

# NATIONAL QUALITY FORUM

## MEETING OF THE RESOURCE USE CARDIOVASCULAR/DIABETES TECHNICAL ADVISORY PANEL

May 10-11, 2011

*Committee Members Participating:* Jeptha Curtis, MD, (Co-Chair), Yale University School of Medicine; James Rosenzweig, MD (Co-Chair), Boston Medical Center and Boston University School of Medicine; Mary Ann Clark, MHA, Neocure Group; Constance Hwang, MD, MPH, Resolution Health Inc.; Thomas Marwick, MBBS, PhD, Cleveland Clinic; David Palestrant, MD, Cedars-Sinai Medical Center; Katherine Reeder, PhD, RN, University of Kansas School of Nursing; Brenda Marie Parker, PharmD, GlaxoSmithKline; William Weintraub, MD, Christiana Care Health System.

*NQF Staff Participating:* Helen Burstin, MD, MPH, Sally Turbyville, MA, MS, Senior Director; Ashlie Wilbon, MPH, BSN, Senior Project Manager, Sarah Fanta, MPH, Research Analyst; Ann Hammersmith, General Counsel.

*Others Present:* Lisa Grabert, American Hospital Association; Tom Lynn, MD, Ingenix; Ben Hamlin, National Committee for Quality Assurance (NCQA); Niall Brennan, Department of Health and Human Services (DHHS), Barry Straube, American Board of Medical Specialties Research and Education Foundation (ABMS-REF).

### MEETING PROCESS

Dr. Curtis (Co-Chair) welcomed the Technical Advisory Panel (TAP) and thanked them for their participation. The purpose of the in-person meeting was to discuss the cardiovascular and diabetes resource use measures that were submitted to this project.

The measure developers and stewards were present at the meeting to respond to questions from the Committee as needed. A NQF Member and public comment period occurred at the end of the meeting on each day; no comments were made at that time. The audio recordings from the conference call can be found at the [project web page](#).

### DICLOSURE OF INTEREST & ROLL CALL

Ms. Hammersmith led the Steering Committee through a roll call and the disclosure of interest process. At this time, each of the TAP members was asked to disclose any explicit or perceived conflicts of interest. There were no conflicts of interest among the TAP members.

### MEASURE EVALUATION SUMMARY

The following summary includes a preliminary review of the two non-condition specific measures that were submitted to the project. The TAP discussed 7 of the 14 measures submitted for Cardiovascular and Diabetes conditions. The developers who have measures under review by this TAP (Ingenix, NCQA, and ABMS-REF) each gave a brief overview of their submitted measures.

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## Measures and Evaluations

**Page**

*\*Measures are listed in the order they were reviewed.*

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|---|----|
| • (1571) Acute myocardial infarction episode-of-care for post-acute period (days 31-365) (ABMS-REF)   | 3  |
| • (1570) Acute myocardial infarction episode-of-care for 30 days following onset (ABMS-REF)           | 5  |
| • (1593) ETG Based Acute Myocardial Infarction (AMI) resource use measure (Ingenix)                   | 7  |
| • (1573) Episode of care for management of coronary artery disease post re-vascularization (ABMS-REF) | 8  |
| • (1595) Measure Name: ETG Based Diabetes resource use measure (Ingenix)                              | 10 |
| • (1557) Relative Resource Use for People with Diabetes (RDI) (NCQA)                                  | 12 |
| • (1576) Episode of care for patients with diabetes over a one year period (ABMS-REF)                 | 14 |

**LEGEND:** Y-‘Yes’; N-‘No’; A-‘Abstain’; H-High; M-Moderate; L-Low; I-Insufficient; N-Not applicable

<p><b>1571: Acute myocardial infarction episode-of-care for post acute period (days 31-365)</b></p> <p><b>Description:</b> Resource use and costs associated with acute myocardial infarction (AMI) episode during post-acute period. Post-acute period is defined as days 31 to 365 following an index AMI event. An index AMI event is identified and all AMI-related services are identified between days 30 and 365. Resource use is attributed at the level of the individual provider.</p> <p><b>Resource Use Measure Type:</b> Per episode</p> <p><b>Data Source:</b> Administrative claims, Other</p> <p><b>Resource Use Service Category:</b> Inpatient services: Inpatient facility services; Inpatient services: Evaluation and management; Inpatient services: Procedures and surgeries; Inpatient services: Imaging and diagnostic; Inpatient services: Lab services; Inpatient services: Admissions/discharges; Ambulatory services: Outpatient facility services; Ambulatory services: Emergency Department; Ambulatory services: Pharmacy; Ambulatory services: Evaluation and management; Ambulatory services: Procedures and surgeries; Ambulatory services: Imaging and diagnostic; Ambulatory services: Lab services</p> <p><b>Care Setting:</b> Ambulatory Care : Ambulatory Surgery Center (ASC), Ambulatory Care : Clinic/Urgent Care, Ambulatory Care : Clinician Office, Hospital/Acute Care Facility, Imaging Facility, Laboratory, Pharmacy</p> <p><b>Level of Analysis:</b> Clinician : Individual</p> <p><b>Measure Developer:</b> American Board of Medical Specialties Research and Education Foundation (ABMS-REF)</p>
<p><b>If applicable, Conditions/Questions for Developer:</b></p> <p><b>1a:</b></p> <ul style="list-style-type: none"> <li>• Provide evidence of variation during the post-acute phase, &gt;30 day, time period</li> </ul> <p><b>1b:</b></p> <ul style="list-style-type: none"> <li>• Provide any further evidence or rationale for lack of evidence.</li> </ul> <p><b>1c:</b></p> <ul style="list-style-type: none"> <li>• Clarify the intent of the measure under review.</li> <li>• The language needs to be more carefully crafted to not imply it belongs to a pair only.</li> </ul> <p><b>2a.1:</b></p> <ul style="list-style-type: none"> <li>• Provide rationale (or evidence) for post-acute episode starting at 31 days.</li> <li>• Precisely specify the amount of required data and the start and end time periods such that the measure can be implemented.</li> <li>• Clarify application of BETOS codes.</li> <li>• Clarify if measure is stratified for reporting or for some other purpose? (At meeting developer responded that it wasn't viewed as a need of stratification, it was counted in the risk adjustment.)</li> <li>• Precisely specify and describe how the measure handles trigger events that occur during the course of the episode.</li> </ul> <p><b>2a.1:</b></p> <ul style="list-style-type: none"> <li>• Provide rationale for low number of claims attributed to the episode.</li> <li>• Clarify the use of region as a proxy for provider.</li> <li>• Clarify the approach to calculate the O/E. What are the implications of this approach?</li> </ul> <p><b>2b.1:</b></p> <ul style="list-style-type: none"> <li>• Clarify specification, especially in areas noted (e.g., target populations, costing method, risk adjustment).</li> <li>• Clarify and update time period to align with measure—specifications must be precise for standard implementation</li> <li>• Clarify, with more detailed (clinical) rationales, exclusion and inclusion criteria.</li> </ul>

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<p><b>1571: Acute myocardial infarction episode-of-care for post acute period (days 31-365)</b></p> <p><b>2b.2:</b></p> <ul style="list-style-type: none"> <li>• Provide more detail on the analytic method and testing results.</li> </ul> <p><b>2b.4:</b></p> <ul style="list-style-type: none"> <li>• Provide the following information: model selected results of the goodness of fit testing for the selected model, the Rsq value, and rationale and list of final selected covariates.</li> <li>• Clarify specifications to instruct users how to apply the risk adjustment.</li> </ul> <p><b>2b.5:</b></p> <ul style="list-style-type: none"> <li>• Provide guidance or specifications for sample size, for example, minimum case numbers for reporting for the specified measure. Can run simulations of measure to determine power of estimations at varying sample sizes.</li> <li>• Provide rationale (and interpretation example) for the selected O/E comparison approach.</li> </ul> <p><b>3c:</b></p> <ul style="list-style-type: none"> <li>• Clarify, update and improve precision of specifications.</li> </ul> <p><b>4c:</b></p> <ul style="list-style-type: none"> <li>• Clarify, update and improve precision of specifications.</li> </ul> <p><b>4d:</b></p> <ul style="list-style-type: none"> <li>• Clarify, update and improve precision of specifications.</li> </ul>
<p><b>1. Importance to Measure and Report:</b></p> <p><b>1a.High Impact: H- 9 ; M-0 ; L-0; I-0</b></p> <p><b>Rationale:</b> • TAP agreed this is an important area to measure; however, developer did not provide evidence that there are variations in post-acute care. • Specific detail about &gt;30 day period was not provided; the TAP discussed if this is a consequence of available published literature.</p> <p><b>1b. Resource use/cost problems: H- 2 ; M-6 ; L-0 ; I-1</b></p> <p><b>Rationale:</b> • No evidence presented on variation in care during this timeframe of post-acute timeframe.</p> <ul style="list-style-type: none"> <li>• Developer discussed that there is 'high perceived' variation in resource during this time period; however, literature/evidence supporting this are lacking.</li> </ul> <p><b>1c. Purpose clearly described: H- 8 ; M-1 ; L-0 ; I-0</b></p> <p><b>Rationale:</b> • Purpose was clearly described</p> <p><b>1d. Resource use service categories consistent and representative: H- 6 ; M-3 ; L-0 ; I-0</b></p> <p><b>Rationale:</b> • The RU categories were sufficient</p>
<p><b>2. Scientific Acceptability of Measure Properties:</b></p> <p><b>2a1. Well defined/precise specifications: H- 0 ; M-0; L-8 ; I-1</b></p> <p><b>Rationale:</b> • The TAP expressed concern that the target population is a mix of chronic stable CAD patients and post revascularization CAD patients. • Coding errors need to addressed• The stratification method specified in 10.2 uses outcomes measure (subsequent revascularization) as the stratification; the TAP did not think this was appropriate• TAP discussed that the type of Revascularization might be a more appropriate strata, and that the other variables should be included as covariates. • The described costing approach for professional services was not clear. The TAP was concerned about the proposed level of analysis at physician level, perhaps plan or group level only.</p> <p><b>2a2. Reliability testing: H- 2 ; M-5 ; L-2 ; I-0</b></p> <p><b>Rationale:</b> • There was some concern about the low number of claims attributed to the episode (47%). The developer responded that it is a precise attribution method once they are able to ID the clinician• Slide 18: Region as a proxy for provider: The post-acute care may be different based on region• The calculated the O/E based on the patient; they might want to look at the observed/episode at the provider level.</p> <p><b>2b1. Specifications consistent with resource use/cost problem: H- 2 ; M-7 ; L-0 ; I-0</b></p> <p><b>Rationale:</b> • Specifications were not always clear. • Costing method requires clarification• Exclusion and inclusion criteria require more clarity and specific rationale. • Specifications were not always clear. • Time period: entry into target population, and resource use measurement time periods are not specified precisely enough. Should also align with specified required amounts of data. • Costing method requires clarification• Exclusion and inclusion criteria require more clarity and specific rationale.</p> <p><b>2b2. Validity testing: H-2 ; M-6 ; L-1 ; I-0</b></p> <p><b>Rationale:</b> • Insufficient information was provided on the validity testing's analytic method and results.</p> <p><b>2b3. Exclusions: H- 2 ; M-5 ; L-2 ; I-0</b></p> <p><b>Rationale:</b> • Use consistent Inclusion &amp; Exclusion criteria across measures where relevant• Provide clear and relevant rationale for measure exclusions. • Exclusion criteria: Exclusion of deaths in hospital may reward hospitals who have a greater mortality rate</p> <ul style="list-style-type: none"> <li>• SNF Admissions during measurement: Clarify if patients are excluded form measurement or SNF resource use excluded. Provide rationale for exclusion.</li> </ul> <p><b>2b4. Risk adjustment : H- 3 ; M-4 ; L-2 ; I-0</b></p> <p><b>Rationale:</b> • TAP requires confirmation on which risk adjustment approach selected; methodology selected appears to be based on the widely used CMS HCC approach--which the TAP expressed general comfort. TAP could not assess the risk adjustment because the</p>

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<p><b>1571: Acute myocardial infarction episode-of-care for post acute period (days 31-365)</b></p> <p>following information was missing: model selected results of the goodness of fit testing for the selected model, the Rsq value, and rationale and list of final selected covariates. • Specifications require more clarity to instruct users how to apply the risk adjustment.</p> <p><b>2b5. Identification of statistically significant/meaningful differences: H- 0 ; M-5 ; L-4 ; I-0</b>  <b>Rationale:</b> • A minimum sample size for reporting in implementation of the measure is not provided.          • O/E calculation is for each episode attributed to each provider; followed by an evaluation and comparison of the distribution to the O/E ratios for all providers in their peer group. The performance of the provider is evaluated by analyzing how often the O/E ratio for the provider is above some reference point determined by the distribution of the O/E ratios in the peer group. • Sample reports are not always relevant to the measure under review</p> <p><b>2b6. Multiple data sources: H- 0 ; M-0 ; L-0 ; I-0 ; N-9</b>  <b>Rationale:</b> N/A</p> <p><b>2c. Stratification for disparities: H- 0 ; M-0 ; L-0 ; I-0 ; N-9</b>  <b>Rationale:</b> N/A</p> <p><b>3. Usability:</b></p> <p><b>3a. Measure performance results are publicly reported: H- 0 ; M-0 ; L-0 ; I-9</b>  <b>Rationale:</b> • Measures are not in current use; developer anticipates will be in use.</p> <p><b>3b. Measure results are meaningful/useful for public reporting and quality improvement: H- 0 ; M-0 ; L-0 ; I-9</b>  <b>Rationale:</b> • Measures are not in current use; developer anticipates will be in use</p> <p><b>3c. Data and results can be decomposed for transparency and understanding: H- 0 ; M-0 ; L-0 ; I-9</b>  <b>Rationale:</b> • Need (and request for) specification clarification influenced outcome of this rating.</p> <p><b>3d. Harmonized or justification for differences: N/A</b>  <b>Rationale:</b> • Developers were not asked to harmonize prior to submissions. Harmonization may come up as the set of measures move through the CDP process.</p> <p><b>4. Feasibility: (Dr. Palestrant did not vote on this criterion)</b></p> <p><b>4a. Data elements routinely generated during care process: H- 6 ; M-2 ; L-0 ; I-0</b>  <b>Rationale:</b> • Measures rely on administrative data.</p> <p><b>4b. Data elements available electronically: H- 6 ; M-2 ; L-0 ; I-0</b>  <b>Rationale:</b> • Administrative data are in electronic format.</p> <p><b>4c. Susceptibility to inaccuracies/ unintended consequences identified: H- 0 ; M-0 ; L-8 ; I-0</b>  <b>Rationale:</b> • Need (and request for) specification clarification influenced outcome of this rating</p> <p><b>4d. Data collection strategy can be implemented: H- 0 ; M-1 ; L-5 ; I-2</b>  <b>Rationale:</b> • Need (and request for) specification clarification influenced outcome of this rating.</p>
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<p><b>1570: Acute myocardial infarction episode-of-care for 30 days following onset</b></p> <p><b>Description:</b> Resource use and costs associated with acute myocardial infarction (AMI) episode during the acute period. The acute period is defined as 30 days following initial hospitalization for an AMI event. An index AMI event is identified and all AMI-related services are identified in the 30 days following the onset of the acute event. Total AMI-related costs are calculated for each patient and summarized at the attributable hospital level. Observed costs are compared to risk-adjusted expected costs at the hospital level.</p> <p><b>Resource Use Measure Type:</b> Per episode</p> <p><b>Data Source:</b> Administrative claims, Other</p> <p><b>Resource Use Service Category:</b> Inpatient services: Inpatient facility services; Inpatient services: Evaluation and management; Inpatient services: Procedures and surgeries; Inpatient services: Imaging and diagnostic; Inpatient services: Lab services; Inpatient services: Admissions/discharges; Ambulatory services: Outpatient facility services; Ambulatory services: Emergency Department; Ambulatory services: Pharmacy; Ambulatory services: Evaluation and management; Ambulatory services: Procedures and surgeries; Ambulatory services: Imaging and diagnostic; Ambulatory services: Lab services</p> <p><b>Care Setting:</b> Ambulatory Care : Ambulatory Surgery Center (ASC), Ambulatory Care : Clinic/Urgent Care, Ambulatory Care : Clinician Office, Hospital/Acute Care Facility, Imaging Facility, Laboratory, Pharmacy</p> <p><b>Level of Analysis:</b> Facility</p> <p><b>Measure Developer:</b> American Board of Medical Specialties Research and Education Foundation (ABMS-REF)</p> <p><b>If applicable, Conditions/Questions for Developer:</b></p> <p><b>1b:</b></p> <ul style="list-style-type: none"> <li>• Clean up language in IM2.1 to focus on the measure under evaluation, not other existing measures.</li> </ul> <p><b>1c:</b></p> <ul style="list-style-type: none"> <li>• Clarify the intent of the measure under review.</li> <li>• The language needs to be more carefully crafted to not imply it belongs to a pair only.</li> </ul> <p><b>2a1:</b></p>
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<p><b>1570: Acute myocardial infarction episode-of-care for 30 days following onset</b></p> <ul style="list-style-type: none"> <li>• Rationale for continuous data requirement or shorten requirement.</li> <li>• Rationale or update time frames such that the measurement can be implemented in a standard manner.</li> <li>• Rationale or update measure to include patients that expire prior to discharge.</li> <li>• Rationale or update measure that expired patients during measurement are excluded or included equally throughout measurement episode.</li> <li>• Rationale or update pharmacy list to be more inclusive.</li> <li>• Update code lists with most current version of codes available or in use</li> <li>• Clarify and specify how codes are assigned using the BETOS codes</li> <li>• Justify or update identified co-morbid captured</li> <li>• Correct cut-and-paste errors</li> </ul> <p><b>2a.2:</b></p> <ul style="list-style-type: none"> <li>• Provide the data on how many missing hospital identifiers were in the data. More information about hospitals that were dropped.</li> <li>• During meeting developer responded that the clinical processes/decisions for patients &gt;85 y.o. is different and their costs may be different. Any further input?</li> <li>• During meeting developer stated: Due to data integration issues or other data barriers, measuring costs during SNF is difficult, and they were unable to test the measures with SNF data. Any further input?</li> </ul> <p><b>2b.1:</b></p> <ul style="list-style-type: none"> <li>• Clarify specification, especially in areas noted (e.g., target populations, costing method, risk adjustment).</li> <li>• Clarify and update time period to align with measure—specifications must be precise for standard implementation</li> <li>• Clarify, with more detailed (clinical) rationales, exclusion and inclusion criteria.</li> <li>• Provide rationale for excluding SNF costs.</li> </ul> <p><b>2b.2:</b></p> <ul style="list-style-type: none"> <li>• Provide more detail on the analytic method and testing results.</li> </ul> <p><b>2b.3:</b></p> <ul style="list-style-type: none"> <li>• Provide concise rationales for exclusions or update measures to be more consistent.</li> <li>• Provide rationale for excluding patients that expire prior to discharge.</li> </ul> <p><b>2b.4:</b></p> <ul style="list-style-type: none"> <li>• Provide the following information: model selected results of the goodness of fit testing for the selected model, the Rsq value, and rationale and list of final selected covariates.</li> <li>• Clarify specifications to instruct users how to apply the risk adjustment.</li> </ul> <p><b>2b.5:</b></p> <ul style="list-style-type: none"> <li>• Provide guidance or specifications for sample size, for example, minimum case numbers for reporting for the specified measure. Can run simulations of measure to determine power of estimations at varying sample sizes.</li> <li>• Provide rationale (and interpretation example) for the selected O/E comparison approach.</li> </ul> <p><b>3c:</b></p> <ul style="list-style-type: none"> <li>• Clarify, update and improve precision of specifications.</li> </ul> <p><b>4c:</b></p> <ul style="list-style-type: none"> <li>• Clarify, update and improve precision of specifications.</li> </ul> <p><b>4d:</b></p> <ul style="list-style-type: none"> <li>• Clarify, update and improve precision of specifications.</li> </ul>
<p><b>1. Importance to Measure and Report:</b></p> <p><b>1a. High Impact: H- 9 ; M-0 ; L-0 ; I-0</b>  <i>Rationale:</i> • Developer provided sufficient evidence and support.</p> <p><b>1b. Resource use/cost problems: H- 9 ; M-6 ; L-0 ; I-0</b>  <i>Rationale:</i> • Similar citations used for the ABMS AMI 31-365 days measure; the literature on variation focused on variation from 0-30 days. • The intended use response was confusing--it focused on and referenced readmission measures. • This measure examines resource use 0- 30 days, not just resource use associated with readmissions.</p> <p><b>1c. Purpose clearly described: H- 4 ; M-5 ; L-0 ; I-0</b>  <i>Rationale:</i> • The intent of the measure is not clearly described • The intent description emphasizes the measure as complementary to a readmission measure. • It states that the measure should be paired with the 30 day measure that was submitted, they are not additive but rather complementary. • NQF is currently not accepting paired measure for RU; it is an independent measure review. The language needs to be more carefully crafted to not imply it belongs to a pair only.</p> <p><b>1d. Resource use service categories consistent and representative: H- 4 ; M-5 ; L-0 ; I-0</b>  <i>Rationale:</i> • The RU categories were sufficient</p>
<p><b>2. Scientific Acceptability of Measure Properties:</b></p> <p><b>2a1. Well defined/precise specifications: H- 0 ; M-3 ; L-6 ; I-0</b>  <i>Rationale:</i> • Requiring full year of continuous data for a patient reduces the sample size. Is this requirement necessary when the</p>

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<p><b>1570: Acute myocardial infarction episode-of-care for 30 days following onset</b></p> <p>measure examines resource use for only 30 days after the AMI event? • The measurement time period does not align with the measure specifications—are patients who have an AMI in December ever measured? For example, for calendar year measurement, could the measurement time period to identify the patient end Dec 1 (giving 30 days to measure resource use) and start the year prior to the measurement year Dec 1 (to ensure the patients that have AMI in December are captured)? For 12 month (regardless if it aligns with calendar year) require detail on how to ensure the patients having AMI in the last month of measurement are counted. • Discharge status: Have to be discharged alive to be in the measure. This could cause bias. TAP also expressed concern that those who are discharged alive but die within the 30 days after discharge are included. • All code lists need to be updated, as in other ABMS measures. • Pharmacy: Pharmacy list does not include any antiarrhythmic agents; they are often given as treatment for complications of AMI. This is potentially a bigger issue for AMI patients than for other patient populations addressed in the other measures. • Need more clarification on how codes are assigned using the BETOS codes • Why is CHF called out? Seems to be arbitrary selection of a single co-morbid condition, shouldn't others be captured here as well? • Developer is unable to get data on STEMI and Non-STEMI to allow them to stratify, this is a problem • Copy and paste error on page 30.</p> <p><b>2a2. Reliability testing: H- 0 ; M-8 ; L-1 ; I-0</b></p> <p><i>Rationale:</i> • A high number of hospital claims were dropped; developer noted that this is a consequence of missing hospital identifiers. • Age Limit: Why have the upper age limit of 85years? This is inconsistent with the CAD revascularization measure. Hospitalization: What if patient was in the hospital &gt;30days? Developer: need to clarify specifications on this. • Patients in hospice are included. Why is this different than SNF? Developer: Due to data integration issues or other data barriers, measuring costs during SNF is difficult, and they were unable to test the measures with SNF data.</p> <p><b>2b1. Specifications consistent with resource use/cost problem: H- 0 ; M-1 ; L-8 ; I-0</b></p> <p><i>Rationale:</i> • Specifications were not always clear. • Time period: entry into target population, and resource use measurement time periods are not specified precisely enough. Should also align with specified required amounts of data. • Costing method requires clarification • Exclusion and inclusion criteria require more clarity and specific rationale. • Exclusions, especially those not discharged alive are excluded but anyone expiring after the discharge are included and the exclusion of SNF costs.</p> <p><b>2b2. Validity testing: H- 0 ; M-6 ; L-3 ; I-0</b></p> <p><i>Rationale:</i> • Insufficient information was provided on the validity testing's analytic method and results.</p> <p><b>2b3. Exclusions: H- 0 ; M-0; L-9; I-0</b></p> <p><i>Rationale:</i> • Inconsistent Inclusion &amp; Exclusion of pregnant patients across all the AMBS measures. Exclusions seem to be arbitrary at times. • Exclusion criteria: Exclusion of deaths in hospital may reward hospitals who have a greater mortality rate • Why exclude ESRD patients?</p> <p><b>2b4. Risk adjustment : H-0 ; M-9 ; L-0 ; I-0</b></p> <p><i>Rationale:</i> • TAP requires confirmation on which risk adjustment approach selected; methodology selected appears to be based on the widely used CMS HCC approach--which the TAP expressed general comfort. TAP could not assess the risk adjustment because the following information was missing: model selected results of the goodness of fit testing for the selected model, the Rsq value, and rationale and list of final selected covariates. • Specifications require more clarity to instruct users how to apply the risk adjustment.</p> <p><b>2b5. Identification of statistically significant/meaningful differences: H- 0 ; M-3 ; L-6 ; I-0</b></p> <p><i>Rationale:</i> • A minimum sample size for reporting in implementation of the measure is not provided. • O/E calculation is for each episode attributed to each provider; followed by an evaluation and comparison of the distribution to the O/E ratios for all providers in their peer group. The performance of the provider is evaluated by analyzing how often the O/E ratio for the provider is above some reference point determined by the distribution of the O/E ratios in the peer group. • Sample reports are not always relevant to the measure under review</p> <p><b>2b6. Multiple data sources: H- 0 ; M-0 ; L-0 ; I-0 ; N-9</b></p> <p><i>Rationale:</i> N/A</p> <p><b>2c. Stratification for disparities: H- 0 ; M-0 ; L-0 ; I-0; N-9</b></p> <p><i>Rationale:</i> N/A</p>
<p><b>3. Usability:</b></p> <p><b>3a. Measure performance results are publicly reported: H- 0 ; M-1 ; L-0 ; I-8</b></p> <p><i>Rationale:</i> • Measures are not in current use; developer anticipates will be in use.</p> <p><b>3b. Measure results are meaningful/useful for public reporting and quality improvement: H- 0 ; M-1 ; L-0 ; I-8</b></p> <p><i>Rationale:</i> • Measures are not in current use; developer anticipates will be in use.</p> <p><b>3c. Data and results can be decomposed for transparency and understanding: H- 0 ; M-1 ; L-0 ; I-8</b></p> <p><i>Rationale:</i> • Need (and request for) specification clarification influenced outcome of this rating.</p> <p><b>3d. Harmonized or justification for differences: N/A</b></p> <p><i>Rationale:</i> • Developers were not asked to harmonize prior to submissions. Harmonization may come up as the set of measures move through the CDP process.</p>
<p><b>4. Feasibility:</b></p> <p><b>4a. Data elements routinely generated during care process: H- 7 ; M-2 ; L-0 ; I-0</b></p> <p><i>Rationale:</i> • Measures rely on administrative data.</p>

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<p><b>1570: Acute myocardial infarction episode-of-care for 30 days following onset</b></p> <p><b>4b. Data elements available electronically:</b> H- 7 ; M-2 ; L-0 ; I-0  <i>Rationale:</i> • Administrative data are in electronic format.</p> <p><b>4c. Susceptibility to inaccuracies/ unintended consequences identified:</b> H- 0 ; M-1 ; L-8 ; I-0  <i>Rationale:</i> • Need (and request for) specification clarification influenced outcome of this rating.</p> <p><b>4d. Data collection strategy can be implemented:</b> H- 0 ; M-2; L-5; I-2  <i>Rationale:</i> • Need (and request for) specification clarification influenced outcome of this rating.</p>
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<p><b>1593: Measure Name: ETG Based Acute Myocardial Infarction (AMI) resource use measure</b></p> <p><b>Description:</b> The measure focuses on resources used to deliver episodes of care for patients with AMI. AMI episodes are defined using the Episode Treatment Groups (ETG) methodology and describe the unique presence of the condition for a patient and the services involved in diagnosing, managing and treating AMI. A number of resource use measures are defined for AMI episodes, including overall cost of care, cost of care by type of service, and the utilization of specific types of services. Each resource use measure is expressed as a cost or a utilization count per episode and comparisons with internal and external benchmarks are made using risk adjustment to support valid comparisons.</p> <p>As requested by NQF, the focus of this submission is for AMI episodes and will cover both measures at the AMI base and severity level and also an AMI composite measure where AMI episode results are combined across AMI severity levels. At the most detailed level, the measure is defined as the base condition of AMI and an assigned level of severity (e.g., resources per episode for AMI, severity level 1 episodes). Composite measures can then be created using these measurement units to meet a specific need. For example, a composite measure for AMI is derived by combining AMI episode results across AMI severity levels. Appropriate risk adjustment is applied to support comparisons (e.g., for physician measurement, adjusting for a physician’s mix of AMI episodes by severity level when supporting an AMI composite comparison).</p> <p>The focus of this measure is on AMI. However, AMI episode results could also be included in a “cardiology”, “chronic care”, or other clinical composite for a physician, combining episodes in clinical areas similar to AMI. Further, an “overall” composite for a physician can be created, again by aggregating episode results across appropriate conditions and severity levels and applying proper risk adjustment when making comparisons.</p> <p><b>Resource Use Measure Type:</b> Per episode  <b>Data Source:</b> Administrative claims, Other  <b>Resource Use Service Category:</b> Inpatient services: Inpatient facility services; Inpatient services: Admissions/discharges; Ambulatory services: Outpatient facility services; Ambulatory services: Emergency Department; Ambulatory services: Pharmacy; Ambulatory services: Evaluation and management; Ambulatory services: Procedures and surgeries; Ambulatory services: Imaging and diagnostic; Ambulatory services: Lab services  <b>Care Setting:</b> Ambulatory Care : Ambulatory Surgery Center (ASC), Ambulatory Care : Clinic/Urgent Care, Ambulatory Care : Clinician Office, Home Health, Hospice, Hospital/Acute Care Facility, Imaging Facility, Laboratory  <b>Level of Analysis:</b> Clinician : Group/Practice, Clinician : Individual, Clinician : Team, Facility, Health Plan, Integrated Delivery System, Population : Community, Population : County or City, Population : National, Population : Regional  <b>Measure Developer:</b> Ingenix</p> <p><b>If applicable, Conditions/Questions for Developer and Developer response:</b></p> <p><i>This measure was withdrawn by the developer, did not meet project scope.</i></p>
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<p><b>1573: Episode of care for management of coronary artery disease post re-vascularization</b></p> <p><b>Description:</b> Resource use and costs associated with management of coronary artery disease (CAD) care over a one-year period post revascularization (coronary artery bypass graft [CABG] or percutaneous coronary intervention [PCI]) without an acute myocardial infarction (AMI). Patients are identified who had a revascularization and CAD-related resource use and costs during a 12-month period post revascularization are measured.</p> <p><b>Resource Use Measure Type:</b> Per episode  <b>Data Source:</b> Administrative claims, Other  <b>Resource Use Service Category:</b> Inpatient services: Inpatient facility services; Inpatient services: Evaluation and management; Inpatient services: Procedures and surgeries; Inpatient services: Imaging and diagnostic; Inpatient services: Lab services; Inpatient services: Admissions/discharges; Ambulatory services: Outpatient facility services; Ambulatory services: Emergency Department; Ambulatory services: Pharmacy; Ambulatory services: Evaluation and management; Ambulatory services: Procedures and surgeries; Ambulatory services: Imaging and diagnostic; Ambulatory services: Lab services; Durable Medical Equipment (DME)  <b>Care Setting:</b> Ambulatory Care : Ambulatory Surgery Center (ASC), Ambulatory Care : Clinic/Urgent Care, Ambulatory Care : Clinician Office, Hospital/Acute Care Facility, Imaging Facility, Laboratory, Pharmacy</p>
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<p><b>1573: Episode of care for management of coronary artery disease post re-vascularization</b></p> <p><b>Level of Analysis:</b> Clinician : Individual</p> <p><b>Measure Developer:</b> American Board of Medical Specialties Research and Education Foundation (ABMS-REF)</p> <p><b>If applicable, Conditions/Questions for Developer:</b></p> <p><b>1b:</b></p> <ul style="list-style-type: none"> <li>• The developer further responded that commercial data often is limited on variables that may support examining disparities.</li> </ul> <p><b>1c:</b></p> <ul style="list-style-type: none"> <li>• Clarify the intent of the measure under review.</li> <li>• The language needs to be more carefully crafted to not imply it belongs to a pair only.</li> </ul> <p><b>2a.1:</b></p> <ul style="list-style-type: none"> <li>• Provide a rationale (evidence) for target population mix of chronic stable CAD patients and post revascularization CAD patients.</li> <li>• Update all code lists.</li> <li>• Update measure or provide rationale for specified stratification method</li> <li>• Clarify costing approach and provide overarching description of costing methodology.</li> </ul> <p><b>2a.2:</b></p> <ul style="list-style-type: none"> <li>• Clarify specifications</li> <li>• Specify target populations more precisely.</li> </ul> <p><b>2b.1:</b></p> <ul style="list-style-type: none"> <li>• Clarify specification, especially in areas noted, including inpatient codes are pasted under outpatient section (e.g., target populations, costing method, risk adjustment).</li> <li>• Clarify and update time period to align with measure—specifications must be precise for standard implementation</li> <li>• Clarify, with more detailed (clinical) rationales, exclusion and inclusion criteria.</li> </ul> <p><b>2b.2:</b></p> <ul style="list-style-type: none"> <li>• Provide more detail on the analytic method and testing results.</li> <li>• Clarify what and how data are presented in the PPT and implications for the final measure approach. (Applies to all measures.)</li> </ul> <p><b>2b.4:</b></p> <ul style="list-style-type: none"> <li>• Provide the following information: model selected results of the goodness of fit testing for the selected model, the Rsq value, and rationale and list of final selected covariates.</li> <li>• Clarify specifications to instruct users how to apply the risk adjustment.</li> </ul> <p><b>2b.5:</b></p> <ul style="list-style-type: none"> <li>• Provide guidance or specifications for sample size, for example, minimum case numbers for reporting for the specified measure. Can run simulations of measure to determine power of estimations at varying sample sizes.</li> <li>• Provide rationale (and interpretation example) for the selected O/E comparison approach.</li> </ul> <p><b>3c:</b></p> <ul style="list-style-type: none"> <li>• Clarify, update and improve precision of specifications.</li> </ul> <p><b>4c:</b></p> <ul style="list-style-type: none"> <li>• Clarify, update and improve precision of specifications.</li> </ul> <p><b>4d:</b></p> <ul style="list-style-type: none"> <li>• Clarify, update and improve precision of specifications.</li> </ul>
<p><b>1. Importance to Measure and Report:</b></p> <p><b>1a.High Impact: H- 8; M-1 ; L-0 ; I-0</b>  <b>Rationale:</b> • Developer provided sufficient evidence and support.</p> <p><b>1b. Resource use/cost problems: H- 2 ; M-6 ; L-0 ; I-1</b>  <b>Rationale:</b> • TAP discussed that the submission (among others) provided evidence of gender and only racial disparities only and did not address other areas of disparities. The TAP discussed that this may be due to a lack of literature in this area. Requested Steering Committee guidance if this should be evaluated in the resource use measures at this time.</p> <p><b>1c. Purpose clearly described: H- 6 ; M-3 ; L-0 ; I-0</b>  <b>Rationale:</b> • More detail about whether this measure is paired to other quality measures as discussed in 3.1• This project does not include the evaluation of “paired” measured.</p> <p><b>1d. Resource use service categories consistent and representative: H- 2 ; M-6 ; L-0 ; I-0</b>  <b>Rationale:</b> • The RU categories were sufficient</p>
<p><b>2. Scientific Acceptability of Measure Properties:</b></p> <p><b>2a1. Well defined/precise specifications: H- 0 ; M-1 ; L-9; I-0</b>  <b>Rationale:</b> • The TAP expressed concern that the target population is a mix of chronic stable CAD patients and post revascularization CAD patients. • Coding errors need to addressed• The stratification method specified in 10.2 uses outcomes measure (subsequent revascularization) as the stratification; the TAP did not think this was appropriate• TAP discussed that the type of Revascularization might be a more appropriate strata, and that the other variables should be included as covariates. • The described costing approach for professional services was not clear. The TAP was concerned about the proposed level of analysis at physician level, perhaps plan or</p>



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<p><b>1573: Episode of care for management of coronary artery disease post re-vascularization</b></p> <p>group level only.</p> <p><b>2a2. Reliability testing:</b> H- 1 ; M-0 ; L-6 ; I-2  <i>Rationale:</i> • Because the TAP requires clarifications and rationales for the specifications, testing results were difficult to rate.          • Precision of target population may be insufficient.</p> <p><b>2b1. Specifications consistent with resource use/cost problem:</b> H- 0 ; M-0 ; L-9 ; I-0  <i>Rationale:</i> • Specifications were not always clear. • Time period: entry into target population, and resource use measurement time periods are not specified precisely enough. Should also align with specified required amounts of data. • Costing method requires clarification • Exclusion and inclusion criteria require more clarity and specific rationale. • Target population identification specifications require more precision.          • <i>S11.3: Level of Analysis; can work at the level of health systems and health plans. Rethink the level of analysis</i></p> <p><b>2b2. Validity testing:</b> H- 0 ; M-1 ; L-8 ; I-0  <i>Rationale:</i> • Insufficient information was provided on the validity testing's analytic method and results.          • Slide 10 of the measure's attachment included resources which are 'not related' to CAD; developer clarified slide information as presented.</p> <p><b>2b3. Exclusions:</b> H- 0 ; M-3 ; L-5 ; I-1  <i>Rationale:</i> • Use consistent Inclusion &amp; Exclusion criteria across measures where relevant. • Provide clear and relevant rationale for measure exclusions.</p> <p><b>2b4. Risk adjustment :</b> H-0 ; M-9 ; L-0 ; I-0  <i>Rationale:</i> • TAP requires confirmation on which risk adjustment approach selected; methodology selected appears to be based on the widely used CMS HCC approach--which the TAP expressed general comfort. TAP could not assess the risk adjustment because the following information was missing: model selected results of the goodness of fit testing for the selected model, the Rsq value, and rationale and list of final selected covariates. • Specifications require more clarity to instruct users how to apply the risk adjustment.</p> <p><b>2b5. Identification of statistically significant/meaningful differences:</b> H- 0 ; M-2 ; L-1 ; I-6  <i>Rationale:</i> • A minimum sample size for reporting in implementation of the measure is not provided. • O/E calculation is for each episode attributed to each provider; followed by an evaluation and comparison of the distribution to the O/E ratios for all providers in their peer group. The performance of the provider is evaluated by analyzing how often the O/E ratio for the provider is above some reference point determined by the distribution of the O/E ratios in the peer group. • Sample reports are not always relevant to the measure under review</p> <p><b>2b6. Multiple data sources:</b> H- 0; M-0; L-0; I-0; N: 9  <i>Rationale:</i> N/A</p> <p><b>2c. Stratification for disparities:</b> H- 0; M-0; L-0; I-0; N: 9  <i>Rationale:</i> N/A</p>
<p><b>3. Usability:</b></p> <p><b>3a. Measure performance results are publicly reported:</b> H- 0 ; M-0 ; L-0 ; I-9  <i>Rationale:</i> • Measures are not in current use; developer anticipates will be in use.</p> <p><b>3b. Measure results are meaningful/useful for public reporting and quality improvement:</b> H- 0 ; M-0 ; L-0 ; I-9  <i>Rationale:</i> • Measures are not in current use; developer anticipates will be in use.</p> <p><b>3c. Data and results can be decomposed for transparency and understanding:</b> H- 0 ; M-0 ; L-0 ; I-9  <i>Rationale:</i> • Need (and request for) specification clarification influenced outcome of this rating.</p> <p><b>3d. Harmonized or justification for differences:</b> H- 0 ; M-0 ; L-0 ; I-0; N-9  <i>Rationale:</i> • Developers were not asked to harmonize prior to submissions. Harmonization may come up as the set of measures move through the CDP process.</p>
<p><b>4. Feasibility:</b></p> <p><b>4a. Data elements routinely generated during care process:</b> H- 7 ; M-2 ; L-0 ; I-0  <i>Rationale:</i> • Measures rely on administrative data.</p> <p><b>4b. Data elements available electronically:</b> H- 7 ; M-2 ; L-0 ; I-0  <i>Rationale:</i> • Administrative data are in electronic format.</p> <p><b>4c. Susceptibility to inaccuracies/ unintended consequences identified:</b> H- 0 ; M-1 ; L-8 ; I-0  <i>Rationale:</i> • Need (and request for) specification clarification influenced outcome of this rating</p> <p><b>4d. Data collection strategy can be implemented:</b> H- 1 ; M-1 ; L-5 ; I-2  <i>Rationale:</i> • Need (and request for) specification clarification influenced outcome of this rating.</p>

<p><b>1557: Relative Resource Use for People with Diabetes (RDI)</b></p> <p><b>Description:</b> The risk-adjusted relative resource use by health plan members 18-75 years of age who were identified as having diabetes (type 1 and type 2) during the measurement year.</p>
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<p><b>1557: Relative Resource Use for People with Diabetes (RDI)</b></p> <p><b>Resource Use Measure Type:</b> Per capita (population- or patient-based)</p> <p><b>Data Source:</b> Administrative claims</p> <p><b>Resource Use Service Category:</b> Inpatient services: Inpatient facility services; Inpatient services: Evaluation and management; Inpatient services: Procedures and surgeries; Inpatient services: Imaging and diagnostic; Inpatient services: Lab services; Inpatient services: Admissions/discharges; Ambulatory services: Outpatient facility services; Ambulatory services: Emergency Department; Ambulatory services: Pharmacy; Ambulatory services: Evaluation and management; Ambulatory services: Procedures and surgeries; Ambulatory services: Imaging and diagnostic; Ambulatory services: Lab services</p> <p><b>Care Setting:</b> Ambulatory Care : Clinic/Urgent Care, Ambulatory Care : Clinician Office, Hospital/Acute Care Facility, Imaging Facility, Laboratory, Pharmacy</p> <p><b>Level of Analysis:</b> Health Plan, Integrated Delivery System, Population : National, Population : Regional</p> <p><b>Measure Developer:</b> National Committee for Quality Assurance (NCQA)</p>
<p><b>If applicable, Conditions/Questions for Developer and Developer response:</b></p> <p><b>2a.1:</b> Provide information on which maternity codes are included.</p> <p><b>2b.3:</b> Rationale for excluding patients &gt;75 years old.</p>
<p><b>1. Importance to Measure and Report:</b></p> <p><b>1a. High Impact:</b> H- 9 ; M-0 ; L-0 ; I-0 <i>Rationale:</i> • Developer provided sufficient evidence and support.</p> <p><b>1b. Resource use/cost problems:</b> H- 9 ; M-0 ; L-0 ; I-0 <i>Rationale:</i> • Developer provided sufficient evidence and support.</p> <p><b>1c. Purpose clearly described:</b> H- 8 ; M-1 ; L-0 ; I-0 <i>Rationale:</i> • Developer provided sufficient evidence and support.</p> <p><b>1d. Resource use service categories consistent and representative:</b> H- 7 ; M-2 ; L-0 ; I-0 <i>Rationale:</i> • The RU categories were sufficient</p>
<p><b>2. Scientific Acceptability of Measure Properties:</b></p> <p><b>2a1. Well defined/precise specifications:</b> H- 8 ; M-0 ; L-0 ; I-0 <i>Rationale:</i> The TAP had concerns about how are changing codes are handled. It was stated that this is very difficult to manage in all measures. Concern was also expressed related to adjusting away patients with lots of claims; conditions such as HIV and active cancer are excluded (this adjustment is made every year with a one year lag). The intent of this measure is to capture all costs for a diabetic patient, including services that may not be related to a diabetes diagnosis. While counting all costs does add some noise to the measure, there is evidence that diabetics stay in hospital longer even for stays triggered by non-diabetes related events. With a minimum sample size of 400, this measure has been specified for use at the health plan level; not for use at the physician attribution level. TAP had concerns as to why conditions that are proven to be related to diabetes complications are not included –e.g. amputations, ESRD, etc. TAP wanted clarification on whether pregnancy/maternity codes were included in this measure.</p> <p><b>2a2. Reliability testing:</b> H- 9 ; M-0 ; L-0 ; I-0 <i>Rationale:</i> Reliability testing was acceptable.</p> <p><b>2b1. Specifications consistent with resource use/cost problem:</b> H- 5 ; M-4 ; L-0 ; I-0 <i>Rationale:</i> Measure captures all costs for a diabetes patient.</p> <p><b>2b2. Validity testing:</b> H- 5 ; M-4 ; L-0 ; I-0 <i>Rationale:</i> Adequate validity testing information provided.</p> <p><b>2b3. Exclusions:</b> H- 6 ; M-3 ; L-0 ; I-0 <i>Rationale:</i> TAP expressed concern over the age limit criteria; Age 75 may be too low.</p> <p><b>2b4. Risk adjustment :</b> H- 9 ; M-0 ; L-0 ; I-0 <i>Rationale:</i> Measure uses HCC's for the risk adjustment. TAP agrees this is acceptable methodology.</p> <p><b>2b5. Identification of statistically significant/meaningful differences:</b> H- 9 ; M-0 ; L-0 ; I-0 <i>Rationale:</i> Minimum sample size at 400 allows for increased statistical stability.</p> <p><b>2b6. Multiple data sources:</b> H- 0 ; M-0 ; L-0 ; I-0 ; N-9 <i>Rationale:</i> N/A</p> <p><b>2c. Stratification for disparities:</b> H- 2 ; M-5 ; L-1 ; I-0; N-1 <i>Rationale:</i> Can only be stratified for age and gender and region, as with most of the measures submitted.</p>
<p><b>3. Usability:</b></p> <p><b>3a. Measure performance results are publicly reported:</b> H- 9 ; M-0 ; L-0 ; I-0 <i>Rationale:</i> Measure is currently in use by large number of health plans.</p> <p><b>3b. Measure results are meaningful/useful for public reporting and quality improvement:</b> H- 8 ; M-1 ; L-0 ; I-0 <i>Rationale:</i> Public reporting mechanism sufficient.</p>

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<p><b>1557: Relative Resource Use for People with Diabetes (RDI)</b></p> <p><b>3c. Data and results can be decomposed for transparency and understanding:</b> H- 8 ; M-1 ; L-0 ; I-0  <i>Rationale:</i> Specifications adequate for transparency.</p> <p><b>3d. Harmonized or justification for differences:</b> H- 0 ; M-0 ; L-0 ; I-0 ; N-9  <i>Rationale:</i> • Developers were not asked to harmonize prior to submissions. Harmonization may come up as the set of measures move through the CDP process.</p> <p><b>4. Feasibility:</b></p> <p><b>4a. Data elements routinely generated during care process:</b> H- 9 ; M-0 ; L-0 ; I-0  <i>Rationale:</i> • Measures rely on administrative data.</p> <p><b>4b. Data elements available electronically:</b> H- 9 ; M-0 ; L-0 ; I-0  <i>Rationale:</i> • Administrative data are in electronic format.</p> <p><b>4c. Susceptibility to inaccuracies/ unintended consequences identified:</b> H- 6 ; M-3 ; L-0 ; I-0  <i>Rationale:</i> Users of NCQA are subject to a data audit process. Susceptibility to errors/inaccuracies are low.</p> <p><b>4d. Data collection strategy can be implemented:</b> H- 9 ; M-0 ; L-0 ; I-0  <i>Rationale:</i> Barriers to use are low.</p>
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<p><b>1576: Episode of care for patients with diabetes over a one year period</b></p> <p><b>Description:</b> Resource use and costs associated with management of diabetes over a one year period. Identify patients in a management phase of diabetes by including patients with diabetes in the year prior to the measurement year and measure diabetes-related resource use and costs during the measurement year. Patients with new diagnoses of diabetes and those with end stage disease are excluded from the measure. Resource use is attributed at the level of the individual provider.</p> <p><b>Resource Use Measure Type:</b> Per episode</p> <p><b>Data Source:</b> Administrative claims, Other</p> <p><b>Resource Use Service Category:</b> Inpatient services: Inpatient facility services; Inpatient services: Evaluation and management; Inpatient services: Procedures and surgeries; Inpatient services: Imaging and diagnostic; Inpatient services: Lab services; Inpatient services: Admissions/discharges; Ambulatory services: Outpatient facility services; Ambulatory services: Emergency Department; Ambulatory services: Pharmacy; Ambulatory services: Evaluation and management; Ambulatory services: Procedures and surgeries; Ambulatory services: Imaging and diagnostic; Ambulatory services: Lab services; Durable Medical Equipment (DME)</p> <p><b>Care Setting:</b> Ambulatory Care : Clinician Office, Hospital/Acute Care Facility, Pharmacy</p> <p><b>Level of Analysis:</b> Clinician : Individual</p> <p><b>Measure Developer:</b> American Board of Medical Specialties Research and Education Foundation (ABMS-REF)</p> <p><b>If applicable, Conditions/Questions for Developer and Developer response:</b></p> <p><b>1b:</b></p> <ul style="list-style-type: none"> <li>• The developer further responded that commercial data often is limited on variables that may support examining disparities.</li> </ul> <p><b>1c:</b></p> <ul style="list-style-type: none"> <li>• Clarify the intent of the measure under review.</li> <li>• The language needs to be more carefully crafted to not imply it belongs to a pair only.</li> </ul> <p><b>2a.1:</b></p> <ul style="list-style-type: none"> <li>• Update measure to include renal failure codes 585.3, 585.2, 585.4 or provide rationale for exclusion.</li> <li>• Update all code lists.</li> <li>• Update measure to include bariatric surgery or provide rationale.</li> <li>• Provide more specific rationale for the drugs selected.</li> <li>• Update/clarify measure title and description such that the focus on Type 2 diabetes is readily apparent.</li> <li>• Provide rationale on Type I's exclusion.</li> <li>• Update measure to more precisely exclude patients with Type I (or provide rationale).</li> <li>• Clarify specification to and provide rationale for approach to excluding new diabetes diagnosis.</li> </ul> <p><b>2b.1:</b></p> <ul style="list-style-type: none"> <li>• Clarify specification, especially in areas noted (e.g., target populations, costing method, risk adjustment).</li> <li>• Clarify and update time period to align with measure—specifications must be precise for standard implementation</li> <li>• Clarify, with more detailed (clinical) rationales, exclusion and inclusion criteria.</li> </ul> <p><b>2b.2:</b></p> <ul style="list-style-type: none"> <li>• Provide more detail on the analytic method and testing results.</li> </ul> <p><b>2b.4:</b></p> <ul style="list-style-type: none"> <li>• Provide the following information: model selected results of the goodness of fit testing for the selected model, the Rsq value, and rationale and list of final selected covariates.</li> <li>• Clarify specifications to instruct users how to apply the risk adjustment.</li> </ul>
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<p><b>1576: Episode of care for patients with diabetes over a one year period</b></p> <p><b>2b.5:</b></p> <ul style="list-style-type: none"> <li>• Provide guidance or specifications for sample size, for example, minimum case numbers for reporting for the specified measure. Can run simulations of measure to determine power of estimations at varying sample sizes.</li> <li>• Provide rationale (and interpretation example) for the selected O/E comparison approach.</li> </ul> <p><b>3c:</b></p> <ul style="list-style-type: none"> <li>• Clarify, update and improve precision of specifications.</li> </ul> <p><b>4d:</b></p> <ul style="list-style-type: none"> <li>• Clarify, update and improve precision of specifications.</li> </ul>
<p><b>1. Importance to Measure and Report:</b></p> <p><b>1a. High Impact: H- 8 ; M-1 ; L-0 ; I-0</b>  <b>Rationale:</b> • Developer provided sufficient evidence and support.</p> <p><b>1b. Resource use/cost problems: H- 2 ; M-6 ; L-0 ; I-1</b>  <b>Rationale:</b> • TAP discussed that the submission (among others) provided evidence of gender and only racial disparities only and did not address other areas of disparities. The TAP discussed that this may be due to a lack of literature in this area. Requested Steering Committee guidance if this should be evaluated in the resource use measures at this time.</p> <p><b>1c. Purpose clearly described: H- 6 ; M-3 ; L-0 ; I-0</b>  <b>Rationale:</b> • More detail about whether this measure is paired to other quality measures as discussed in 3.1</p> <ul style="list-style-type: none"> <li>• This project does not include the evaluation of “paired” measured.</li> </ul> <p><b>1d. Resource use service categories consistent and representative: H- 3 ; M-6 ; L-0 ; I-0</b>  <b>Rationale:</b> • The RU categories were sufficient</p>
<p><b>2. Scientific Acceptability of Measure Properties:</b></p> <p><b>2a1. Well defined/precise specifications: H- 0 ; M-7 ; L-2 ; I-0</b>  <b>Rationale:</b> • Unclear as to why renal failure codes 585.3, 585.2, 585.4 are excluded from this measure. • Codes are not updated.</p> <ul style="list-style-type: none"> <li>• Bariatric surgery was not included; it is now approved for patients with a lower level obesity.</li> <li>• The TAP requires rationale for the drugs selected. In particular, why the uses of only oral hypoglycemic or injectable medication are in the inclusion criteria—others should be considered.</li> <li>• Requested clarification for lower age band of 30 years of age for type II diabetes specified. Developer responded that the measure is supposed to be focused on Type II diabetes.</li> <li>• TAP stated that the title and measure description, intent should clearly state the focus on Type 2 diabetes.</li> <li>• TAP requested clarification on Type I's exclusion and requested the developer consider stratifying between type 1 and type 2 rather than exclude type 1.</li> <li>• Inclusion and exclusion criteria need be tightened up to really be sure to exclude patients with Type I.</li> <li>• TAP was concerned about method of excluding new diabetes diagnosis</li> </ul> <p><b>2a2. Reliability testing: H- 9 ; M-0 ; L-0 ; I-0</b>  <b>Rationale:</b> • Reliability testing is sound. Tested in large databases.</p> <p><b>2b1. Specifications consistent with resource use/cost problem: H- 0 ; M-3 ; L-6 ; I-0</b>  <b>Rationale:</b> • Specifications were not always clear. • Time period: entry into target population, and resource use measurement time periods are not specified precisely enough. Should also align with specified required amounts of data. • Costing method requires clarification • Exclusion and inclusion criteria require more clarity and specific rationale. • Target population identification specifications require more precision.</p> <p><b>2b2. Validity testing: H- 0 ; M-9 ; L-0 ; I-0</b>  <b>Rationale:</b> • Insufficient information was provided on the validity testing's analytic method and results.</p> <p><b>2b3. Exclusions: H- 0 ; M-8 ; L-1 ; I-0</b>  <b>Rationale:</b> • Use consistent Inclusion &amp; Exclusion criteria across measures where relevant. • Provide clear and relevant rationale for measure exclusions.</p> <p><b>2b4. Risk adjustment : H- 3 ; M-6 ; L-0 ; I-0</b>  <b>Rationale:</b> • TAP requires confirmation on which risk adjustment approach selected; methodology selected appears to be based on the widely used CMS HCC approach--which the TAP expressed general comfort. TAP could not assess the risk adjustment because the following information was missing: model selected results of the goodness of fit testing for the selected model, the Rsq value, and rationale and list of final selected covariates. • Specifications require more clarity to instruct users how to apply the risk adjustment.</p> <p><b>2b5. Identification of statistically significant/meaningful differences: H- 6 ; M-2 ; L-0 ; I-0 ; N-1</b>  <b>Rationale:</b> • A minimum sample size for reporting in implementation of the measure is not provided. • O/E calculation is for each episode attributed to each provider; followed by an evaluation and comparison of the distribution to the O/E ratios for all providers in their peer group. The performance of the provider is evaluated by analyzing how often the O/E ratio for the provider is above some reference point determined by the distribution of the O/E ratios in the peer group. • Sample reports are not always relevant to the measure under review</p> <p><b>2b6. Multiple data sources: H- 0 ; M-0 ; L-0 ; I-0 ; N-9</b>  <b>Rationale:</b> N/A</p> <p><b>2c. Stratification for disparities: H- 0 ; M-0 ; L-0 ; I-0 ; N-9</b>  <b>Rationale:</b> N/A</p>
<p><b>3. Usability:</b></p>

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<p><b>1576: Episode of care for patients with diabetes over a one year period</b></p> <p><b>3a. Measure performance results are publicly reported:</b> H- 0 ; M-0 ; L-0 ; I-9  <i>Rationale:</i> • Measures are not in current use; developer anticipates will be in use.</p> <p><b>3b. Measure results are meaningful/useful for public reporting and quality improvement:</b> H- 0 ; M-0 ; L-0 ; I-9  <i>Rationale:</i> • Measures are not in current use; developer anticipates will be in use.</p> <p><b>3c. Data and results can be decomposed for transparency and understanding:</b> H- 0 ; M-0 ; L-0 ; I-9  <i>Rationale:</i> • Need (and request for) specification clarification influenced outcome of this rating.</p> <p><b>3d. Harmonized or justification for differences:</b> H- 0; M-0 ; L-0 ; I-0; N:9  <i>Rationale:</i> • Developers were not asked to harmonize prior to submissions. Harmonization may come up as the set of measures move through the CDP process.</p> <p><b>4. Feasibility:</b> (Dr. Palestrant did not vote on this criterion)</p> <p><b>4a. Data elements routinely generated during care process:</b> H- 6 ; M-2 ; L-0 ; I-0  <i>Rationale:</i> • Measures rely on administrative data.</p> <p><b>4b. Data elements available electronically:</b> H- 6 ; M-2 ; L-0 ; I-0  <i>Rationale:</i> • Administrative data are in electronic format.</p> <p><b>4c. Susceptibility to inaccuracies/ unintended consequences identified:</b> H- 0 ; M-0 ; L-8; I-0  <i>Rationale:</i> • Clarify, update and improve precision of specifications.</p> <p><b>4d. Data collection strategy can be implemented:</b> H- 0 ; M-1 ; L-5; I-2  <i>Rationale:</i> • Need (and request for) specification clarification influenced outcome of this rating.</p>
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<p><b>1595: ETG Based DIABETES resource use</b></p> <p><b>Description:</b> The measure focuses on resources used to deliver episodes of care for patients with Diabetes. Diabetes episodes are defined using the Episode Treatment Groups (ETG) methodology and describe the unique presence of the condition for a patient and the services involved in diagnosing, managing and treating diabetes. A number of resource use measures are defined for diabetes episodes, including overall cost of care, cost of care by type of service, and the utilization of specific types of services. Each resource use measure is expressed as a cost or a utilization count per episode and comparisons with internal and external benchmarks are made using risk adjustment to support valid comparisons.</p> <p>As requested by NQF, the focus of this submission is for Diabetes episodes and will cover both measures at the Diabetes base and severity level and also a Diabetes composite measure where Diabetes episode results are combined across Diabetes severity levels. At the most detailed level, the measure is defined as the base condition of Diabetes and an assigned level of severity (e.g., resources per episode for Diabetes, severity level 1 episodes). Composite measures can then be created using these measurement units to meet a specific need. For example, a composite measure for Diabetes is derived by combining Diabetes episode results across Diabetes severity levels. Appropriate risk adjustment is applied to support comparisons (e.g., for physician measurement, adjusting for a physician’s mix of Diabetes episodes by severity level when supporting a Diabetes composite comparison).</p> <p>The focus of this measure is on Diabetes. However, Diabetes episode results could also be included in an “endocrinology”, “chronic care”, or other clinical composite for a physician, combining episodes in clinical areas similar to Diabetes. Further, an “overall” composite for a physician can be created, again by aggregating episode results across appropriate conditions and severity levels and applying proper risk adjustment when making comparisons.</p> <p><b>Resource Use Measure Type:</b> Per episode  <b>Data Source:</b> Administrative claims, Other  <b>Resource Use Service Category:</b> Inpatient services: Inpatient facility services; Inpatient services: Admissions/discharges; Ambulatory services: Outpatient facility services; Ambulatory services: Emergency Department; Ambulatory services: Pharmacy; Ambulatory services: Evaluation and management; Ambulatory services: Procedures and surgeries; Ambulatory services: Imaging and diagnostic; Ambulatory services: Lab services  <b>Care Setting:</b> Ambulatory Care : Ambulatory Surgery Center (ASC), Ambulatory Care : Clinic/Urgent Care, Ambulatory Care : Clinician Office, Home Health, Hospice, Hospital/Acute Care Facility, Imaging Facility, Laboratory  <b>Level of Analysis:</b> Clinician : Group/Practice, Clinician : Individual, Clinician : Team, Facility, Health Plan, Integrated Delivery System, Population : Community, Population : County or City, Population : National, Population : Regional  <b>Measure Developer:</b> Ingenix</p> <p><b>If applicable, Conditions/Questions for Developer and Developer response:</b></p> <p><b>1c:</b>  Clarification on intent specific to diabetes should be provided.</p> <p><b>1d:</b></p>
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<p><b>1595: ETG Based DIABETES resource use</b></p> <p>The spreadsheet of resource use category codes provided includes codes for all conditions submitted to NQF. Developer should submit spreadsheet with diabetes specific codes for this measure.</p> <p><b>2a.1:</b></p> <ul style="list-style-type: none"><li>• List/Explain any fields that list, "other"</li><li>• Statistical data on severity model and stability of assignment of claims to the episode and co-morbid categories needed (e.g. Include data on how the first diagnosis is coded versus the possible, 2,3,4 diagnoses)</li><li>• Explain why certain time frames were included in the episode</li><li>• Provide detail around how varying benefit levels for Rx are accounted (stratify by those with and without after O/E estimation?)</li></ul> <p><b>2a.2:</b></p> <ul style="list-style-type: none"><li>• Need the R2 discrimination AND calibration data for EACH measure</li></ul> <p><b>2b.1:</b></p> <ul style="list-style-type: none"><li>• Check to see if diabetes education is included in RU category, if so, how is it coded? • Need spreadsheets with resource category codes specific ONLY to diabetes for this measure (RU Categories spreadsheet S9.7)</li></ul> <p><b>2b.3:</b></p> <ul style="list-style-type: none"><li>• Need to be more specific for inclusion/exclusion criteria – provide justification/rationale for those listed that are out of the "norm"</li></ul> <p><b>2b.4:</b></p> <p>TAP expressed this is a real limitation. Provide rationale and information about consequence of this approach.</p> <p><b>2b.5:</b></p> <p>Rationale for selection of the sample size. Data from sample size simulations showing the thresholds for significance of the data for a range of sample sizes.</p> <p><b>3a:</b></p> <p>Developer should clarify how and which data is shared with the public. Proportion of tool in use.</p> <p><b>3b:</b></p> <p>Provide response specific to diabetes measure, if applicable. Aren't there known users of this measure that can be cited?</p> <p><b>3c:</b></p> <p>Provide response specific to diabetes measure, if applicable.</p> <p><b>3d:</b></p> <p>Provide response specific to diabetes measure, if applicable.</p> <p><b>4c:</b></p> <p>Provide a clear statement or assessment of perceived susceptibility to inaccuracies/errors.</p>
<p><b>1. Importance to Measure and Report:</b></p> <p><b>1a. High Impact: H-9 ; M-0 ; L-0 ; I-0</b></p> <p><i>Rationale:</i> • Developer provided sufficient evidence and support.</p> <p><b>1b. Resource use/cost problems: H- 3 ; M-6 ; L-0 ; I-0</b></p> <p><i>Rationale:</i> TAP would have liked to see more evidence of provider variation and other types of variation in treating diabetes in addition to the regional variation.</p> <p><b>1c. Purpose clearly described: H- 4 ; M-5 ; L-0 ; I-0</b></p> <p><i>Rationale:</i> Intent is general and not very specific to this diabetes measure.</p> <p><b>1d. Resource use service categories consistent and representative: H- 9 ; M-0 ; L-0 ; I-0</b></p> <p><i>Rationale:</i> The RU categories were sufficient.</p>
<p><b>2. Scientific Acceptability of Measure Properties:</b></p> <p><b>2a1. Well defined/precise specifications: H- 5 ; M-3 ; L-1 ; I-0</b></p> <p><i>Rationale:</i> Specifications for comorbidities, severity, etc. are not clear. It is unclear if severity ratings are weighted based on services of comparable cost. Only costs that are mapped back to the diabetes code are counted in the episode. The measure is stratified by severity level not clinical condition. Concerns about how patients with Rx benefit (or who run out of Rx benefit) are accounted for versus those with full Rx benefit?</p> <p><b>2a2. Reliability testing: H- 7 ; M-1; L-0 ; I-0</b></p> <p><i>Rationale:</i> Demonstration of internal consistency reliability was acceptable.</p> <p><b>2b1. Specifications consistent with resource use/cost problem: H- 1 ; M-6 ; L-1 ; I-0</b></p> <p><i>Rationale:</i> TAP was unclear on whether diabetes education codes were included in the specifications?</p> <p><b>2b2. Validity testing: H- 4 ; M-3; L-0 ; I-1</b></p> <p><i>Rationale:</i> Adequate validity testing information provided.</p> <p><b>2b3. Exclusions: H-0; M-7 ; L1 ; I-0</b></p> <p><i>Rationale:</i> TAP was unclear on how exclusions were identified.</p> <p><b>2b4. Risk adjustment : H-0 ; M-4 ; L-4 ; I-0</b></p> <p><i>Rationale:</i> Inability to distinguish between complications and comorbidities.</p> <p><b>2b5. Identification of statistically significant/meaningful differences: H- 0 ; M-4 ; L-4 ; I-0</b></p>

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<p><b>1595: ETG Based DIABETES resource use</b></p> <p><i>Rationale:</i> Insufficient evidence that the sample size threshold and analysis at the physician level is meaningful at that level. Unclear how the 30 sample size was selected.</p> <p><b>2b6. Multiple data sources: H- 0 ; M-0 ; L-0 ; I-0; N-9</b></p> <p><i>Rationale:</i> N/A</p> <p><b>2c. Stratification for disparities: H- 0 ; M-0 ; L-0 ; I-0; N-9</b></p> <p><i>Rationale:</i> N/A</p>
<p><b>3. Usability:</b></p> <p><b>3a. Measure performance results are publicly reported: H- 0; M-1 ; L-1; I-6</b></p> <p><i>Rationale:</i> The usability information submitted is not specific to diabetes, but for all Ingenix measures. TAP expressed concerns with the availability of this data to the public and requested clarification from NQF on what is required for "public reporting". The NQF CSAC and BOD continue to discuss this issue; NQF staff will continue to filter any new information on the refining of this policy to the TAP to facilitate final ratings of this usability criterion.</p> <p><b>3b. Measure results are meaningful/useful for public reporting and quality improvement: H- 0 ; M-4 ; L-2 ; I-2</b></p> <p><i>Rationale:</i> The usability information submitted is not specific to diabetes, but for all Ingenix measures.</p> <p><b>3c. Data and results can be decomposed for transparency and understanding: H- 1 ; M-2 ; L-5 ; I-0</b></p> <p><i>Rationale:</i> The usability information submitted is not specific to diabetes, but for all Ingenix measures. Challenges for the use of this measure include, complexity, lack of specificity in specifications. The TAP agrees it is difficult to assess the extent of which the measure can be decomposed as currently specified.</p> <p><b>3d. Harmonized or justification for differences: H-0 ; M-0 ; L-0 ; I-0; N-9</b></p> <p><i>Rationale:</i> The usability information submitted is not specific to diabetes, but for all Ingenix measures.</p>
<p><b>4. Feasibility:</b></p> <p><b>4a. Data elements routinely generated during care process: H- 8 ; M-0 ; L-0 ; I-0</b></p> <p><i>Rationale:</i> • Measures rely on administrative data.</p> <p><b>4b. Data elements available electronically: H-8 ; M-0 ; L-0; I-0</b></p> <p><i>Rationale:</i> • Administrative data are in electronic format.</p> <p><b>4c. Susceptibility to inaccuracies/ unintended consequences identified: H-2 ; M-2 ; L-4 ; I-0</b></p> <p><i>Rationale:</i> Did not address susceptibility to inaccuracies. Current issues identified with specifications could result in inaccuracies and errors.</p> <p><b>4d. Data collection strategy can be implemented: H- 5 ; M-2 ; L-1 ; I-0</b></p> <p><i>Rationale:</i> Barriers to use are minimal. (NQF Note: This is prior to updating MSA--the SC will reconsider the criteria based on new information submitted)</p>

### PUBLIC COMMENT

There were no public comments.

### NEXT STEPS:

Ms. Wilbon indicated that project staff will continue with preparations for the next Steering Committee conference call based on the Committee's availability. An additional call will be scheduled to finish the discussion of the following measures:

- (1572) Episode of care for management of chronic coronary artery disease (ABMS-REF)
- (1594) ETG Based Coronary Artery Disease (CAD) resource use measure (Ingenix)
- (1596) Measure Name: ETG Based Stroke resource use measure (Ingenix)
- (1558) Relative Resource Use for People with Cardiovascular Conditions(NCQA)
- (1591) ETG Based Congestive Heart Failure (CHF) resource use measure (Ingenix)

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- (1574) Episode of care for management of chronic congestive heart failure over a 12 month period (ABMS-REF)
- (1575) Episode of care for management of post-hospitalization chronic congestive heart failure over a 4 month period (ABMS-REF)



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