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Measure Evaluation Criteria and Guidance Summary Tables
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1. Impact, Opportunity, Evidence—Importance to Measure and Report
Extent to which the specific measure focus is evidence-based, important to making significant gains in healthcare quality, and improving health outcomes for a specific high-impact aspect of healthcare where there is variation in or overall less-than-optimal performance. ***Measures must be judged to*** *meet all three subcriteria to pass this criterion and be evaluated against the remaining criteria.* **Yes☐ No☐** Guidance-Table 3

1a. High Impact H☐ M☐ L☐ I ☐ Definitions-Table 5
The measure focus addresses:

- a specific national health goal/priority identified by DHHS or the National Priorities Partnership convened by NQF;

OR

- a demonstrated high-impact aspect of healthcare (e.g., affects large numbers of patients and/or has a substantial impact for a smaller population; leading cause of morbidity/mortality; high resource use (current and/or future); severity of illness; and severity of patient/societal consequences of poor quality).

AND

1b. Performance Gap H☐ M☐ L☐ I ☐ Definitions-Table 5
Demonstration of quality problems and opportunity for improvement, i.e., data[2] demonstrating considerable variation, or overall less-than-optimal performance, in the quality of care across providers and/or population groups (disparities in care).

AND

1c. Evidence to Support the Measure Focus Quantity: Yes☐ No☐ Guidance-Table 3
Quantity: H☐ M☐ L☐ I ☐ Quality: H☐ M☐ L☐ I ☐ Consistency: H☐ M☐ L☐ I ☐ Guidance-Table 2
The measure focus is a health outcome or is evidence-based, demonstrated as follows: Guidance-Table 1

- Health outcome:[3] a rationale supports the relationship of the health outcome to processes or structures of care.
- Intermediate clinical outcome, Process,[4] or Structure: a systematic assessment and grading of the quantity, quality, and consistency of the body of evidence[5] that the measure focus leads to a desired health outcome.
- Patient experience with care: evidence that the measured aspects of care are those valued by patients and for which the patient is the best and/or only source of information OR that patient experience with care is correlated with desired outcomes.
- Efficiency:[6] evidence for the quality component as noted above.

Notes
2. Examples of data on opportunity for improvement include, but are not limited to: prior studies, epidemiologic data, or data from pilot testing or implementation of the proposed measure. If data are not available, the measure focus is systematically assessed (e.g., expert panel rating) and judged to be a quality problem.
3. Generally, rare event outcomes do not provide adequate information for improvement or discrimination; however, serious reportable events that are compared to zero are appropriate outcomes for public reporting and quality improvement.
4. Clinical care processes typically include multiple steps: assess → identify problem/potential problem → choose/plan intervention (with patient input) → provide intervention → evaluate impact on health status. If the measure focus is one step in such a multistep process, the step with the strongest evidence for the link to the desired outcome should be selected as the focus of measurement.
5. The preferred systems for grading the evidence are the U.S. Preventive Services Task Force (USPSTF) grading definitions and methods, or Grading of Recommendations, Assessment, Development and Evaluation (GRADE) guidelines.
6. Measures of efficiency combine the concepts of resource use and quality (NQF's Measurement Framework: Evaluating Efficiency Across Episodes of Care; AQA Principles of Efficiency Measures).

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Guidance on Evaluating Importance to Measure and Report

For more information, see: Guidance for Evaluating the Evidence Related to the Focus of Quality Measurement and Importance to Measure and Report

Table 1: Evidence to Support the Focus of Measurement

Type of Measure	Evidence	Example of Measure Type and Evidence to Be Addressed
Health Outcome An outcome of care is the health status of a patient (or change in health status) resulting from healthcare— desirable or adverse. In some situations, resource use may be considered a proxy for a health state (e.g., hospitalization may represent deterioration in health status).	A rationale supports the relationship of the health outcome to at least one healthcare structure, process, intervention, or service. See Table 5.	**#0230** Acute myocardial Infarction 30-day mortality Survival is a goal of seeking and providing treatment for AMI. **Rationale** linking healthcare processes/ interventions (aspirin, reperfusion) to mortality/ survival **#0171** Acute care hospitalization (risk-adjusted) [of home care patients] Improvement or stabilization of condition to remain at home is a goal of seeking and providing home care services. **Rationale** linking healthcare processes (e.g., medication reconciliation, care coordination) to hospitalization of patients receiving home care services **#0140** Ventilator-associated pneumonia for ICU and high-risk nursery (HRN) patients Avoiding harm from treatment is a goal when seeking and providing healthcare. **Rationale** linking healthcare processes (e.g., ventilator bundle) to ventilator acquired pneumonia
Intermediate Clinical Outcome An intermediate outcome is a change in physiologic state that leads to a longer-term health outcome.	Quantity, quality, and consistency of a body of evidence that the measured intermediate clinical outcome leads to a desired health outcome. See Table 4.	**#0059** Hemoglobin A1c management [A1c > 9] **Evidence** that hemoglobin A1c level leads to health outcomes (e.g., prevention of renal disease, heart disease, amputation, mortality)
Process A process of care is a healthcare-related activity performed for, on behalf of, or by a patient.	Quantity, quality, and consistency of a body of evidence that the measured healthcare process leads to desired health outcomes in the target population with benefits that outweigh harms to patients.	**#0551** ACE inhibitor/Angiotensin receptor blocker (ARB) use and persistence among members with coronary artery disease at high risk for coronary events **Evidence** that use of ACE-I and ARB

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Type of Measure	Evidence	Example of Measure Type and Evidence to Be Addressed
	Specific drugs and devices should have FDA approval for the target condition. If the measure focus is on inappropriate use, then quantity, quality, and consistency of a body of evidence that the measured healthcare process does *not* lead to desired health outcomes in the target population. See Table 4.	results in lower mortality and/or cardiac events **#0058** Inappropriate antibiotic treatment for adults with acute bronchitis **Evidence** that antibiotics are not effective for acute bronchitis
Structure Structure of care is a feature of a healthcare organization or clinician related to its capacity to provide high-quality healthcare.	Quantity, quality, and consistency of a body of evidence that the measured healthcare structure leads to desired health outcomes with benefits that outweigh harms (including evidence for the link to effective care processes and the link from the care processes to desired health outcomes). See Table 4.	**#0190** Nurse staffing hours **Evidence** that higher nursing hours result in lower mortality or morbidity, or leads to provision of effective care processes (e.g., lower medication errors) that lead to better outcomes
Special Considerations by Topic		
Patient Experience with Care	• Evidence that the measured aspects of care are those valued by patients and for which the patient is the best and/or only source of information (often acquired through qualitative studies) OR • Evidence that patient experience with care is correlated with desired outcomes	**#0166** HCAHPS **Evidence** that patients/consumers value the aspects of care being measured (e.g., communication with doctors and nurses, responsiveness of hospital staff, pain control, communication about medicines, cleanliness and quiet of the hospital environment, and discharge information)
Efficiency Measures of efficiency combine the concepts of resource use *and* quality	Efficiency measured with combination of quality measures and resource use measures **Quality measure component:** Evidence for the selected quality measure(s) as described in this table **Resource use measure component:** Does not require clinical evidence as described in this table	Currently, there are no NQF-endorsed efficiency measures that combine quality and resource use. **Potential measure:** Diabetes quality measure(s) or composite used in conjunction with a measure of resource use per episode **Evidence** for diabetes quality measure(s) as described in this table

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Table 2: Evaluation of Quantity, Quality, and Consistency of Body of Evidence for Structure, Process, and Intermediate Outcome Measures

Definition/ Rating	**Quantity** of Body of Evidence	**Quality** of Body of Evidence	**Consistency** of Results of Body of Evidence
Definition	Total number of studies (not articles or papers)	Certainty or confidence in the estimates of benefits and harms to patients across studies in the body of evidence related to study factors[a] including: study design or flaws; directness/indirectness to the specific measure (regarding the population, intervention, comparators, outcomes); imprecision (wide confidence intervals due to few patients or events)	Stability in both the direction and magnitude of clinically/practically meaningful benefits and harms to patients (benefit over harms) across studies in the body of evidence
High	5+ studies[b]	Randomized controlled trials (RCTs) providing direct evidence for the specific measure focus, with adequate size to obtain precise estimates of effect, and without serious flaws that introduce bias	Estimates of clinically/practically meaningful benefits and harms to patients are consistent in direction and similar in magnitude across the preponderance of studies in the body of evidence
Moderate	2-4 studies[b]	• Non-RCTs with control for confounders that could account for other plausible explanations, with large, precise estimate of effect OR • RCTs without serious flaws that introduce bias, but with either indirect evidence or imprecise estimate of effect	Estimates of clinically/practically meaningful benefits and harms to patients are consistent in direction across the preponderance of studies in the body of evidence, but may differ in magnitude If only one study, then the estimate of benefits greatly outweighs the estimate of potential harms to patients (one study cannot achieve high consistency rating)
Low	0-1 studies[b]	• RCTs with flaws that introduce bias OR • Non-RCTs with small or imprecise estimate of effect, or without control for confounders that could account for other plausible explanations	• Estimates of clinically/practically meaningful benefits and harms to patients differ in both direction and magnitude across the preponderance of studies in the body of evidence OR • wide confidence intervals prevent estimating net benefit If only one study, then estimate of benefits do not greatly outweigh harms to patients
Insufficient to Evaluate *(See Table 5 for exceptions.)*	• No empirical evidence OR • Only selected studies from a larger body of evidence	• No empirical evidence OR • Only selected studies from a larger body of evidence	No assessment of magnitude and direction of benefits and harms to patients

[a] *Study designs* that affect certainty of confidence in estimates of effect include: randomized controlled trials (RCTs), which control for both observed and unobserved confounders, and non-RCTs (observational studies) with various levels of control for confounders.

Study flaws that may bias estimates of effect include: lack of allocation concealment; lack of blinding; large losses to follow-up; failure to adhere to intention to treat analysis; stopping early for benefit; and failure to report important outcomes.
Imprecision with wide confidence intervals around estimates of effects can occur in studies involving few patients and few events.
Indirectness of evidence includes: indirect comparisons (e.g., two drugs compared to placebos rather than head-to head); and differences between the population, intervention, comparator interventions, and outcome of interest and those included in the relevant studies.[15]
[b]The suggested number of studies for rating levels of quantity is considered a general guideline.

Table 3: Evaluation of Subcriterion 1c Based on the Quantity, Quality, and Consistency of the Body of Evidence

Quantity of Body of Evidence	**Quality** of Body of Evidence	**Consistency** of Results of Body of Evidence	**Pass Subcriterion 1c**
Moderate-High	Moderate-High	Moderate-High	Yes
Low	Moderate-High	Moderate (if only one study, high consistency not possible)	Yes, but only if it is judged that additional research is unlikely to change conclusion that benefits to patients outweigh harms; otherwise, No
Moderate-High	Low	Moderate-High	Yes, but only if it is judged that potential benefits to patients clearly outweigh potential harms; otherwise, No
Low-Moderate-High	Low-Moderate-High	Low	No
Low	Low	Low	No
Exception to Empirical Body of Evidence for Health Outcome For a health outcome measure: A rationale supports the relationship of the health outcome to at least one healthcare structure, process, intervention, or service			Yes, if it is judged that the rationale supports the relationship of the health outcome to at least one healthcare structure, process, intervention, or service
Potential Exception to Empirical Body of Evidence for Other Types of Measures If there is no empirical evidence, expert opinion is systematically assessed with agreement that the benefits to patients greatly outweigh potential harms.			Yes, but only if it is judged that potential benefits to patients clearly outweigh potential harms; otherwise, No

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Table 4: Evidence for Evaluating Importance to Measure and Report

Pass Criterion, Importance to Measure and Report?			
All three subcriteria (1a, 1b, 1c) must be met to pass the threshold criterion, *Importance to Measure and Report.*			
Subcriterion	**Evidence**	**Example**	**Pass the Subcriterion?**
High impact (1a)	• Addresses a *specific* national health goal/priority identified by the Secretary of DHHS or the NPP OR • Epidemiologic or resource use data; health services research – affects large numbers of patients and/or has a very substantial impact for smaller populations; leading cause of morbidity/mortality; high resource use (current and/or future); severity of illness; and patient/societal consequences of poor quality	#0140 Ventilator-associated pneumonia for ICU and high-risk nursery (HRN) patients **NPP goal:** Focus relentlessly on continually reducing and seeking to eliminate all healthcare-associated infections (HAIs) **Evidence** related to numbers of patients (e.g., 250,205 VAPs reported; 35,969 (14.4%) were fatal; cost (e.g., total annual cost of VAP $2.5 billion)	**Yes—** Demonstrated at least one of the aspects of high impact (**High or moderate rating** described in Table 5) **No—**Did not demonstrate at least one of the aspects of high impact
Opportunity for improvement (1b)	**Initial Endorsement** Epidemiologic or resource use data or health services research demonstrating considerable variation or overall less than optimal performance for the focus of measurement across providers and/or population groups (disparities in care) **Review for Endorsement Maintenance** Data for the measure as specified and endorsed demonstrating considerable variation or overall less than optimal performance	#0432 Influenza vaccination of nursing home/skilled nursing facility residents **NPP goal:** All Americans will receive the most effective preventive services recommended by the U.S. Preventive Services Task Force. **Evidence** that vaccination rates vary (e.g., 39% fail to reach the Healthy People 2010 objective of vaccinating at least 90% of nursing home residents)	**Yes—** Demonstrated either variation or overall less than optimal performance (**High or moderate rating** described in Table 5) **No—**Did not demonstrate either variation **or** overall less than optimal performance
Evidence for the focus of measurement (1c)	See Table 2	See Table 2	See Table 2 and Table 3

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Table 5: Generic Scale for Rating Subcriteria 1a and 1b

Rating	Definition
High	Based on the information submitted, there is high confidence (or certainty) that the criterion is met
Moderate	Based on the information submitted, there is moderate confidence (or certainty) that the criterion is met
Low	Based on the information submitted, there is low confidence (or certainty) that the criterion is met
Insufficient	There is insufficient information submitted to evaluate whether the criterion is met (e.g., blank, incomplete, or not relevant, responsive, or specific to the particular question)