage 3 Recommendations
<p>EP MENU Objective: Capability to submit electronic syndromic surveillance data to public health agencies, except where prohibited, and in accordance with applicable law and practice</p> <p>EH Objective: Capability to submit electronic syndromic surveillance data to public health agencies, except where prohibited, and in accordance with applicable law and practice</p> <p>EP/EH Measure: Successful ongoing submission of electronic syndromic surveillance data from Certified EHR Technology to a public health agency for the entire EHR reporting period</p>	<p>No change from current requirements.</p>

Proposed **Merged** Registry Objective

(404, 405, 407- EP)

EP Objective:

Capability to electronically submit standardized (i.e., data elements, structure and transport mechanisms), commonly formatted reports to two registries (e.g., local/state health departments, professional or other aggregating resources) from the Certified EHR Technology, except where prohibited, and in accordance with applicable law and practice. This objective is in addition to and does not replace prior requirements for submission to an immunization registry.

Measure: Documentation (or registry acknowledgement) of ongoing successful electronic transmission of Standardized reports from the CEHRT to two registries (either mandated or voluntary)). **Attestation of submission for at least 10% of all patients** who meet registry inclusion criteria during the entire EHR reporting period as authorized, and in accordance with applicable State law and practice.

Registries examples include: cancer, children with special needs, and/or early hearing detection and intervention or external entities that maintain the registry (e.g., hypertension, diabetes, body mass index, devices, and/or other diagnoses/conditions) that could include accountable care organization, public health agency, professional society, or specialty community.

Certification criteria: EHR is able to build and then send a standardized report (e.g., standard message format) to a registry, maintain an audit of those reports, and track total number of reports sent.

Exclusion: where local or state health departments have no mandated registries or are incapable of receiving these standardized reports Merged registry objectives.

Proposed **Merged** Registry Objective (404, 405, 407 - EH objective)

EH Objective: Capability to electronically submit standardized (i.e., data elements, structure and transport mechanisms), commonly formatted reports to two registries (e.g., local/state health departments, professional or other aggregating resources) from the Certified EHR Technology, except where prohibited, and in accordance with applicable law and practice. This objective is in addition to and does not replace prior requirements for submission to an immunization registry.

Measure: Documentation (or registry acknowledgement) of ongoing successful electronic transmission of standardized reports from the CEHRT to two registries (either mandated or voluntary)). **Attestation of submission for at least 10%** of all patients who meet registry inclusion criteria during the entire EHR reporting period as authorized, and in accordance with applicable State law and practice.

Registries include: cancer, health-care associated infections, children with special needs, and/or early hearing detection and intervention or external entities that maintain the registry (e.g., hypertension, diabetes, body mass index, devices, and/or other diagnoses/conditions) that could include accountable care organization, public health agency, professional society, or specialty community) should maintain the registry

Certification criteria: EHR is able to build and then send a standardized report (e.g., standard message format) to an external mandated or voluntary registry, maintain an audit of those reports, and track total number of reports sent.

Exclusion: where local or state health departments have no mandated registries or are incapable of receiving these standardized reports Merged registry objectives.

Mandated Registry – 404

Consolidated

Stage 2 Final Rule	Stage 3 Recommendations
<p>EP only MENU Objective: Capability to identify and report cancer cases to a public health central cancer registry, except where prohibited, and in accordance with applicable law and practice.</p> <p>EP only MENU Measure: Successful ongoing submission of cancer case information from CEHRT to a public health central cancer registry for the entire EHR reporting period</p>	<p>EH/EP Objective: Capability to electronically participate and send standardized (i.e. data elements and transport mechanisms), commonly formatted reports to a mandated jurisdictional registry (e.g., cancer, children with special needs, and/or early hearing detection and intervention) from Certified EHR to either local/state health departments, except where prohibited, and in accordance with applicable law and practice. This objective is in addition to prior requirements for submission to an immunization registry.</p> <p>Measure: Documentation of ongoing successful electronic transmission of standardized reports from the Certified EHR Technology to the jurisdictional registry. Attestation of submission for at least 10% of all patients who meet registry inclusion criteria during the entire EHR reporting period as authorized, and in accordance with applicable State law and practice.</p> <p>Certification criteria: EHR is able to build and then send a standardized report (e.g., standard message format) to an external mandated registry, maintain an audit of those reports, and track total number of reports sent.</p> <p>Exclusion: where local or state health departments have no mandated registries or are incapable of receiving these standardized reports</p>

Additional Registry – 405

Consolidated

Stage 2 Final Rule	Stage 3 Recommendations
<p>EP only MENU Objective: Capability to identify and report specific cases to a specialized registry (other than a cancer registry), except where prohibited, and in accordance with applicable law and practice.</p> <p>EP only MENU Measure: Successful ongoing submission of specific case information from Certified EHR Technology to a specialized registry for the entire EHR reporting period</p>	<p>EP Objective: Capability to electronically submit standardized reports to an additional registry beyond any prior meaningful use requirements (e.g., immunizations, cancer, early hearing detection and intervention, and/or children with special needs). Registry examples include hypertension, diabetes, body mass index, devices, and/or other diagnoses/conditions) from the Certified EHR to a jurisdictional, professional or other aggregating resources (e.g., HIE, ACO), except where prohibited, and in accordance with applicable law and practice.</p> <p>Measure: Documentation of successful ongoing electronic transmission of standardized (e.g., consolidated CDA) reports from the Certified EHR Technology to a jurisdictional, professional or other aggregating resource. Attestation of submission for at least 10% of all patients who meet registry inclusion criteria during the entire EHR reporting period as authorized, and in accordance with applicable state/local law and practice.</p> <p>Certification criteria: EHR is able to build and send a standardized message report format to an external registry, maintain an audit of those reports, and track total number of reports sent.</p>

HAI reports – 407

Consolidated

Stage 2 Final Rule	Stage 3 Recommendations
New	<p>EH Objective: Capability to electronically send standardized Healthcare Associated Infection (HAI) reports to the National Healthcare Safety Network (NHSN) using a common format from the Certified EHR, except where prohibited, and in accordance with applicable law and practice.</p> <p>Measure: Documentation of successful electronic transmission of standardized healthcare acquired infection reports to the NHSN from the Certified EHR Technology. Total numeric count of HAI in the hospital and attestation of Certified EHR electronic submission of at least 10% of all reports during the entire EHR reporting period as authorized, and in accordance with applicable State law and practice.</p> <p>Certification criteria: EHR is able to sending a standard HAI message to NHSN, maintain an audit and track total number of reports sent.</p>

Adverse Event Reports – 408

Future Stage

Stage 2 Final Rule	Stage 3 Recommendations	Proposed for Future Stage
New	New	<p>EH/EP Objective: Capability to electronically send adverse event reports (e.g., vaccines, devices, EHR, drugs or biologics) to the Federal Drug Administration (FDA) and/or Centers for Disease Control and Prevention (CDC) from the Certified EHR, except where prohibited, and in accordance with applicable law and practice.</p> <p>Measure: Attestation of successful electronic transmission of standardized adverse event reports to the FDA/CDC from the Certified EHR Technology. Total numeric count (null is acceptable) of adverse event reports from the EH/EP submitted electronically during the entire EHR reporting period as authorized, and in accordance with applicable State law and practice.</p> <p>Certification criteria: EHR is able to build and send a standardized adverse event report message to FDA/CDC and maintain an audit of those reports sent to track number of reports sent (Common Format).</p>

Immunization CDS – 401B

Consolidated

Stage 2 Final Rule	Stage 3 Recommendations	Proposed for Future Stage	Questions / Comments
New	<p>EP/EH Objective: Capability to receive, generate or access appropriate age-, gender- and immunization history-based recommendations (including immunization events from immunization registries or immunization information systems) as applicable by local or state policy.</p> <p>Measure: Implement an immunization recommendation system that: 1) establishes baseline recommendations (e.g., Advisory Committee on Immunization Practices), and 2) allows for local/state variations. For 20% of patients receiving an immunization, the EP/EH practice receives the recommendation before giving an immunization.</p> <p>Exclusion: EPs and EHs that administer no immunizations.</p> <p>Certification criteria: EHR uses a standard (e.g., national, state and/or local) rule set, plus patient age, gender, and prior immunization history to recommend administration of immunizations; capture the act and date/time of recommendation review.</p>		

Deeming Option An Alternate Pathway

Deeming Assumptions

- Providers have already met all functional objectives in stages 1 and 2
- Effective use of HIT can reliably assist in the achievement of good performance (or significant improvement)
- To promote innovation, reduce burden, and reward good performance, deem high performers (or significant improvers) in satisfaction of a subset of MU objectives as an *optional pathway* to qualifying for MU
- CMS selects appropriate **outcomes-oriented CQMs** as deeming performance measure; **CMS may have to contract** for appropriate measures to be developed

Example Framework (not QMs) for Deeming for EPs

Demonstrate high (top quartile) or improved performance (20% reduction of gap between last year's performance and top quartile) and reduction in disparities.

Select two items from each of the categories below:

Prevention of high priority diseases

(pick 2 from) [could be a dynamic set vs static]

- Colon cancer (colonoscopy screening – NQF 0034)
- Influenza (flu vaccine – NQF 0041)
- Pneumonia (pneumococcal vaccine – NQF 0043)
- Obesity (BMI screening and follow up – NQF 0421)
- Cardiovascular disease (LDL screen – NQF 0075)
- HTN (BP screen and follow up)

Control of high priority chronic health conditions

(pick 2 from) could be a dynamic set vs static]

- HTN (BP control or improvement)
- Diabetes (A1c control)
- Heart attack (LDL control)
- Asthma (controller med)
- CHF (ACEI or ARB meds)
- MI (beta blocker)

For one of the four selected population reports, demonstrate **improvement** from the prior year for a **disparity** population (e.g., language, gender, race, ethnicity, LGBT, SES)

- Improvement is reduction of the gap between the mean performance for the disparity subset and the mean performance for the rest of the patient population

Example Framework (not QMs) for Deeming for EHS

Demonstrate high (top quartile) or improved performance (20% reduction of gap between last year's performance and top quartile) and reduction in disparities.

Select two items from each of the categories below:

Patient safety (pick 2 from)

- Clostridium difficile Infection (outcome measure)
- Catheter-Associated Urinary Tract Infection (outcome measure)
- Central Line-Associated Blood Stream Infection (outcome measure)
- MRSA (staph outcome measure)
- Specific Surgical Site Infection (SSI) Outcome Measure
- Severe sepsis and septic shock: Management bundle
- Late sepsis or meningitis in very low birth weight (VLBW) neonates (risk-adjusted)
- Measure of pressure ulcers

Care coordination (pick 2 from)

- Experience of care (from HCAHPS)
- Hospital-wide-all-cause unplanned readmission measure (HWR)
- CTM-3, 3-item care transition

For one of the four selected population reports, demonstrate **improvement** from the prior year for a **disparity** population (e.g., language, gender, race, ethnicity, LGBT, SES)

- Improvement is reduction of the gap between the mean performance for the disparity subset and the mean performance for the rest of the patient population

Deemed MU Objectives

Deemed in Satisfaction of:

- CDS
- Reminders
- Electronic notes
- Test tracking
- Clinical summary
- Patient education
- Reconcile meds

- **View, download, transmit (VDT), consider adding if stage 2 reports good uptake*
- **Secure patient messaging, consider adding if stage 2 reports good uptake*

Remaining Items:

- Advance directive
- eMAR
- Imaging results
- EH: provide lab results
- Patient generated data
- **VDT*
- **Secure patient messaging*
- Care summary
- Notification of health event
- Immunization registry
- Electronic lab reporting
- Syndromic surveillance
- Reporting to registries

NB: There is not a 1:1 mapping of QMs used for deeming and the MU functional objectives being deemed in compliance

Additional Considerations

- Propose **baseline reporting period** to be the **12 months prior to the performance reporting period**
 - Providers anticipating that they will participate in the deeming pathway are advised that the deeming program uses the prior year's performance as the baseline for determining "improvement performance"
- Specialists may have fewer options for deeming as determined by available NQF QMs. **If not able to report on at least 4 performance measures, then may not be eligible for the deeming pathway**
- Since effective use of HIT is an enabler for many of the performance improvement programs at CMS, we recommend that **qualification for MU in a given year should be deemed partial satisfaction of other CMS programs (e.g., ACO, PCMH, eRx, CPCI, PQRS)**

Next Steps

- MU WG will incorporate HITPC feedback into revised recommendations to be presented for HITPC approval September 4
- MU WG to discuss and develop recommendations about timing of stage 3 to present September 4
- QM/ACO TT to discuss QMs appropriate for use in 'ACO' models of care and other outcome-oriented measures useful for deeming program, to present in October HITPC

Summary

Stage 3 Recommendations

- Continues the trajectory for meaningful use of effective HIT
- Leverages work and functionality of stages 1 and 2
- Focuses more on tools needed to measure and improve outcomes
- Reduces and simplifies functional objectives
- Provides alternative deeming pathway for high performers and high improvers, meeting the primary MU objective of improving health outcomes