2018 CMS Quality Measure Development Plan

Environmental Scan and Gap Analysis Report

August 2, 2018

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Suggested citation: Centers for Medicare & Medicaid Services, Health Services Advisory Group. *2018 CMS Quality Measure Development Plan Environmental Scan and Gap Analysis Report.* Baltimore, MD: Centers for Medicare & Medicaid Services; 2018. https://www.cms.gov/Medicare/Quality-Payment-Program/Measure-Development/Measure-development.html

HSAG HEALTH SERVICES ADVISORY GROUP

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EXECUTIVE SUMMARY

The U.S. Department of Health and Human Services (HHS) and the Centers for Medicare & Medicaid Services (CMS) are committed to putting patients first. Accordingly, CMS is partnering with patients, clinicians, payers, and other stakeholders to build a strong foundation for the Quality Payment Program within a value-based health care delivery system. This environmental scan and gap analysis report fulfills a statutory requirement to identify new gaps in measures and implement the *CMS Quality Measure Development Plan: Supporting the Transition to the Merit-based Incentive Payment System (MIPS) and Alternative Payment Models (APMs)*, known as the MDP.[1]

Methods

In 2017, the Health Services Advisory Group, Inc. (HSAG) assisted CMS in devising a data-driven approach to analyze 67 clinical specialties used in CMS administrative data and publicly available reports. Using information on the clinical specialties including volume of services,[2] quality reporting experience,[3] specialty measure sets,[4(p. 30271-30454)] and stakeholder comments,[5] HSAG ranked the specialties based on the combined indicators of their measure development needs. CMS identified allergy/immunology, emergency medicine, neurology, physical medicine and rehabilitation, and rheumatology as priorities for measure development to support the Quality Payment Program. The five clinical specialties were the focus of this environmental scan and gap analysis, performed using the guidance of the *Blueprint for the CMS Measures Management System Version 13.0*[6] and the Meaningful Measures initiative that informs all CMS quality measurement and improvement efforts.

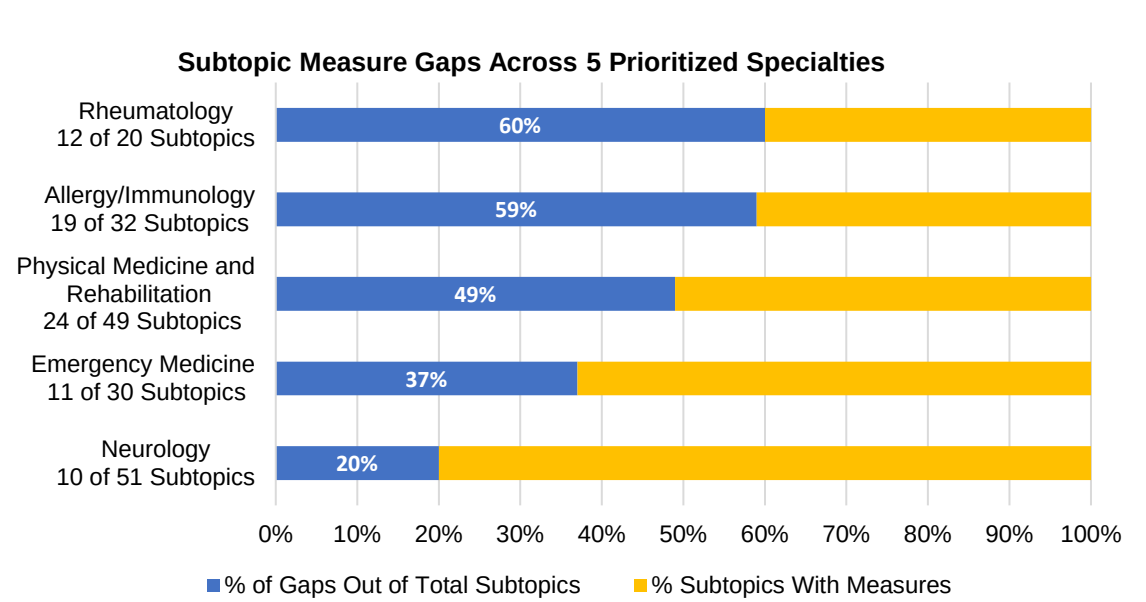
CMS contracted with HSAG to identify measure gaps aligned with the Meaningful Measures priorities and high-impact areas of focus for the five prioritized specialties. To accomplish this task, HSAG reviewed previous scans, national reports, and recent public comments on rulemaking and the draft MDP, among other key sources; identified potential measure subtopics (i.e., structures, processes, or outcomes of care) important to these specialties; and mapped them to a conceptual framework. A scan of major databases and other relevant measure sources identified clinician-level measures applicable to the framework, including 2018 MIPS measures and qualified clinical data registry (QCDR) measures approved for 2018 MIPS reporting, as well as subtopics that represented potential measure gaps.

To obtain stakeholder input for the environmental scan and gap analysis, patient/caregiver interviews were conducted and HSAG convened a technical expert panel (TEP), a 23-member group representing patients and caregivers, quality measurement experts, and the target specialties, including professional societies and practicing clinicians. The TEP provided input on subtopics for inclusion in the conceptual framework. All TEP input was reconciled and incorporated into a final conceptual framework. Subtopics included in the final conceptual framework with no corresponding measures were identified as gaps and indicated as priorities for measure development.

Main Findings

Opportunities for New Measure Development

- The scan initially identified 155 specialty-specific measure subtopics, which increased to 182 after TEP and patient/caregiver input; 76 of the 182 subtopics (42%) have no corresponding measures.



Subtopics to address priority measure gaps for each of the five specialties are noted below.

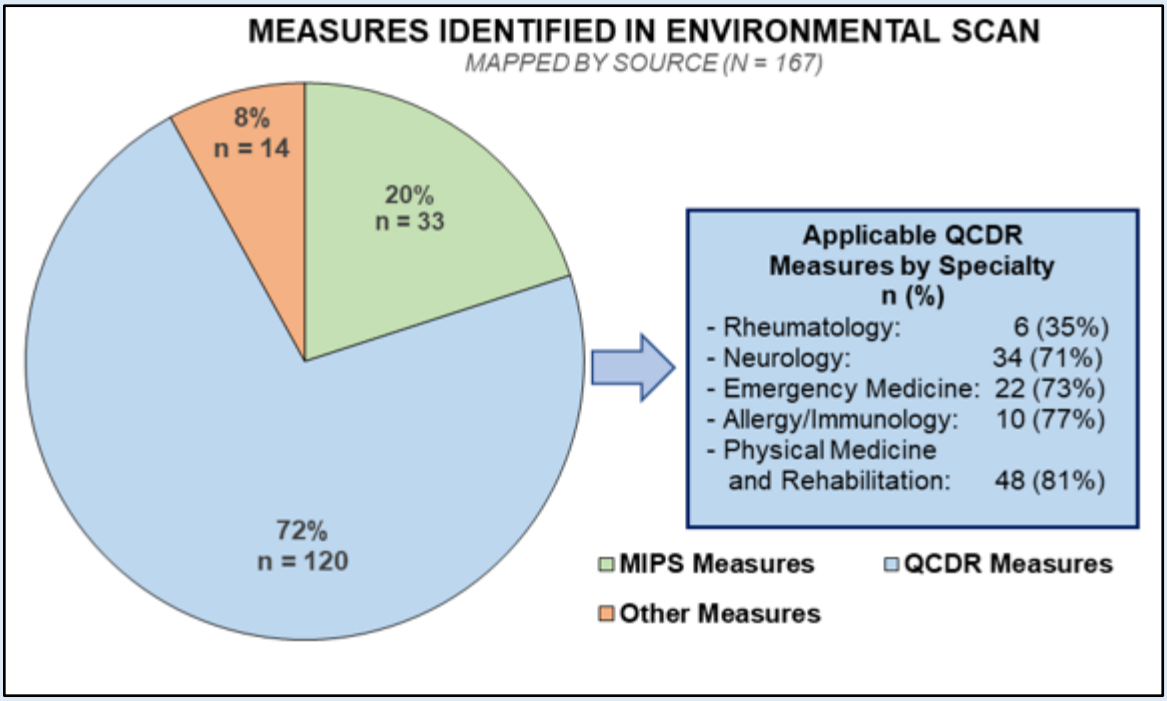
- **Rheumatology:** Immunization for patients on biological therapy; treatment outcomes for rheumatoid arthritis (RA); treat to target (appropriate dosing); plan of care; health-related quality of life for RA; symptom assessment for fatigue; stability of symptom severity/disease activity over time; medications including conventional synthetic disease-modifying antirheumatic drugs (csDMARDs), steroids, and biologics; biologic medication cost to RA control ratio (transparency and value).
- **Allergy/immunology:** Identification of non-medication care plan, including environmental amelioration, behavioral intervention, communication of triggers; allergy testing and treatment; patient's goals, values, and preferences incorporated in plan of care, including for asthma; self-management, including anaphylaxis, asthma, food; treatment outcomes, including allergies, eczema; asthma disparities; community interventions, including home environmental triggers; telemonitoring; electronic medication monitoring devices; biologic medication cost to asthma and comorbidity control ratio.
- **Physical medicine and rehabilitation:** Diagnosis-specific primary prevention, including traumatic brain injury, ultrasounds in spinal cord injuries; interventions to prevent falls; patient/caregiver interventions to prevent complications related to disability; symptom management for pain involving complex conditions; family/caregiver education;

family/caregiver training; treatment tailored to patient goals; patient goal attainment; patient self-efficacy/barriers to completion, including pain in gaining function; multiple chronic conditions; symptom assessment, including pain; general health-related quality of life; cultural competency; episode of care based on specific diagnosis, including amputation, spinal cord injury, spine care, stroke, traumatic brain injury.

- **Emergency medicine:** HIV testing for at-risk populations; behavioral and psychological screening, including for anxiety/depression; adverse medication events; timely transition of emergency department specified data elements to the next level of care; EMS information included in transfer of care summary; assessment of post-discharge patient needs; patient and caregiver satisfaction survey; discharge instructions, including patient/caregiver questions at point of contact; patient outcome follow-up after ED visit; total cost of care for high-volume diagnosis (e.g., chest pain).
- **Neurology:** Referral for rehabilitation services; accuracy of differential diagnosis; patient understanding of medications, including neuropathy management, education of risks; patient/caregiver confidence in self-management; comprehensive health-related quality of life for neurology with proxy allowed to report; neurological functional outcomes with proxy allowed to report; home and community-based services with caregiver support and education; reduction of emergency department use for headache management.

Opportunities for Measure Adaptation

- QCDR measures account for the majority of measures applicable to the conceptual framework (72%) and for all priority specialties except rheumatology (35%).



Examples of QCDR measures by specialty include:

- **Neurology:** *Querying About Symptoms of Autonomic Dysfunction for Patients with Parkinson's Disease*; *Overuse of barbiturate and opioid containing medications for primary headache disorders; Three Day All Cause Return ED Visit Rate*; *Optimal Ratio of Blood Product Transfusion*
- **Allergy/Immunology:** *Penicillin Allergy: Appropriate Removal or Confirmation*; *Asthma Assessment and Classification*
- **Physical Medicine and Rehabilitation:** *Functional Improvement in neck pain/injury patients rehabilitation measured via the validated Neck Disability Index (NDI); Outcome of High Risk Pain Medications Prescribed in Last 6 Months*

- The TEP recommends that CMS measure development priorities include a clear pathway to evaluate and adapt QCDR measures as MIPs measures, when feasible, to broaden opportunities for reporting, reduce burden of measure development, and foster harmonization and alignment in measure development.
- 14 measures identified in the "Other" category could be evaluated for consideration as MIPS measures.

Crosscutting Subtopics

- The scan initially identified 96 crosscutting subtopics, which increased to 119 crosscutting subtopics after TEP and patient/caregiver input.
- Crosscutting subtopics require further review to support the alignment of measure development efforts and harmonization of measures across specialties. Examples of crosscutting subtopics included early diagnosis and appropriate treatment, adverse medication events, and patient adherence to care plan.

Conclusion

This environmental scan and gap analysis report provides important foundational work to ascertain the types of measures needed to address quality priorities for clinician specialists providing a high volume of critical Medicare services. The results of this analysis will inform efforts to close identified gaps through the development, adoption, and refinement of quality measures to support value-based payment models for health care delivery.

Identifying the priority measure gaps in the context of the Meaningful Measures framework ensures that subsequent measure development will assess the core issues that are most critical to providing high-quality care and improving patient outcomes. Each Meaningful Measure area reinforces a connection to specific goals such as empowering patients and doctors to make shared health care decisions, while advancing a strategic approach to eliminate disparities, safeguard public health, track to measurable outcomes, improve access to rural communities, and achieve cost savings.

Through annual reports and updates to the MDP, CMS will chart continual progress toward a Quality Payment Program measure portfolio that is meaningful to patients, caregivers, and clinicians and that lessens the burden of participating in the Quality Payment Program. Fulfillment of these aims will help advance a critical goal of improving health care and health outcomes for Medicare beneficiaries and the nation's health care system as a whole.

CHAPTER 1. INTRODUCTION

In 2017, CMS integrated aspects of three clinician quality reporting programs into one consolidated program that rewards high-value, patient-centered care. Established by the Medicare Access and Children's Health Insurance Program (CHIP) Reauthorization Act of 2015 (MACRA),[7] the new payment and delivery models that constitute the Quality Payment Program lay a foundation for an innovative, patient-centered health care system that is outcome-focused and cost-effective.

CMS is partnering with patients, clinicians, payers, and other stakeholders to establish a Quality Payment Program that empowers patients and doctors to make decisions that achieve better patient outcomes. The Meaningful Measures approach to clinical quality measurement is a part of a broad CMS initiative that supports the aims of enhancing patient care and reducing regulatory burden on health care providers.[8]

CMS contracted with HSAG to develop and maintain the *CMS Quality Measure Development Plan* according to the requirements of section 102 of MACRA. The MDP highlights known measurement and performance gaps and recommends an approach to close those gaps through the development, adoption, and refinement of quality measures. Section 102 of MACRA also requires annual reports on measure development and the status of clinician-level measure priorities and gaps highlighted in the MDP, as well as newly identified gaps.

In addition to supporting CMS in preparing progress reports, HSAG conducts environmental scans and gap analyses to assess the landscape of clinician quality measures and identify priorities for measure development funded by MACRA. HSAG convened a TEP in November 2016 to review the findings of the *CMS Quality Measure Development Plan Environmental Scan and Gap Analysis Report (MACRA, Section 102)*,[9] which CMS posted on the agency website in February 2017.

In accordance with the MACRA requirements to evaluate and report on measure gaps, CMS strategically assesses clinician quality program measures. In 2017, HSAG assisted CMS in devising a data-driven approach to analyze 67 clinical specialties used in CMS administrative data and publicly available reports. Information about volume of services,[2] quality reporting experience,[3] specialty measure sets,[4(p. 30271-30454)] stakeholder comments,[5] and CMS quality priorities factored into a scoring methodology to rank the specialties by their measure development needs. The need for targeted quality measure development was not assessed at the subspecialty level, nor were measures mapped to subspecialties. Therefore, the measures and gaps identified in this report may not be directly applicable to all subspecialties within a specialty. QCDR measures approved for reporting in 2018 were not available at the time of the ranking.

Based on the analysis results, CMS selected the following specialties with known gaps in measures as additional priorities for targeted and informed measure development. These five specialties, together with the Meaningful Measures quality priorities and areas, make up the foundation of the conceptual framework used throughout this environmental scan and gap analysis report.

- Allergy/immunology
- Emergency medicine
- Neurology
- Physical medicine and rehabilitation
- Rheumatology

This report describes the methods used to perform the scan and gap analysis. HSAG convened a second MDP TEP to review the results and recommend areas of focus for future measure development for the prioritized specialties. These findings and the expert input will inform the *2019 MDP Annual Report* and updates of the MDP, as appropriate, as well as complement broader CMS efforts to evaluate measure and performance gaps within and across clinical specialties.

To provide background and context for the terminology used in this report, Table 1-1 provides operational definitions.

Table 1-1: Operational Definitions of Terms Used in the Environmental Scan and Gap Analysis

Term	Operational Definition	Example
Meaningful Measures Priority/ MACRA Domain	Highest-level categorization of quality measures that reflects the desired attributes of health care	Making Care Safer/ Safety
Meaningful Measure Area[a]	Second-level categorization of quality measures: One of 19 concrete quality topics that reflect core issues most vital to high-quality care and better patient outcomes	Preventable Health Care Harm
Subtopic	Structure, process, or outcome of care described in more detail within a Meaningful Measure area.	Potentially harmful drug-drug interactions
Measure	Specified mechanism for assessing observations, treatment, processes, experiences, and/or outcomes. Assesses the degree the provider competently and safely delivers appropriate clinical services to the patient in an optimal time frame.	Adverse drug events: Inappropriate renal dosing of anticoagulants

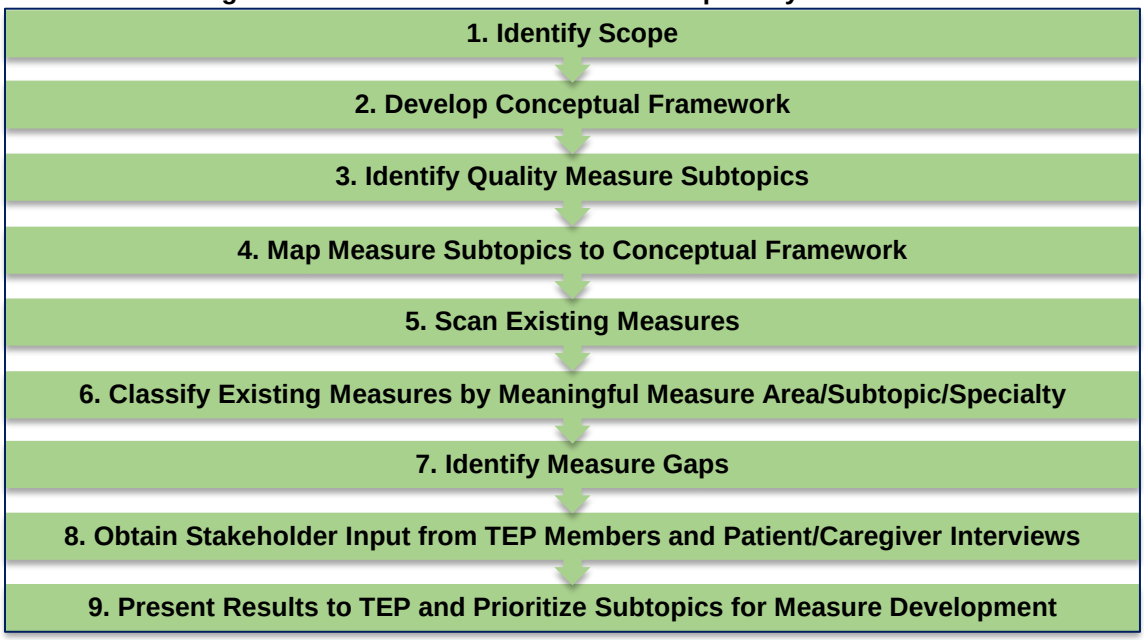
[a] The previous environmental scan for this project referred to domains, topics, and subtopics. This conceptual framework replaces "topic" with "Meaningful Measure area" to align with the initiative.

CHAPTER 2. APPROACH

The *Blueprint for the CMS Measures Management System, Version 13.0*,[6] guided the approach to the environmental scan. The Blueprint outlines standardized processes in clinical quality measure development efforts that all CMS contractors follow.

Figure 2-1 outlines the methods the HSAG project team ("the team") used to conduct this environmental scan, which align with the processes described in the Blueprint.

Figure 2-1: Environmental Scan and Gap Analysis Process



An overview of the steps in the environmental scan and gap analysis is included below. Chapters 2–5 contain detailed descriptions of how the team developed and used the conceptual framework, conducted the scan of existing measures, and identified preliminary measure gaps.

1. **Identify scope.** The Meaningful Measures quality priorities,[i] Meaningful Measure areas,[ii] and clinical specialties prioritized by CMS[iii] are the foundation for this environmental scan and gap analysis. Overarching concerns were also incorporated when determining the scope of the environmental scan and gap analysis:
    a. MACRA and the MDP state that measures to address these gaps shall emphasize person-centered measure concepts, including patient-reported outcomes and functional status, personal preferences and shared decision-making, and team-based care.

[i] Operational definition of quality priority: Highest-level categorization of quality measures that reflects the desired attributes of health care. Derived from the six priorities of the Meaningful Measures framework and MACRA domains, e.g., Strengthen Person & Family Engagement as Partners in Their Care.
[ii] Operational definition of Meaningful Measure area: One of 19 concrete quality topics that reflect core issues most vital to high quality care and better patient outcomes (e.g., Patient-Reported Functional Outcomes as an area under the quality priority of Strengthen Person & Family Engagement as Partners in Their Care)
[iii] Allergy/immunology; emergency medicine; neurology; physical medicine and rehabilitation; and rheumatology.

   b. Measure priorities are expected to balance narrowly focused specialty-relevant measures with crosscutting measures that are broadly applicable. The crosscutting Meaningful Measures priorities of Promote Effective Communication & Care Coordination and Strengthen Person & Family Engagement as Partners in Their Care are national priorities, particularly relative to measures applicable to more than one clinical specialty.
   c. CMS identified certain specialties lacking applicable measures (i.e., allergy/immunology, emergency medicine, physical medicine and rehabilitation, neurology, and rheumatology) as priorities for measure development.

2. **Develop a conceptual framework.** A matrix was created to incorporate the six Meaningful Measure quality priorities, 19 Meaningful Measure areas, and five clinical specialties prioritized by CMS into a conceptual framework. Meaningful Measures priorities and areas were aligned with the MACRA quality domains on the y-axis and priority specialties on the x-axis (Table 3-1).
3. **Identify quality measure subtopics.** To identify high-interest subtopics,[iv] the team reviewed key reports from national organizations and stakeholders, public comments on the draft MDP and Quality Payment Program (CY 2017 and CY 2018) proposed rules, and previous scans archived in the CMS Measure and Instrument Development and Support (MIDS) Resource Library. *Appendix A* lists the key sources reviewed, and Table 3-2 explains the rationale for using these types of sources to identify subtopics.
4. **Map measure subtopics to the conceptual framework.** The team mapped the identified subtopics to the conceptual framework by Meaningful Measures priority/MACRA domain, Meaningful Measure area, and specialty (Table 3-3).
5. **Scan existing measures.** The team reviewed major quality measure databases and repositories, measures published in the CY 2018 Quality Payment Program final rule, and measures in use by other federal agencies, health care systems, and organizations. This comprehensive scan identified measures applicable to the priorities and areas by specialty.
6. **Classify existing measures by Meaningful Measure area/subtopic/specialty.** The team assigned each measure to one applicable area/subtopic/specialty combination in the conceptual framework. If no representative subtopic existed in the framework for an applicable measure, one was added.
7. **Identify measure gaps.** The team tabulated measures and populated the conceptual framework with a count for each subtopic. Subtopics for which no measures were identified represent opportunities for new measure development.
8. **Obtain stakeholder input from TEP members and patient/caregiver interviews.** Members of the MDP TEP completed a pre-assessment to independently evaluate crosscutting and specialty-specific subtopics. Based on feedback from the 2016–2017 MDP TEP,[10] the team sought TEP input to identify additional subtopics important to clinicians, patients, and caregivers.
9. **Present results to the TEP and prioritize subtopics for measure development.** The team compiled gap analysis results, major themes, and TEP pre-assessment results into

[iv] Operational definition of subtopic: Structure, process, or outcome of care described in more detail within a Meaningful Measure area, e.g., functional outcome.

briefing materials for review by the TEP at the initial meeting. Members discussed the identified subtopics and recommended priorities for future measure development. The TEP also identified relevant subtopics as gaps to be added to the conceptual framework.

CHAPTER 3. CONCEPTUAL FRAMEWORK

The team developed a conceptual framework to aid in the organization and analysis of the information gathered for this environmental scan and gap analysis. The primary purpose of the conceptual framework is to provide a visual representation of the classification of identified measure subtopics and clinician-level quality measures based on their applicability to the five clinical specialties CMS prioritized in 2017.

Meaningful Measures Priorities and MACRA Domains

To align this environmental scan and gap analysis with current CMS quality measure development efforts, the conceptual framework incorporates the Meaningful Measures framework as well as the MACRA quality domains identified in Section V of the MDP.[1] The Meaningful Measures initiative focuses on core issues most vital to measuring meaningful outcomes and fostering operational efficiencies, including decreased data collection to lessen provider reporting burden.

Meaningful Measures Priority		MACRA Domain
Promote Effective Prevention and Treatment of Chronic Disease	⟷	Clinical Care
Make Care Safer by Reducing Harm Caused in the Delivery of Care	⟷	Safety
Promote Effective Communication and Coordination of Care	⟷	Care Coordination
Strengthen Person and Family Engagement as Partners in their Care	⟷	Patient and Caregiver Experience
Work with Communities to Promote Best Practices of Healthy Living	⟷	Population Health and Prevention
Make Care Affordable	⟷	Affordable Care

Organized within the six quality priorities are these 19 high-impact Meaningful Measure areas.

- Preventive Care
- Management of Chronic Conditions
- Prevention, Treatment, and Management of Mental Health
- Prevention and Treatment of Opioid and Substance Use Disorders
- Risk Adjusted Mortality
- Healthcare-Associated Infections
- Preventable Health Care Harm
- Medication Management
- Admissions and Readmissions to Hospitals
- Transfer of Health Information and Interoperability
- Care Is Personalized and Aligned With Patient's Goals
- End-of-Life Care According to Preferences
- Patient's Experience of Care
- Patient-Reported Functional Outcomes
- Equity of Care
- Community Engagement
- Appropriate Use of Health Care
- Patient-Focused Episode of Care
- Risk-Adjusted Total Cost of Care

Constructing the Conceptual Framework

The first column of the conceptual framework encompasses the six priorities of the Meaningful Measures framework, aligned with the MACRA domains prioritized in the MDP. The second column comprises the 19 high-impact areas organized within quality domains. The top header row lists the five specialties with gaps in quality measures.

Table 3-1 displays how the Meaningful Measures priorities and areas, together with the five specialties, make up the 95 cells of the conceptual framework. Throughout this environmental scan and gap analysis report, this framework illustrates measure gaps to inform and prioritize measure development for the Quality Payment Program.

Table 3-1: Conceptual Framework

Meaningful Measures Priority/ MACRA Domain	Meaningful Measure Area	Specialty				
		Allergy/ Immunology	Emergency Medicine	Physical Medicine and Rehabilitation	Neurology	Rheumatology
Effective Prevention and Treatment/ Clinical Care[v]	Preventive Care					
	Management of Chronic Conditions					
	Prevention, Treatment, and Management of Mental Health					
	Prevention and Treatment of Opioid and Substance Use Disorders					
	Risk-Adjusted Mortality					
Making Care Safer/ Safety	Healthcare-Associated Infections					
	Preventable Health Care Harm					
Communication and Coordination/ Care Coordination	Medication Management					
	Admissions and Readmissions to Hospitals					
	Transfer of Health Information and Interoperability					
Person and Family Engagement/ Patient and Caregiver Experience	Care Is Personalized and Aligned With Patient's Goals					
	End-of-Life Care According to Preferences					

[v] Domain includes measures of screening, prevention, and primary care.

Meaningful Measures Priority/ MACRA Domain	Meaningful Measure Area	Specialty				
		Allergy/ Immunology	Emergency Medicine	Physical Medicine and Rehabilitation	Neurology	Rheumatology
Person and Family Engagement/ Patient and Caregiver Experience	Patient's Experience of Care					
	Patient-Reported Functional Outcomes					
Healthy Living/ Population Health and Prevention	Equity of Care					
	Community Engagement					
Affordable Care	Appropriate Use of Health Care					
	Patient-Focused Episode of Care					
	Risk-Adjusted Total Cost of Care					

Identification and Mapping of Quality Measure Subtopics

The team completed the conceptual framework by populating the table with subtopics. To identify high-interest subtopics appropriate to include under the Meaningful Measures priority, area, and specialty combinations, the team reviewed 43 reports related to measure development and evaluation published from 2015 to present, 343 letters from the call for public comment on the draft MDP and the CY 2017 and 2018 Quality Payment Program proposed rules, and 31 relevant scans from the Measure & Instrument Development and Support (MIDS) Resource Library (*Appendix A*).[vi] The rationale for using these source materials in the identification of subtopics is included in Table 3-2.

Table 3-2: Inclusion Rationale for Key Sources Reviewed to Identify Subtopics for the Conceptual Framework

Subtopic Identification Sources	Rationale
National reports[a]	To garner the perspective of quality measurement national organizations and stakeholders in identifying measure gaps and areas for future measure development
Letters received through MDP and Quality Payment Program (CY 2017 and CY 2018) public comment processes	To identify the types of measures and measure attributes that are valuable to the broader health care community
MIDS Resource Library	To review the measurement gaps and priorities identified in previous environmental scans

[a] Reports reviewed include reports from NQF and CMS. See *Appendix A*, Table A-1, for a complete list of reports.

Source material was divided among members of the team for initial subtopic abstraction, then reviewed by the team as a whole to reach consensus on applicability of identified subtopics across the prioritized specialties. Subtopics that were not initially identified through review of the source material but were found in the scan of measures were also added to the conceptual framework.

[vi] CMS makes environmental scan and gap analysis reports accessible across measure development contractors through a shared workspace, the CMS MIDS Communication, Coordination and Collaboration (MIDS C3) Library.

Throughout the review of subtopics, the team reconciled nomenclature to ensure consistent wording of equivalent subtopics identified across sources. For example, the subtopics "early diagnosis and treatment" and "early and appropriate treatment" were identified during initial subtopic abstraction and later reconciled under the subtopic "early diagnosis and appropriate treatment." A "crosscutting" column was added to the conceptual framework in the mapping of identified subtopics. The team considered subtopics to be specialty-specific if they were mentioned in the source material in direct reference to a particular specialty. Subtopics were considered to be crosscutting if they were mentioned in the key sources without reference to any particular specialty or the team determined that a Meaningful Measure area mentioned in a specialty-specific context had potential applicability across multiple prioritized specialties without the need for specialty-specific variation. Subtopics could be both specialty-specific and crosscutting within the framework.

The review of key sources identified 251 subtopics applicable to the five identified specialties, including 155 specialty-specific and 96 regarded as crosscutting. Forty-nine of the 95 specialty-specific cells in the conceptual framework (Table 3-3) had no measure subtopics identified.

Table 3-3: Preliminary Conceptual Framework With Subtopics

Meaningful Measures Priority/ MACRA Domain	Meaningful Measure Area	Specialty					
		Crosscutting	Allergy/ Immunology	Emergency Medicine	Neurology	Physical Medicine and Rehabilitation	Rheumatology
Effective Prevention and Treatment/ Clinical Care[vii]	Preventive Care	Immunization Screening	No subtopics identified	Immunization Screening	No subtopics identified	No subtopics identified	No subtopics identified
	Management of Chronic Conditions	Early diagnosis and appropriate treatment Effective interventions to decrease disparities in chronic conditions Secondary prevention - Immunizations Symptom management - Pain - Dyspnea Telehealth monitoring	Treatment outcomes - Asthma Treatment processes - Allergies - Asthma	Treatment outcomes Treatment processes - Asthma	Symptom management - Migraines - Muscle spasticity Treatment outcomes - Giant cell arteritis Treatment processes - Alzheimer's disease - Dementia - Distal symmetric polyneuropathy - Epilepsy - Multiple sclerosis - Muscular dystrophy - Parkinson's disease - Spine care	Complex conditions Symptom management - Bowel care - Muscle spasticity Treatment outcomes	Early diagnosis and appropriate treatment - Rheumatoid arthritis Treatment outcomes - Ankylosing spondylitis - Gout Treatment processes - Gout - Inflammatory arthritis
	Prevention, Treatment, and Management of Mental Health	Behavioral and psych screening - Anxiety/ Depression Referral or follow-up - Depression	No subtopics identified	Behavioral and psych screening - Anxiety/ Depression Referral or follow-up	Behavioral and psych screening - Anxiety/Depression -General	Behavioral and psych screening - Anxiety/ Depression	No subtopics identified

[vii] Domain includes measures of screening, prevention, and primary care.

Meaningful Measures Priority/ MACRA Domain	Meaningful Measure Area	Specialty					
		Crosscutting	Allergy/ Immunology	Emergency Medicine	Neurology	Physical Medicine and Rehabilitation	Rheumatology
Effective Prevention and Treatment/ Clinical Care	Prevention and Treatment of Opioid and Substance Use Disorders	Care plan Opioid prescribing Referral or follow-up - Opiate/SUD Screening/ intervention - Alcohol - Opioid/SUD - Tobacco	No subtopics identified	Opioid prescribing Referral or follow-up - Opioid/SUD Screening/ intervention - Opioid/SUD	Care plan Opioid prescribing - Chronic headaches Referral or follow-up - Opioid/SUD Screening/ intervention - Alcohol - Opioid/SUD	Care plan Opioid prescribing Screening/ intervention - Opioid/SUD	No subtopics identified
	Risk-Adjusted Mortality	No subtopics identified	No subtopics identified	Severe trauma	Stroke	No subtopics identified	No subtopics identified
Making Care Safer/Safety	Healthcare-Associated Infections	No subtopics identified	No subtopics identified	No subtopics identified	No subtopics identified	No subtopics identified	No subtopics identified
	Preventable Health Care Harm	Adverse medication events - Medication errors Diagnostic accuracy Falls Medical errors Potentially avoidable complications Unintended consequences of treatment	Penicillin allergy testing	Adverse medication events Antibiotic use - Overuse - Appropriate use Diagnostic accuracy Potentially harmful drug-drug interactions	Adverse medication events Falls Potentially avoidable complications Potentially harmful drug-drug interactions Unintended consequences - Alzheimer's - Dementia - Parkinson's disease - Multiple sclerosis - Muscular dystrophy	Infection control practices Potentially avoidable complications Potentially harmful drug-drug interactions	No subtopics identified

Meaningful Measures Priority/ MACRA Domain	Meaningful Measure Area	Specialty					
		Crosscutting	Allergy/ Immunology	Emergency Medicine	Neurology	Physical Medicine and Rehabilitation	Rheumatology
Communication and Coordination/ Care Coordination	Medication Management	Comorbid condition prescribing High-risk medications Medication management/ reconciliation Medication persistence monitoring	Medication persistence monitoring Treat to target (appropriate dosing)	Medication management/ reconciliation	No subtopics identified	High risk medications	Treat to target (appropriate dosing)
	Admissions and Readmissions to Hospitals	Admission - Multiple chronic conditions Attendance at first post-discharge appointment Readmission - All-cause - Multiple chronic conditions	No subtopics identified	Return to ED Severe trauma	No subtopics identified	Admissions Severe trauma	No subtopics identified

Meaningful Measures Priority/ MACRA Domain	Meaningful Measure Area	Specialty					
		Crosscutting	Allergy/ Immunology	Emergency Medicine	Neurology	Physical Medicine and Rehabilitation	Rheumatology
Communication and Coordination/ Care Coordination	Transfer of Health Information and Inter-operability	Communication between patient and provider - Communication of results to patient/family Interprovider communication and/or collaboration - Transitions of care from provider to provider - Transfer of referral report Patient access to records Timely transition of specified EHR data elements	Communication between patient and provider - Communication of results to patient/family	Collaborative ED care plans for frequent users ED visit information available via health information exchange EMS information included in transfer of care summary Timely transition of specified data elements to next level of care	No subtopics identified	No subtopics identified	No subtopics identified

Meaningful Measures Priority/ MACRA Domain	Meaningful Measure Area	Specialty					
		Crosscutting	Allergy/ Immunology	Emergency Medicine	Neurology	Physical Medicine and Rehabilitation	Rheumatology
Person and Family Engagement/ Patient and Caregiver Experience	Care is Personalized and Aligned with Patient's Goals	Adherence to follow-up instructions - Med adherence - Missed appointments - Tests ordered but not complete - Self-management Patient education/ health literacy Patient engagement and activation Patient's goals, values and preference incorporated in plan of care Patient's preferences are included in transition of care	No subtopics identified	Patient's goals, values and preference incorporated in plan of care Patient's preferences are included in transition of care	Patient education/ health literacy Self-management	Patient education/ health literacy	No subtopics identified
	End of Life Care According to Preferences	Advance care plan Care delivered according to preferences Unnecessary care at the end of life	No subtopics identified	Care delivered according to preferences	Advance care plan	No subtopics identified	No subtopics identified

Meaningful Measures Priority/ MACRA Domain	Meaningful Measure Area	Specialty					
		Crosscutting	Allergy/ Immunology	Emergency Medicine	Neurology	Physical Medicine and Rehabilitation	Rheumatology
Person and Family Engagement/ Patient and Caregiver Experience	Patient's Experience of Care	Convenience of receiving needed care Cultural and linguistic appropriateness Patient adherence to care plan Patient experience - Access - Communication - Coordination - Courteous - Health promotion - Medications - Provider rating - Shared decision-making - Status - Stewardship - Timeliness Patient-reported patient safety Perception of cost of care	No subtopics identified	No subtopics identified	No subtopics identified	Patient experience - Improvement over time	No subtopics identified

Meaningful Measures Priority/ MACRA Domain	Meaningful Measure Area	Specialty					
		Crosscutting	Allergy/ Immunology	Emergency Medicine	Neurology	Physical Medicine and Rehabilitation	Rheumatology
Person and Family Engagement/ Patient and Caregiver Experience	Patient-Reported Functional Outcomes	Functional status assessment - Baseline - Change over time Meeting expected outcomes Health-related quality of life - Multiple chronic conditions Symptom assessment - Pain	Treatment outcomes - Asthma	No subtopics identified	Functional status assessment - Change over time Health-related QOL - Alzheimer's - Epilepsy - General - Headache - Multiple sclerosis - Muscular dystrophy - Parkinson's disease - Stroke Meeting expected outcomes - Proxy allowed to report (Alzheimer's) Symptom assessment - Parkinson's disease	Functional status assessment - Change over time Health-related QOL - Pain - Spine care Multiple chronic conditions	Functional status assessment - Rheumatoid arthritis Health-related QOL - Rheumatoid arthritis
Healthy Living/ Population Health and Prevention	Equity of Care	Access to care Cultural competence Implement interventions to reduce disparities Outcomes of intervention to reduce disparities	No subtopics identified	Access to care	Disparities data on disease and treatment to inform care	No subtopics identified	No subtopics identified

Meaningful Measures Priority/ MACRA Domain	Meaningful Measure Area	Specialty					
		Crosscutting	Allergy/ Immunology	Emergency Medicine	Neurology	Physical Medicine and Rehabilitation	Rheumatology
Healthy Living/ Population Health and Prevention	Community Engagement	Collaboration across health and non-health sectors to improve equity of care Home and community-based services Referral to community resources as appropriate	No subtopics identified	Identification of community supports and services	Home and community-based services (Alzheimer's)	No subtopics identified	No subtopics identified
Affordable Care	Appropriate Use of Health Care	Balancing measures to avoid unintended consequences Tests and services - Imaging - Labs	Medications Tests and services - Labs	Medications Procedures Tests and services - Imaging - Labs - Telemetry	Medications Tests and services - Imaging	Procedures Tests and services - Imaging	No subtopics identified
	Patient-Focused Episode of Care	Condition specific episode-based cost measures	No subtopics identified	No subtopics identified	Condition specific episode-based cost measures - Stroke	No subtopics identified	Cost to outcome ratio - RA control to biologic medication cost ratio
	Risk-Adjusted Total Cost of Care	Total cost of care per beneficiary	No subtopics identified	No subtopics identified	No subtopics identified	No subtopics identified	No subtopics identified

CHAPTER 4. SCAN OF EXISTING MEASURES

To gain insight into the landscape of quality measurement for clinician specialties prioritized by CMS, the team conducted a comprehensive environmental scan of quality measure databases and measures in use by CMS public reporting programs, other federal agencies, health care systems, and other organizations. The team sought to identify quality measures applicable to the Meaningful Measure areas and subtopics described in Chapter 3. This chapter describes the methodology for each review and the results of the scan.

Methods

Inclusion Criteria

The search applied the following inclusion criteria:

- The measure applied to care provided by and attributed to a clinician with an identified clinician (individual or group/practice) level of analysis.
- The measure was fully developed with accessible information, including measure description, numerator, denominator, and steward/developer.

Sources Scanned and Search Strategy

Major Measure Databases

NQF QPS/NQF website – The team searched the NQF QPS database[11] by selecting endorsement status "Endorsed" and "eMeasures Approved for Trial Use" and the clinician group/practice and individual levels of analysis. A manual measure-by-measure review of all returned results from the NQF database identified clinician quality measures that may be applicable to the Meaningful Measure areas in the conceptual framework. In addition, the team reviewed the NQF website[12] for other projects related to clinician quality measures.

CMS Measures Inventory Tool – The CMS Measures Inventory Tool (CMIT) is an interactive repository of measures used by CMS in various quality, reporting, and payment programs.[13] The team searched the CMIT by selecting "Measure Status by Program," "Finalized," and "Merit-based Incentive Payment System (MIPS) Program." Results were exported to an external database and evaluated against the measures identified for the 2018 MIPS program. The clinician-level measures in the inventory that met the inclusion criteria were a subset of those identified in the Quality Payment Program Resource Library and are attributed to that source in this report.

NQMC database/HHS measure inventory – To search the agency-specific repository hosted by the Agency for Healthcare Research and Quality,[14] the team used the Measures Matrix tool to execute the following search options: y-axis "Operating Division/Staff Division," x-axis "Measure Status." Results for "Active" measures for the Centers for Disease Control and Prevention were transferred to an external database and evaluated to identify measures specified at a clinician level of analysis that might be unique and applicable to the conceptual framework.

CMS Public Reporting Programs and Other Federal Agencies/Offices

CMS quality reporting programs – The team reviewed and abstracted the measures listed in the CY 2018 Quality Payment Program final rule,[15] as well as the 2018 MIPS quality measures and 2018 Qualified Clinical Data Registry (QCDR) Measure Specifications available in the 2018

Quality Payment Program Resource Library.[16] The measures were abstracted to an external database and evaluated to identify measures that might be unique and applicable to the conceptual framework.

Other federal agencies/offices – Seven other federal agencies/offices were contacted for assistance in acquiring the clinician-level measures they use. The team obtained the measures directly or, as indicated, searched an agency website if so directed or in the absence of a response.

- Agency for Healthcare Research & Quality
- Centers for Disease Control and Prevention – referred to the NQMC HHS Measure Inventory Database[14]
- Health Resources and Services Administration
- Indian Health Service – website search[17]
- Office of the Assistant Secretary for Planning and Evaluation – website search[18]
- Substance Abuse and Mental Health Services Administration – referred to the Certified Community Behavioral Health Clinics quality measures[19]
- Veterans Health Administration

Health Care Systems and Other Organizations

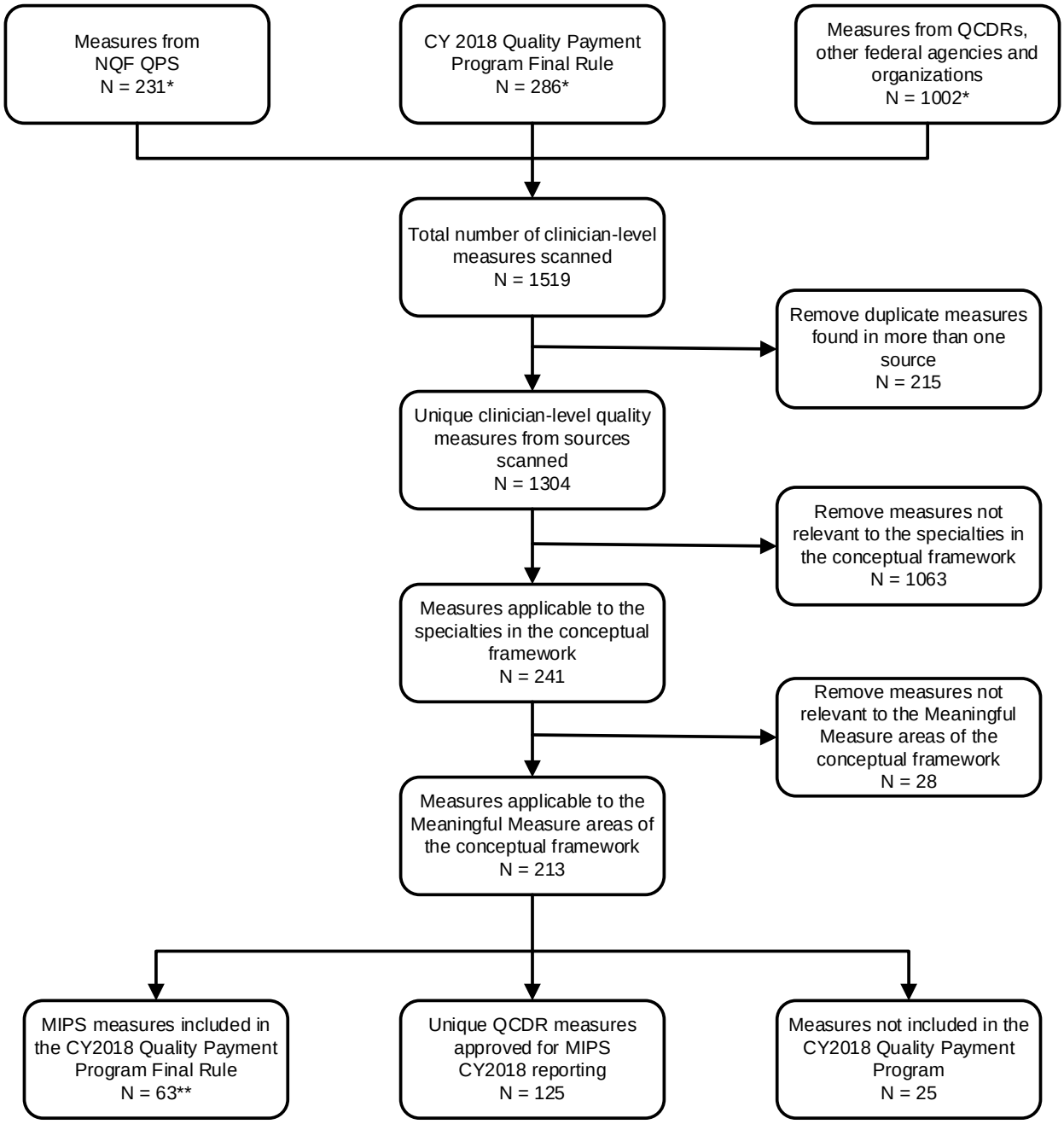
The team visited the websites of professional/medical societies, state or regional health care systems, and public or private organizations that are measure stewards with one or more NQF-endorsed measures at a clinician level of analysis (*Appendix B*). The search used terms such as "quality measurement" and "performance measurement." Information about applicable quality measures was extracted and added to the earlier results.

Results

In total, 1,519 clinician-level measures were located by scanning the previously identified sources and applying the search strategy inclusion criteria. After excluding duplicates—identical measures located in more than one source—the team found 1,304 unique measures relevant to clinician quality measurement. Of these, a majority (1,063 measures) were excluded as not applicable to the specialties prioritized by CMS. An additional 28 measures addressed topics that did not align with the high-priority Meaningful Measure areas and therefore were not mapped to the conceptual framework.

Figure 4-1 illustrates the results of the search strategy by which 213 measures were identified as applicable to clinician quality measurement within a Meaningful Measure area. *Appendix C* lists all 213 measures mapped to the preliminary conceptual framework: 63 MIPS quality measures identified in the CY 2018 Quality Payment Program final rule, 125 QCDR measures available for MIPS reporting only through a CMS-approved registry for the 2018 performance period, and 25 other measures not included in MIPS.

Figure 4-1: Results of Scan for Existing Clinician Quality Measures



*CAHPS Composite Survey counted at the component/domain level

**Also reportable via QCDR

CHAPTER 5. IDENTIFYING PRELIMINARY MEASURE GAPS

To identify the gaps in quality measurement for clinicians, the team mapped the 213 measures identified from the environmental scan to the conceptual framework (Table 3-3), assigning each measure to a Meaningful Measure area and a subtopic. As necessary, subtopics were added to the framework for measures that were relevant but for which subtopics were not yet identified through key sources.

Methods

For each measure, the team reviewed the title, description, and numerator and denominator statements to determine the appropriate Meaningful Measures priority and Meaningful Measure area. Each measure was assigned to one cell of the conceptual framework, corresponding to a single specialty, area, and subtopic combination. The measure was assigned to the crosscutting column if the denominator statement was broad and not solely applicable to a prioritized specialty.

The number of measures assigned to each combination of specialty/crosscutting, Meaningful Measure area, and subtopic was recorded. A (0) after a subtopic indicates no measures were found, representing a measure gap. Some subtopics are categorized by condition, e.g., Symptom Assessment (0) - Pain (0).

Mapping the 213 measures to the preliminary conceptual framework revealed measurement gaps by highlighting subtopics not addressed by existing clinician quality measures (105 of 251 subtopics). These gaps could be considered as priorities for measure development. Additionally, measures mapped to the conceptual framework but not included in the Quality Payment Program represent opportunities to add high-priority measures to the CMS measure portfolio.

Preliminary Results by Specialty

Table 5-1 summarizes the counts of measures for each specialty area. Refer to *Appendix C* for lists of measures.

Table 5-1: Counts of Measures in the Preliminary Conceptual Framework, by Specialty and Source

Specialty	MIPS	QCDR	Other	Total
Allergy/Immunology	2	10	1	13
Emergency medicine	6	22	2	30
Neurology	12	34	2	48
Physical medicine and rehabilitation	8	48	3	59
Rheumatology	5	6	6	17
Crosscutting (applicable to more than one specialty)	30	5	11	46
Total	**63**	**125**	**25**	**213**

CHAPTER 6. EXTERNAL STAKEHOLDER INPUT

To evaluate gap areas viable for CMS-funded measure development for the Quality Payment Program, the team sought stakeholder expertise specific to clinician measures. Semi-structured interviews of patients and caregivers were conducted to identify aspects of care and interactions with the health care team that are important from their perspectives. Additionally, members of the MDP TEP were asked to independently evaluate the subtopics for which no measures were mapped in the preliminary conceptual framework and to propose additional subtopics.

Patient/Caregiver Interviews

The team worked with an independent consumer survey group to conduct interviews of patients and caregivers.[viii] The survey group first identified individuals with experience with the prioritized specialties. To be considered, a patient must have seen a clinician from at least one of the five specialties within the past year; caregivers were likewise screened. Among the 25 individuals selected to participate, care experiences were relatively evenly distributed among the five specialties.

Information was derived from the interviews to present to the TEP for consideration during discussions of subtopics to prioritize for measure development. Themes identified during the patient/caregiver interviews aligned with the following Meaningful Measure areas:

- Patient's Experience of Care
- Medication Management
- Care Is Personalized and Aligned With Patient's Goals
- Management of Chronic Conditions
- Transfer of Health Information and Interoperability

TEP Pre-Assessment

Before the TEP meeting, each TEP member was asked to rate the importance of specialty-specific subtopics that the environmental scan identified as having no corresponding measures, and thus as potential priorities for measure development. As part of this online pre-assessment, TEP members were asked to provide additional subtopics for consideration, particularly for Meaningful Measure areas for which the literature identified no subtopics. Of the 48 identified subtopics with no mapped measures,[ix] 94% (n = 45) had a median TEP rating of 7, 8, or 9, or "highly important" as a quality of care issue that should be measured in the Quality Payment Program. The remaining 6% of identified subtopics with no mapped measures (n = 3) had a median TEP rating of 4, 5, or 6, or "moderately important." Two emergency medicine subtopics rated < 7[x] were excluded from the post-TEP conceptual framework, as the TEP neither discussed them nor voted on their inclusion in the conceptual framework. The rheumatology subtopic rated < 7[xi] was suggested by a TEP member and therefore included in the vote. In total, TEP members suggested an additional 91 unique subtopics, 80 of which mapped to specialty-specific Meaningful Measure areas for which no subtopics had been identified.

[viii] The CMS Office of Strategic Operations and Regulatory Affairs identified this outreach activity as exempt from the Paperwork Reduction Act under section 102 of MACRA.
[ix] The TEP rated 49 subtopics, one of which was later found to not be a gap; 48 gaps were presented at the meeting.
[x] Admissions and Readmissions to Hospitals: Severe trauma; and Management of Chronic Conditions: Treatment outcomes
[xi] Patient-Focused Episode of Care: Cost to outcome ratio-RA control to biologic medication cost ratio

CHAPTER 7. TEP PRIORITIZATION OF SUBTOPICS

Convening the 2018–2019 MDP TEP was a critical step in the environmental scan and gap analysis. The meeting fostered dialogue among TEP members and provided multi-stakeholder input on the results of the scan. The team recorded comments and recommendations from the TEP to apply when revising the conceptual framework and completing this report.

Methods

The TEP meeting provided a forum for discussion of the subtopic gaps identified from the measure scan (Chapter 5) and suggested by TEP members. Each specialty had time allocated for TEP members to review and discuss findings from the scan and the pre-assessment, to revise lists of subtopics, and to vote on recommended priorities.

Each specialty-specific discussion began with a review of insights from the patient and caregiver interviews in relation to that specialty. The moderator then presented the subtopics rated as highly important (median rating ≥ 7) during the TEP pre-assessment. Discussion focused on the relevance of each subtopic to the specialty and considerations that might warrant specialty-specific measure development. TEP members also had the opportunity to propose additional subtopics for consideration. By consensus, the TEP determined whether to revise a subtopic, confirm it as a priority, dismiss it from consideration, or table it for later consideration as a crosscutting subtopic. In a second phase of discussion, the TEP considered the subtopics that members suggested during the pre-assessment. Each phase of the discussion culminated in a vote to confirm the list of subtopics as discussed or amended, including those recommended for inclusion in the conceptual framework.

Conceptual Framework Reconciliation

After the TEP meeting, the team recorded the TEP's recommendations and follow-up comments in a meeting summary and considered how to incorporate members' input into this report. TEP members recommended to move many specialty-specific subtopics off the conceptual framework or to table them for additional research and future discussion of crosscutting measures for multiple specialties. Subtopics recommended for inclusion in the conceptual framework were mapped to the appropriate Meaningful Measure quality priority/MACRA domain and Meaningful Measure area. Some subtopics were edited for brevity and clarity. For example, the recommended rheumatology subtopic "appropriate/timely use of conventional synthetic disease-modifying antirheumatic drugs (csDMARDs), steroids, and biologics" was added to the framework in the Meaningful Measure area Appropriate Use of Health Care as the subtopic "medications" with examples of "csDMARDs," "steroids," and "biologics" listed. In some cases, a recommendation fit best under an existing subtopic. For instance, "treatment outcomes: rheumatoid arthritis" was added as "rheumatoid arthritis" under the existing subtopic of "treatment outcomes" in addition to two other rheumatologic conditions: "gout" and "ankylosing spondylitis."

After reconciliation of the TEP input, 41 cells of the reconciled conceptual framework (compared with 49 previously identified) remain shaded in blue and populated with the text "No identified subtopics."

CHAPTER 8. GAP ANALYSIS FOLLOWING EXTERNAL STAKEHOLDER INPUT

The TEP noted the importance of QCDR measures for specialists with few MIPS measures to report and reached a consensus to include such measures in the conceptual framework. The TEP also stressed the importance of harmonizing measure development efforts to avoid duplication. The TEP views crosscutting subtopics as having the potential to address measure needs for multiple specialties and promote alignment of measures, which in turn can reduce the burden of reporting.

By incorporating the TEP's new subtopics into the framework and removing others, including potential crosscutting subtopics, the team produced a revised conceptual framework containing 182 specialty-specific subtopics, compared with 155 originally identified.

Methods

The TEP members' recommendation to table specialty-specific subtopics for additional research and future discussion of crosscutting measures for multiple specialties resulted in removal of the crosscutting column from the conceptual framework. The team confirmed the mapping of measures to Meaningful Measures priorities/MACRA domains and Meaningful Measure areas and found 46 of the 213 measures in Table 5-1 to be crosscutting. The remaining 167 measures were specialty-specific and were remapped to the framework.

In this post-TEP conceptual framework (*Appendix E*, Table E-1), the focus remains on the landscape of clinical quality measures specific to the five prioritized specialties. Subtopics for which specialty-specific measures were mapped prior to the TEP meeting are retained. Those for which no measures were found are identified with a red zero (0), illustrating a measurement gap and potential priority for measure development. All measures mapped to the revised framework are identified by source in *Appendix C* as either MIPS, QCDR, or other. Those not included in the Quality Payment Program represent opportunities to enhance the measure portfolio and fill high-priority gaps.

Crosscutting subtopics identified as part of the environmental scan and pending further TEP consideration are listed in *Appendix D*, Table D-1.

Cells with no identified subtopics are shaded in blue and populated with the text "No identified subtopics." Meaningful Measures areas are not expected to apply equally to every specialty.

Gap Analysis Results by Specialty

Overall, the results of the scan confirm measurement gap areas across the five specialties prioritized by CMS. Rheumatology (60%) and allergy/immunology (59%) have the highest percentages of subtopic gaps. Physical medicine and rehabilitation (49%) and emergency medicine (37%) have fewer than half of their subtopics represented as measurement gaps, and neurology has the lowest percentage (20%).

Distinct subtopic gaps in the reconciled framework evidence the need for clinically specialized measure development. The gaps associated with each specialty are summarized below.

Rheumatology	
Meaningful Measure Area/ • **Subtopic(s) Prioritized as Gaps**	**n = 12, or 60% of 20 total subtopics**
Preventive Care • Immunizations for patients on biological therapy	
Management of Chronic Conditions • Treatment outcomes: Rheumatoid arthritis	
Medication Management • Treat to target (appropriate dosing)	
Care Is Personalized and Aligned With Patient's Goals • Plan of care	
Patient-Reported Functional Outcomes • Health-related quality of life for rheumatoid arthritis • Symptom assessment for fatigue • Stability of symptom severity/disease activity over time	
Appropriate Use of Health Care • Medications • Medications: conventional synthetic disease-modifying antirheumatic drugs • Medications: Steroids • Medications: Biologics	
Patient-Focused Episode of Care • Biologic medication cost to rheumatoid arthritis control ratio (transparency and value)	

Allergy/Immunology	
Meaningful Measure Area/ • **Subtopic(s) Prioritized as Gaps**	**n = 19, or 59% of 32 total subtopics**
Preventive Care • Identification of non-medication care plan • Identification of non-medication care plan: Environmental amelioration • Identification of non-medication care plan: Behavioral intervention • Identification of non-medication care plan: Communication of triggers	
Management of Chronic Conditions • Allergy testing and treatment	
Care Is Personalized and Aligned With Patient's Goals • Patient's goals, values and preference incorporated in plan of care • Patient's goals, values and preference incorporated in plan of care: Asthma • Self-management • Self-management: Anaphylaxis • Self-management: Asthma • Self-management: Food	
Patient-Reported Functional Outcomes • Treatment outcomes: Allergies • Treatment outcomes: Eczema	
Equity of Care • Asthma disparities	
Community Engagement • Community interventions • Community interventions: Home environmental triggers	

Allergy/Immunology
Patient-Focused Episode of Care • Telemonitoring • Electronic medication monitoring devices • Biologic medication cost to asthma and comorbidity control ratio

Physical Medicine and Rehabilitation	
Meaningful Measure Area/ • **Subtopic(s) Prioritized as Gaps**	**n = 24, or 49% of 49 total subtopics**
Preventive Care • Diagnosis-specific primary prevention • Diagnosis-specific primary prevention: Traumatic brain injury • Diagnosis-specific primary prevention: Ultrasounds in spinal cord injuries • Interventions to prevent falls • Patient/caregiver interventions to prevent complications related to disability	
Management of Chronic Conditions • Complex conditions • Symptom management: Pain	
Care Is Personalized and Aligned With Patient's Goals • Family/caregiver education • Family/caregiver training • Treatment tailored to patient goals • Patient goal attainment • Patient self-efficacy/barriers to completion • Patient self-efficacy/barriers to completion: Pain in gaining function	
Patient-Reported Functional Outcomes • Multiple chronic conditions • Symptom assessment • Symptom assessment: Pain • Health-related quality of life: General	
Equity of Care • Cultural competency	
Patient-Focused Episode of Care • Episode of care based on specific diagnosis • Episode of care based on specific diagnosis: Amputation • Episode of care based on specific diagnosis: Spinal cord injury • Episode of care based on specific diagnosis: Spine care • Episode of care based on specific diagnosis: Stroke • Episode of care based on specific diagnosis: Traumatic brain injury	

Emergency Medicine	
Meaningful Measure Area/ • **Subtopic(s) Prioritized as Gaps**	**n = 11, or 37% of 30 total subtopics**
Preventive Care • HIV testing for at-risk populations	
Prevention, Treatment, Management of Mental Health • Behavioral and psych screening • Behavioral and psych screening: Anxiety/depression	
Preventable Health Care Harm • Adverse medication events	
Transfer of Health Information and Interoperability • Timely transition of emergency department specified data elements to next level of care • EMS information included in transfer of care summary	
Care Is Personalized and Aligned With Patient's Goals • Assessment of post-discharge patient needs	
Patient's Experience of Care • Patient and caregiver satisfaction survey • Discharge instructions including point of contact for patient/caregiver questions	
Patient-Reported Functional Outcomes • Patient outcome follow-up after ED visit	
Risk-Adjusted Total Cost of Care • Total cost of care for high-volume diagnosis (e.g., chest pain)	

Neurology	
Meaningful Measure Area/ • **Subtopic(s) Prioritized as Gaps**	**n = 10, or 20% of 51 total subtopics**
Management of Chronic Conditions • Referral for rehabilitation services	
Preventable Health Care Harm • Accuracy of differential diagnosis	
Medication Management • Patient understanding of medications • Patient understanding of medications: Neuropathy management • Patient understanding of medications: Education of risks (e.g., gabapentin)	
Care Is Personalized and Aligned With Patient's Goals • Patient/caregiver confidence in self-management	
Patient-Reported Functional Outcomes • Health-related quality of life: Comprehensive health-related quality of life for neurology with proxy allowed to report • Neurological functional outcomes with proxy allowed to report	
Community Engagement • Home and community-based services with caregiver support and education	
Appropriate Use of Health Care • Reduction of ED use for headache management	

Subtopic gaps are present for all five clinical specialties in two Meaningful Measure areas:

- Care Is Personalized and Aligned With Patient's Goals
- Patient-Reported Functional Outcomes

Subtopic gaps are present for four of the five clinical specialties in two Meaningful Measure areas:

- Preventive Care (with the exception of neurology)
- Management of Chronic Conditions (with the exception of emergency medicine)

Across the five specialties, subtopic gaps in Care Is Personalized and Aligned with Patient's Goals focus on self-management, care plans, and family/caregiver education, training, and communication of patient needs. Health-related quality of life, symptom assessment, treatment outcomes, and patient outcomes are gaps in the Meaningful Measure area of Patient-Reported Functional Outcomes. Preventive Care includes subtopic gaps for non-medication care plans, interventions for falls and care complications, HIV testing for at-risk populations, and immunizations for patients on biological therapy. Management of Chronic Conditions encompasses specific disease states, referral services, and symptom management associated with pain.

Four Meaningful Measure areas have subtopic gaps noted for emergency medicine only: Prevention, Treatment, Management of Mental Health; Transfer of Health Information and Interoperability; Patient's Experience of Care; and Risk-Adjusted Total Cost of Care. The other specialties either have no subtopics identified or have measures mapped to the four areas.

Only rheumatology and neurology have measurement gaps in the Meaningful Measure areas of Appropriate Use of Health Care and Medication Management. Subtopics for rheumatology focus on the appropriate use of different types of medications. For neurology, the gaps are headache management, patient understanding of medications, and risks associated with medications. Allergy/immunology and physical medicine and rehabilitation have the only gaps addressing Equity of Care, focusing on asthma and cultural competency.

Multiple subtopic gaps are specific to disease states, symptoms, and outcomes unique to one clinical specialty. For rheumatology, gaps focus on rheumatoid arthritis and medication associated with symptom control. For allergy/immunology, self-management and environmental triggers to reduce allergy and asthma episodes are noted. Physical medicine and rehabilitation gaps include diagnosis and treatment of injuries with an emphasis on patient self-efficacy and goal attainment in rehabilitation. For emergency medicine, the transfer of health information to the next point of care with discharge instructions concerns both patients and caregivers. Neurology gaps focus on proxy reporting for health care quality of life and accuracy of differential diagnosis.

These prioritized gaps identify opportunities for specialty societies and measure developers to partner with CMS in focused measure development to meet the demonstrated needs of clinician specialists, patients, families, and caregivers.

CHAPTER 9. LIMITATIONS AND ACTIONS TO CONSIDER

This environmental scan and gap analysis was comprehensive relative to the Meaningful Measure areas and priority specialties included in the conceptual framework; however, certain limitations to the findings are noted.

- The scan was restricted to measures specified at the clinician (individual or group/ practice) level of analysis and excluded related measures specified for other levels of measurement (e.g., health plan or hospital) that might be adaptable for clinician-level reporting. This approach aligns the methodology of the scan with the program requirements of the Quality Payment Program.
- The team sought to exclude duplicate measures during the initial scan of 1,519 measures, but the methodology to obtain a unique measure count depends in part upon publicly available measure information that can be inconsistent across data sources. While every NQF-endorsed measure has a unique number, other measures identified in the scan lack such distinct identifiers and therefore could not definitively be determined to be unique.
- Two methodological approaches to this scan may underestimate the number of measure gaps identified in the conceptual framework:
    - Based on a consensus of the TEP, QCDR measures are included in the measure scan, thereby indicating that existing measures fill gaps for many subtopics. Because many QCDRs require a subscription to access the measures, these measures may not be available to all clinicians. TEP urged that CMS expedite inclusion of QCDR measures into MIPS and cautioned against developing measures for the Quality Payment Program that might duplicate existing measures developed and used by QCDRs.
    - At the recommendation of the TEP, many subtopics relevant to more than one specialty were tabled for consideration as crosscutting subtopics and removed from the post-TEP conceptual framework. In the consensus view of the TEP, developing measures that more than one specialty can use, constructed with consistent data elements, would promote measure alignment and harmonization and reduce the burden of measure implementation and reporting. The TEP will consider how to advance subtopic recommendations for more than one specialty in a future discussion.

CHAPTER 10. CONCLUSION

The CMS Measure Development Plan, as required by MACRA, is a strategic framework that incorporates initial priorities for the development of clinician quality measures to support MIPS and Advanced APMs, together known as the Quality Payment Program. In Section II of the *2018 CMS MDP Annual Report*,[20] CMS prioritized five additional specialties for new measure development: allergy/immunology, emergency medicine, neurology, physical medicine and rehabilitation, and rheumatology. To explore and refine the prioritized areas for measure development within these specialties, the team performed an environmental scan and gap analysis, which consisted of developing a conceptual framework based on the Meaningful Measures quality priorities and areas, identifying relevant measure subtopics, conducting a scan of existing measures, and mapping the measures to subtopics in the framework to illustrate gaps.

The scan initially identified 96 crosscutting measure subtopics, which increased to 119 after TEP and patient/caregiver input. Crosscutting subtopics require further review and prioritization by the TEP to support the alignment of measure development efforts and harmonization of measures across specialties. The scan also identified 167 existing specialty-specific measures and 155 high-priority subtopics. With the thoughtful input of the TEP, the number of subtopics increased to 182 within the Meaningful Measures framework.

The results of the environmental scan and gap analysis for the five specialties confirm measurement gaps outlined in the *2018 MDP Annual Report*. No measures were found for 76 of the 182 high-priority subtopics. These 76 subtopics identify opportunities for measure development to support the Quality Payment Program. Of the 167 specialty-specific measures identified in the scan (*Appendix C*, Tables C-1 through C-6), 33 are MIPS measures in the CY 2018 Quality Payment Program final rule, and 120 are available for MIPS reporting through a QCDR. The remaining 14 measures identified through the environmental scan are not included in the Quality Payment Program; however, they represent an opportunity for CMS to consider them for inclusion in future program years.

Seventy-two percent of the specialty-specific measures identified in the environmental scan are unique QCDR measures, many of which are developed and maintained by specialty societies. The TEP reached a consensus to include QCDR measures in the conceptual framework. Excluding QCDR measures from the framework would increase the noted gaps from 76 to 143, demonstrating that QCDR measures can fill important measurement gaps for clinicians in the target specialties. The TEP recommends a clear pathway to evaluate and adapt QCDR measures as MIPs quality measures to broaden opportunities for reporting, reduce burden of measure development, and foster harmonization and alignment in future measure development efforts. Such a transition into MIPS could facilitate broader use of measures that currently address gaps only through clinicians' participation in a CMS-approved QCDR.

The identification of gaps in this report builds upon the 2016 environmental scan and gap analysis of the initial priorities in the MDP. In accordance with MACRA, section 102, CMS will continue to gather expert input from stakeholders, evaluate the landscape of quality measures, and further evolve the person-centered, value-based quality measure portfolio that CMS envisions to support the new payment and delivery models that constitute the Quality Payment Program.

GLOSSARY OF ACRONYMS AND ABBREVIATIONS

Acronym	Definition
AAAAI	American Academy of Allergy, Asthma, and Immunology
AAN	American Academy of Neurology
AAO	American Academy of Otolaryngology
AAPM&R	American Academy of Physical Medicine and Rehabilitation
ABFM	American Board of Family Medicine
ABG	Anesthesia Business Group
ABI	acquired brain injury
ACEP	American College of Emergency Physicians
ACMT	American College of Medical Toxicology
ACO	accountable care organization
ACQ	Asthma Control Questionnaire
ACT	Asthma Control Test
ADL	activities of daily living
AHRQ	Agency for Healthcare Research and Quality
AIS	Abbreviated Injury Scale
ALS	amyotrophic lateral sclerosis
AM-PAC	Activity Measure for Post Acute Care
AOD	alcohol or other drug
APM	alternative payment model
AQI	Anesthesia Quality Institute
ARCO	Academic Research for Clinical Outcomes
ASIPP	American Society of Interventional Pain Physicians
ASPE	Office of the Assistant Secretary for Planning and Evaluation
ASSIST	Alcohol, Smoking and Substance Involvement Screening Test
ATAQ	Asthma Therapy Assessment Questionnaire
BASDAI	Bath Ankylosing Spondylitis Disease Activity Index
BMI	body mass index
BoNT-A	botulinum toxin serotype A
CAD	coronary artery disease
CAHPS®	Consumer Assessment of Healthcare Providers and Systems®
CDC	Centers for Disease Control and Prevention
CEDR	Clinical Emergency Data Registry
CG-CAHPS®	Clinician and Group Consumer Assessment of Healthcare Providers and Systems®
CHIP	Children's Health Insurance Program
CMIT	CMS Measures Inventory Tool
CMS	Centers for Medicare & Medicaid Services
CNS	central nervous system
COPD	chronic obstructive pulmonary disease
CORE	Center for Outcomes Research and Evaluation
CP	cerebral palsy
CPT	Current Procedural Terminology

Acronym	Definition
CSA	controlled substance agreement
csDMARD	conventional synthetic disease-modifying antirheumatic drug
CT	computed tomography
CTA	computed tomography angiography
CTPA	computed tomography pulmonary angiogram
CY	calendar year
DASH	Disabilities of the Arm, Shoulder, and Hand
DAST	Drug Abuse Screening Test
DM	diabetes mellitus
DMARD	disease-modifying antirheumatic drug
DRR	drug regimen review
DSP	distal symmetric polyneuropathy
E-CPR	Emergency–Clinical Performance Registry
eCQM	electronic clinical quality measure
ED	emergency department
EHR	electronic health record
EMG	electromyography
EMS	emergency medical services
EOL	end of life
FOTO	Focus on Therapeutic Outcomes, Inc.
FS	functional status
FUA	*Follow-up After Emergency Department Visit for Alcohol and Other Drug Dependence*
FUM	*Follow-Up After Emergency Department Visit for Mental Illness*
GCS	Glasgow Coma Scale
HCI3	Health Care Incentives Improvement Institute
HCPCS	Healthcare Common Procedure Coding System
HF	heart failure
HHS	Health and Human Services (U.S. Department of)
HIE	health information exchange
HIV	human immunodeficiency virus
HNSF	Head and Neck Surgery Foundation
HRQOL	health-related quality of life
HRSA	Health Resources and Services Administration
HSAG	Health Services Advisory Group, Inc.
HTN	hypertension
IADL	instrumental activities of daily living
ICD	International Classification of Diseases
ICH	intracerebral hemorrhage
IFN	interferon
IHS	Indian Health Service
IMPACT	Improving Medicare Post-Acute Care Transformation (Act)
INR	international normalized ratio

Acronym	Definition
IRIS®	Intelligent Research in Sight
IS	infantile spasms
KOS	Knee Outcome Survey
LEFS	Lower Extremity Functional Scale
MACRA	Medicare Access and CHIP Reauthorization Act of 2015
MAP	Measure Applications Partnership
MDP	Measure Development Plan
MDQ	Modified Low Back Pain Disability Questionnaire
MID	minimal important difference
MIDS	Measure & Instrument Development and Support
MIPS	Merit-based Incentive Payment System
MOLST	Medical Orders for Life-Sustaining Treatment
MRA	magnetic resonance angiography
MRI	magnetic resonance imaging
MSSP	Medicare Shared Savings Program
NACOR	National Anesthesia Clinical Outcomes Registry
NCQA	National Committee for Quality Assurance
NCS	nerve conduction study
NIPM	National Interventional Pain Management
NQF	National Quality Forum
NQMC	National Quality Measures Clearinghouse
NQP	National Quality Partners
OA	opiate agreement
OT	occupational therapist
PAC	potentially avoidable complication
PACE	Program of All-Inclusive Care for the Elderly
PAM®	Patient Activation Measure®
PCMH	patient-centered medical home
PD	Parkinson's disease
PDC	*Proportion of Days Covered*
PECARN	Pediatric Emergency Care Applied Research Network
PEG	Pain, Enjoyment of Life, General Activity
PHQ	Patient Health Questionnaire
PPD	purified protein derivative
PROM	patient-reported outcome measure
PROMIS	Patient-Reported Outcomes Measurement Information System
PsA	psoriatic arthritis
PT	physical therapist
PTT	partial thromboplastin time
QCDR	qualified clinical data registry
QOL	quality of life
QOLIE	Quality of Life in Epilepsy
QPS	Quality Positioning System

Acronym	Definition
QRS	Quality Rating System
QVAS	Quadruple Visual Analogue Scale
RA	rheumatoid arthritis
RAR	retract-and-reorder
SADQ	Stroke Aphasic Depression Questionnaire
SAMHSA	Substance Abuse and Mental Health Services Administration
SCI	spinal cord injury
SNRI	serotonin and norepinephrine reuptake inhibitor
SOAPP	Screener and Opioid Assessment for Patients with Pain
SQOD	Spine Quality Outcomes Database
SSRI	selective serotonin reuptake inhibitor
SUD	substance use disorder
TBI	traumatic brain injury
TD	tic disorder
TEP	technical expert panel
TQIP	Trauma Quality Improvement Program
TS	Tourette syndrome
ULT	urate lowering therapy
UREQA	United Rheumatology Effectiveness and Quality Analytics
VHA	Veterans Health Administration
YNHHSC	Yale–New Haven Health Services Corporation

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APPENDIX A. KEY SOURCES FOR SUBTOPIC IDENTIFICATION

Table A-1: National Reports

Document	Author	Date
2017 Consensus Development Process Redesign Final Report[21]	National Quality Forum	July 20, 2017
2018 NQP Priorities for Action[22]	National Quality Forum	October 2017
A Measurement Framework to Assess Nationwide Progress Related to Interoperable Health Information Exchange to Support the National Quality Strategy Environmental Scan Report[23]	National Quality Forum	March 31, 2017
A Measurement Framework to Assess Nationwide Progress Related to Interoperable Health Information Exchange to Support the National Quality Strategy Final Report[24]	National Quality Forum	September 1, 2017
A Measurement Framework to Assess Nationwide Progress Related to Interoperable Health Information Exchange to Support the National Quality Strategy Key Informant Interview Summary Report[25]	National Quality Forum	March 31, 2017
An Environmental Scan of Health Equity Measures and a Conceptual Framework for Measure Development Final Report[26]	National Quality Forum	June 15, 2017
A Roadmap for Promoting Health Equity and Eliminating Disparities: The Four I's for Health Equity Final Report[27]	National Quality Forum	September 14, 2017
Cardiovascular Conditions 2016-2017 Technical Report[28]	National Quality Forum	February 23, 2017
Care Coordination Measures: 2016-2017 Technical Report[29]	National Quality Forum	August 30, 2017
Consensus Core Set: ACO and PCMH / Primary Care Measures Version 1.0[30]	Centers for Medicare & Medicaid Services	February 3, 2016
Consensus Core Set: Pediatric Measures Version 1.0[31]	Centers for Medicare & Medicaid Services	March 24, 2017
Cost and Resource Use 2016–2017 Final Technical Report[32]	National Quality Forum	August 30, 2017
Creating a Framework to Support Measure Development for Telehealth Final Report[33]	National Quality Forum	August 31, 2017
Cross-Cutting Challenges Facing Measurement: MAP 2016 Guidance Final Report[34]	National Quality Forum, Measure Applications Partnership	March 15, 2016
Disparities in Healthcare and Health Outcomes in Selected Conditions Final Report[35]	National Quality Forum	January 15, 2017
Effective Interventions in Reducing Disparities in Healthcare and Health Outcomes in Selected Conditions Final Report[36]	National Quality Forum	March 20, 2017
Emergency Department Transitions of Care: A Quality Measurement Framework Final Report[37]	National Quality Forum	August 30, 2017
Evaluation of the NQF Trial Period for Risk Adjustment for Social Risk Factors Final Report[38]	National Quality Forum	July 18, 2017

Document	Author	Date
Eye Care and Ear, Nose, and Throat Conditions: Off-Cycle Measure Review 2017 Technical Report[39]	National Quality Forum	September 21, 2017
Health and Well-Being 2015–2017 Technical Report[40]	National Quality Forum	April 17, 2017
Identification and Prioritization of Health IT Patient Safety Measures Final Report[41]	National Quality Forum	February 11, 2016
Improving Diagnostic Quality and Safety Final Report[42]	National Quality Forum	September 19, 2017
MAP 2016 Considerations for Implementing Measures in Federal Programs: Clinicians Final Report[43]	National Quality Forum, Measure Applications Partnership	March 15, 2016
MAP 2017 Considerations for Implementing Measures in Federal Programs: MIPS and MSSP Final Report[44]	National Quality Forum, Measure Applications Partnership	March 15, 2017
Maximizing the Value of Measurement: MAP 2017 Guidance Final Report[45]	National Quality Forum, Measure Applications Partnership	March 15, 2017
Measuring What Matters to Patients: Innovations in Integrating the Patient Experience into Development of Meaningful Performance Measures[46]	National Quality Forum	August 28, 2017
Musculoskeletal Off-Cycle Measure Review 2017 Technical Report[47]	National Quality Forum	July 28, 2017
Neurological Conditions 2015-2016 Final Report[48]	National Quality Forum	November 29, 2016
NQF-Endorsed Measures for Infectious Disease 2016-2017 Technical Report[49]	National Quality Forum	August 16, 2017
NQF-Endorsed Measures for Person- and Family-Centered Care Phase 2 Final Report[50]	National Quality Forum	March 31, 2016
NQF-Endorsed Measures for Surgical Procedures Final Report[51]	National Quality Forum	April 20, 2017
NQF Report of 2016 Activities to Congress and the Secretary of the Department of Health and Human Services[52]	National Quality Forum	March 1, 2017
Patient Safety 2015 Final Report[53]	National Quality Forum	February 12, 2016
Patient Safety 2016 Final Report[54]	National Quality Forum	March 15, 2017
Patient Safety: Off-Cycle Measure Review 2017 Final Report[55]	National Quality Forum	July 7, 2017
Pediatric Performance Measures 2017 Final Technical Report[56]	National Quality Forum	August 18, 2017
Person- and Family-Centered Care 2015–2016 Technical Report[57]	National Quality Forum	January 11, 2017
Person- and Family-Centered Care: Off-Cycle Review, 2015–2016 Final Technical Report[58]	National Quality Forum	May 31, 2016
Process and Approach for MAP Pre-Rulemaking Deliberations, 2016-2017 Final Report59	National Quality Forum, Measure Applications Partnership	February 2017
Shared Decision Making: A Standard of Care for All Patients[60]	National Quality Forum	October 3, 2017

Document	Author	Date
Strengthening the Core Set of Healthcare Quality Measures for Adults Enrolled in Medicaid, 2015 Final Report[61]	National Quality Forum, Measure Applications Partnership	August 31, 2015
Strengthening the Core Set of Healthcare Quality Measures for Adults Enrolled in Medicaid, 2016 Final Report[62]	National Quality Forum, Measure Applications Partnership	August 31, 2016
Variation in Measure Specifications: Sources and Mitigation Strategies Final Report[63]	National Quality Forum	December 21, 2016

Table A-2: MIDS Library Sources

Type of Document	Project	Author	Date
Summary report of environmental scan and empirical analysis	Development, Implementation, and Maintenance of Quality Measures for the Programs of All-Inclusive Care for the Elderly (PACE)	Econometrica, Inc.	January 15, 2016
Summary report of environmental scan and empirical analysis	Development, Implementation, and Maintenance of Quality Measures for the Programs of All-Inclusive Care for the Elderly (PACE)	Econometrica, Inc.	March 31, 2017
Environmental scan	Quality Measures for Medicaid Beneficiaries with Complex Needs	Mathematica Policy Research	January 29, 2016
Environmental scan	Quality Measures for Medicaid Beneficiaries with Substance Use Disorders	Mathematica Policy Research	December 18, 2015
Quality measurement environmental scan	Development, Implementation, and Maintenance of Quality Measures for the Programs of All-Inclusive Care for the Elderly (PACE)	Econometrica, Inc.	September 18, 2015
Information gathering report	A Literature Review to Inform Development of Two Experience of Care Surveys: Long-Term Care Hospitals and Inpatient Rehabilitation Facilities	RTI International	January 22, 2016
Environmental scan/ literature review	Patient-Reported Outcome Performance Measure for Patients Undergoing Non-Emergent Percutaneous Coronary Intervention	Yale–New Haven Health Services Corporation/Center for Outcomes Research and Evaluation (YNHHSC/CORE)	February 24, 2015

Type of Document	Project	Author	Date
Monthly literature scan	Discharge to Community QM for SNFs, IRFs, LTCHs, and HHAs	Abt Associates	December 2015
Monthly literature scan	Compliance Drug Regimen Review	Abt Associates	December 2015
Supplementation to literature review/ environmental scan	Drug Regimen Review (DRR) RTI Supplementation to Abt's DRR Literature Review/Environmental Scan	RTI International	August 31, 2015
Environmental Scan Measure ID Analysis: Excel file	Excel file for Develop a portfolio of electronically specified clinical quality measures (eCQMs) that eligible professionals (EPs) can report through CMS quality reporting programs.	Mathematica Policy Research	May 2015
Information gathering report: Summary report of environmental scan and empirical analysis	Develop a portfolio of electronically specified clinical quality measures (eCQMs) that eligible professionals (EPs) can report through CMS quality reporting programs.	Mathematica Policy Research	June 15, 2015
Environmental scan	Environmental scan of new quality measure concepts for potential development and use in five CMS Quality Reporting Programs	Mathematica Policy Research	February 13, 2015
Environmental scan	Environmental Scan for the Transfer of Health Information and Care Preferences for Skilled Nursing Facilities, Inpatient Rehabilitation Facilities, Long-Term Care Hospitals, and Home Health Agencies	RTI International	November 2016
Summary report of environmental scan and empirical analysis (information gathering report)	Literature Review and Environmental Scan for Hybrid Hospital-Wide (All-Condition) Risk-Standardized Mortality Measure	Yale–New Haven Health System/Center for Outcomes Research and Evaluation	January 25, 2017

Type of Document	Project	Author	Date
Focused environmental scan and literature review	Development of Method for Measuring Year-to-Year Improvement in Acute Admission Rates for Individual Accountable Care Organizations	Yale–New Haven Health System/Center for Outcomes Research and Evaluation	July 2, 2015
Environmental scan and literature review	Development, Reevaluation, and Implementation of Outpatient Outcome/ Efficiency Measures: Ambulatory Surgical Center New Measures	Yale–New Haven Health System/Center for Outcomes Research and Evaluation	April 1, 2016
Summary report of environmental scan and empirical analysis	Development, Reevaluation, and Implementation of Outcome/Efficiency Measures for Hospital and Eligible Clinicians: Medicaid Hospital-Wide Readmission	Yale–New Haven Health System/Center for Outcomes Research and Evaluation	January 25, 2017
Environmental scan and review of the literature	MRI Lumbar Spine for Low Back Pain: Expansion to MSSP	Yale–New Haven Health System Center for Outcomes Research and Evaluation and the Lewin Group	June 5, 2015
Environmental scan and literature review	Development, Reevaluation, and Implementation of Outpatient Outcome/ Efficiency Measures: Ambulatory Surgical Center New Measures	Yale–New Haven Health System/Center for Outcomes Research and Evaluation	July 29, 2016
Summary report of environmental scan and empirical analysis	Development, Reevaluation, and Implementation of Outcome/Efficiency Measures for Hospital and Eligible Clinicians: Hospital Harm Measure	Yale–New Haven Health System Center for Outcomes Research and Evaluation	January 25, 2017
Environmental scan/literature review	Development, Reevaluation, and Implementation of Outpatient Outcome/ Efficiency Measures: Fibrinolytic Therapy Received within 30 Minutes of ED Arrival	Yale–New Haven Health System/Center for Outcomes Research and Evaluation	September 25, 2017

Type of Document	Project	Author	Date
Information gathering summary report	Development and Implementation of Quality Rating System (QRS) Measures for Qualified Health Plans (QHPs)	IMPAQ International, LLC and Health Services Advisory Group, Inc.	December 1, 2015
Environmental scan	Quality Measures for Medicare-Medicaid Enrollees (Dual Eligible Population)	Mathematica Policy Research	December 18, 2015
Environmental scan: Measure tables appendix	Quality Measures for Medicare-Medicaid Enrollees (Dual Eligible Population)	Mathematica Policy Research	December 18, 2015
Environmental scan	Quality Measures for Community Integration Long-Term Services and Supports	Mathematica Policy Research	January 8, 2016
Environmental scan and gap analysis report	CMS Quality Measure Development Plan	Centers for Medicare & Medicaid Services, Health Services Advisory Group, Inc.	February 17, 2017
Environmental scan	Development, Reevaluation, and Implementation of Outpatient Outcome/ Efficiency Measures: Adaptation of the Multiple Chronic Conditions Accountable Care Organization Admission Measure for the Merit-based Incentive Payment System	Yale–New Haven Health System/Center for Outcomes Research and Evaluation	May 8, 2017
Literature review	Development, Reevaluation, and Implementation of Outpatient Outcome/ Efficiency Measures: Adaptation of the Multiple Chronic Conditions Accountable Care Organization Admission Measure for the Merit-based Incentive Payment System	Yale–New Haven Health System/Center for Outcomes Research and Evaluation	May 8, 2017
Environmental scan	Quality Measures for Medicaid Beneficiaries Needing Physical-Mental Health Integration	Mathematica Policy Research	December 18, 2015

APPENDIX B. ADDITIONAL MEASURE STEWARDS SEARCHED

1. Altarum Institute
2. American Academy of Ophthalmology
3. American Academy of Otolaryngology
4. American Association of Cardiovascular Pulmonary Rehabilitation
5. American College of Cardiology
6. American College of Radiology
7. American College of Rheumatology
8. American College of Surgeons
9. American Gastroenterological Association
10. American Heart Association/ American Stroke Association
11. American Nurses Association
12. American Podiatric Medical Association
13. American Society for Radiation Oncology
14. American Society of Addiction Medicine
15. American Society of Anesthesiologists
16. American Society of Clinical Oncology
17. American Society of Hematology
18. American Thoracic Society
19. American Urogynecologic Society
20. American Urological Association
21. Center of Excellence for Pediatric Quality Measurement
22. College of American Pathologists
23. CREcare
24. Focus on Therapeutic Outcomes, Inc.
25. HealthPartners
26. Heart Rhythm Society
27. Insignia Health
28. Kidney Care Quality Alliance
29. Massachusetts General Hospital
30. MN Community Measurement
31. National Committee for Quality Assurance
32. New York-Presbyterian Hospital
33. Optum
34. PCPI®
35. Pharmacy Quality Alliance
36. RAND Corporation
37. Renal Physicians Association
38. Society for Vascular Surgery
39. The American Academy of Allergy, Asthma & Immunology
40. The Children´s Hospital of Philadelphia Pediatric Quality Measures Program Center of Excellence
41. The Permanente Federation
42. The Society of Thoracic Surgeons
43. University of North Carolina-Chapel Hill
44. University of Pennsylvania, Center for Health Outcomes and Policy Research

APPENDIX C. ALL MEASURES MAPPED TO THE PRELIMINARY CONCEPTUAL FRAMEWORK

Key: ★ MIPS ▲ Unique to QCDR ☆ Other

Table C-1: Allergy/Immunology Measures Mapped to the Conceptual Framework (n = 13)

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
▲1	Allergy/ Immunology	Affordable Care	Appropriate Use of Healthcare	Medications	None	Percentage of patients with allergic rhinitis who are offered intranasal corticosteroids or oral antihistamines N: Patients who are taking intranasal steroids or oral antihistamines. A prescription for or medication reconciliation of over the counter medications can be used to identify patients taking medications D: Patients with allergic rhinitis seen for an ambulatory visit with a diagnosis of allergic rhinitis.	American Academy of Otolaryngology Head and Neck Surgery Foundation (AAO-HNSF) Reg-ent[SM] Registry
▲2	Allergy/ Immunology	Affordable Care	Appropriate Use of Healthcare	Tests and services: Labs	None	Percentage of patients with allergic rhinitis who do not receive IgG-based immunoglobulin testing N: Patients who do not receive IgG testing for evaluation of allergic rhinitis. D: Patients seen for a visit during the measurement period where allergic rhinitis is diagnosed.	American Academy of Otolaryngology Head and Neck Surgery Foundation (AAO-HNSF) Reg-ent[SM] Registry
▲3	Allergy/ Immunology	Communication and Coordination/ Care Coordination	Medication Management	Treat to target (appropriate dosing)	None	Achievement of Projected Effective Dose of Standardized Allergens for Patient Treated With Allergen Immunotherapy for at Least One Year N: Patients who achieved the projected effective dose for all standardized extracts included in the prescription. D: All patients aged 5 years and older who received subcutaneous allergen immunotherapy for at least one year containing at least one standardized antigen.	AAAAI QCDR - American Academy of Allergy, Asthma, and Immunology Quality Clinical Data Registry Powered by ArborMetrix

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
★4	Allergy/ Immunology	Communication and Coordination/ Care Coordination	Medication Management	Medication persistence monitoring	1799	Medication Management for People with Asthma N: The number of patients who achieved a proportion of days (PDC) of at least 75% for their asthma controller medications during the measurement year D: Patients 5-64 years of age with persistent asthma and a visit during the measurement period	National Committee for Quality Assurance
★5	Allergy/ Immunology	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Treatment Outcomes: Asthma	None	Optimal Asthma Control N: The number of asthma patients who meet ALL of the following targets D: Patients ages 5 to 17 with asthma	Minnesota Community Measurement
▲6	Allergy/ Immunology	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Treatment processes: Allergies	None	Documentation of Clinical Response to Allergen Immunotherapy within One YearN: Patients who were evaluated for clinical improvement and efficacy at least once within the first year of treatment with assessment documented in the medical record.D: All patients aged 5 years and older who initiated allergen immunotherapy within one year prior to the date of encounter.	AAAAI QCDR - American Academy of Allergy, Asthma, and Immunology Quality Clinical Data Registry Powered by ArborMetrix
☆7	Allergy/ Immunology	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Treatment processes: Asthma	0047	Asthma: Pharmacologic Therapy for Persistent Asthma N: Patients who were prescribed long-term control medication D: All patients aged 5 years and older with a diagnosis of persistent asthma	The American Academy of Asthma Allergy and Immunology
▲8	Allergy/ Immunology	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Treatment processes: Asthma	None	Assessment of Asthma Symptoms Prior to Administration of Allergen Immunotherapy Injection(s)	AAAAI QCDR - American Academy of Allergy, Asthma, and Immunology Quality Clinical

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
						N: Patients with documentation of an asthma symptom assessment prior to administration of allergen immunotherapy injection(s). D: All patients aged 5 years and older with a diagnosis of asthma AND who are receiving subcutaneous allergen immunotherapy.	Data Registry Powered by ArborMetrix
▲9	Allergy/ Immunology	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Treatment processes: Asthma	None	Lung Function/Spirometry Evaluation N: Patients aged 5 years and older with a diagnosis of asthma and documentation of a spirometry evaluation, unless a physical inability exists. D: Patients aged 5 years and older with a documented diagnosis of asthma.	AAAAI QCDR - American Academy of Allergy, Asthma, and Immunology Quality Clinical Data Registry Powered by ArborMetrix
▲10	Allergy/ Immunology	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Treatment processes: Asthma	None	Asthma Assessment and Classification N: Patients aged 5 years and older with a diagnosis of asthma and documentation of an asthma assessment and classification. D: Patients aged 5 years and older with a documented diagnosis of asthma.	AAAAI QCDR - American Academy of Allergy, Asthma, and Immunology Quality Clinical Data Registry Powered by ArborMetrix
▲11	Allergy/ Immunology	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Treatment processes: Asthma	None	Asthma: Assessment of Asthma Control – Ambulatory Care Setting N: Patients who were evaluated at least once during the measurement period for asthma control. D: All patients aged 5 years and older with a diagnosis of asthma.	AAAAI QCDR - American Academy of Allergy, Asthma, and Immunology Quality Clinical Data Registry Powered by ArborMetrix

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
▲12	Allergy/ Immunology	Making Care Safer/ Safety	Preventable Healthcare Harm	Penicillin allergy testing	None	Penicillin Allergy: Appropriate Removal or Confirmation N: Patients who underwent elective skin testing or penicillin challenge AND who had the penicillin or ampicillin/amoxicillin allergy label removed from the medical record if results were negative or confirmed in the medical record if results were positive. D: All patients, regardless of age, with a diagnosis of primary penicillin or ampicillin/amoxicillin allergy seen during the reporting period.	AAAAI QCDR - American Academy of Allergy, Asthma, and Immunology Quality Clinical Data Registry Powered by ArborMetrix
▲13	Allergy/ Immunology	Person and Family Engagement/ Patient and Caregiver Experience	Patient Reported Functional Outcomes	Treatment Outcomes: Asthma	None	Asthma Control: Minimal Important Difference Improvement N: Patients who demonstrate a minimal important difference (MID) improvement using one of the following three asthma assessment patient-completed questionnaires D: All patients aged 12 years or older whose asthma is not well-controlled and who had at least one follow-up ACT, ACQ, or ATAQ within the 12-month reporting period.	AAAAI QCDR - American Academy of Allergy, Asthma, and Immunology Quality Clinical Data Registry Powered by ArborMetrix

Table C-2: Emergency Medicine Measures Mapped to the Conceptual Framework (n = 30)

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
▲1	Emergency Medicine	Affordable Care	Appropriate Use of Healthcare	Procedures	None	Appropriate Foley Catheter Use in the Emergency Department N: Emergency department visits where the patient had at least one of the following indications for an indwelling Foley catheter:	ACEP's Clinical Emergency Data Registry (CEDR)

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
						• Acute urinary retention or bladder outlet obstruction • Need for accurate measurement of urinary output with no reasonable alternative • Pre-operative use for selected surgical procedures • Open sacral or perineal wounds in incontinent patients • Patient requires prolonged immobilization • Comfort for end of life care • Other institution-specific indication D: All emergency department visits for admitted patients aged 18 years and older where an indwelling Foley catheter is ordered	
▲2	Emergency Medicine	Affordable Care	Appropriate Use of Healthcare	Procedures	None	Optimal Ratio of Blood Product Transfusion N: Patients meeting all of the following criteria: a) Trauma patient inclusion criteria b) First or lowest systolic blood pressure in the emergency department <90 mmHg c) Receive ≥ 4 units of packed red blood cells within 4 hours of emergency department arrival d) Survive ≥ 4 hours from the time of emergency department arrival D: Patients meeting all of the following criteria: a) Trauma patient inclusion criteria b) First or lowest systolic blood pressure in the emergency department < 90 mmHg c) Receive ≥ 4 units of packed red blood cells within 4 hours of emergency department arrival d) Survive ≥ 4 hours from the time of emergency department arrival e) Received units of blood products in a ratio equal to or higher than 1 unit of plasma for every 2 units of pRBC's over the first four hours after arrival to the emergency department	Surgeon Specific Registry QCDR Trauma Measures

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
▲3	Emergency Medicine	Affordable Care	Appropriate Use of Health Care	Procedures	None	Restrictive Use of Blood Transfusions N: Patients who did not have a transfusion of packed red blood cells (when Hgb>8g/dL) D: Any patient >= 18 years of age evaluated by the eligible professional	E-CPR (Emergency - Clinical Performance Registry)
▲4	Emergency Medicine	Affordable Care	Appropriate Use of Healthcare	Procedures	None	Splenic Salvage Rate N: All patients meeting the following criteria: a) TQIP inclusion criteria b) Survival ≥ 1 hour c) Spleen AIS ≥ 2 and < 5 d) Absence of splenectomy during the admission D: All patients meeting the following criteria: a) TQIP inclusion criteria b) Survival ≥ 1 hour c) Spleen AIS ≥ 2 and < 5	Surgeon Specific Registry QCDR Trauma Measures
▲5	Emergency Medicine	Affordable Care	Appropriate Use of Healthcare	Tests and services: Imaging	None	Appropriate Emergency Department Utilization of CT for Pulmonary Embolism N: Emergency department visits for patients with either:1. Moderate or high pre-test clinical probability for pulmonary embolism OR 2. Positive result or elevated D-dimer level D: All emergency department visits during which patients aged 18 years and older had a CT pulmonary angiogram (CTPA) ordered by an emergency care provider, regardless of discharge disposition	ACEP's Clinical Emergency Data Registry (CEDR)
▲6	Emergency Medicine	Affordable Care	Appropriate Use of Healthcare	Tests and services: Imaging	None	Avoid Head CT for Patients with Uncomplicated Syncope N: Syncope Patients Who Did Not Have a Head CT Ordered by the Provider	E-CPR (Emergency - Clinical Performance Registry)

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
						D: •Any patient >=18 years of age evaluated by the Eligible Professional in the Emergency Department or Urgent Care Clinic	
▲7	Emergency Medicine	Affordable Care	Appropriate Use of Healthcare	Tests and services: Imaging	None	Emergency Department Utilization of CT for Minor Blunt Head Trauma for Patients Aged 18 Years and Older N: Emergency department visits for patients who have an indication for a head CT D: All emergency department visits for patients aged 18 years and older who presented with a minor blunt head trauma who had a head CT for trauma ordered by an emergency care provider	ACEP's Clinical Emergency Data Registry (CEDR)
▲8	Emergency Medicine	Affordable Care	Appropriate Use of Healthcare	Tests and services: Imaging	None	Emergency Department Utilization of CT for Minor Blunt Head Trauma for Patients Aged 2 Through 17 Years N: Emergency department visits for patients who are classified as low risk according to the Pediatric Emergency Care Applied Research Network (PECARN) prediction rules for traumatic brain injury D: All emergency department visits for patients aged 2 through 17 years who presented with a minor blunt head trauma who had a head CT for trauma ordered by an emergency care provider	ACEP's Clinical Emergency Data Registry (CEDR)
★9	Emergency Medicine	Affordable Care	Appropriate Use of Healthcare	Tests and services: Labs	None	Appropriate Testing for Children with Pharyngitis N: Children with a group A streptococcus test in the 7-day period from 3 days prior through 3 days after the diagnosis of pharyngitis D: Children 3 - 18 years of age who had an outpatient or emergency department (ED) visit with a diagnosis of pharyngitis during the measurement period and an antibiotic ordered on or three days after the visit	National Committee for Quality Assurance

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
▲10	Emergency Medicine	Affordable Care	Appropriate Use of Healthcare	Tests and services: Labs	None	Avoidance of Creatine Kinase-MB (CK-MB) Testing for Non-traumatic Chest Pain N: Patients who did not have CK-MB lab testing ordered D: Any patient >= 18 years of age evaluated by the Eligible Professional in the Emergency Department (PLUS Diagnosis of Non-traumatic Chest Pain	E-CPR (Emergency - Clinical Performance Registry)
▲11	Emergency Medicine	Affordable Care	Appropriate Use of Healthcare	Tests and services: Labs	None	Coagulation Studies in Patients Presenting with Chest Pain with No Coagulopathy or Bleeding N: Emergency department visits during which coagulation studies (PT, PTT, or INR tests) were ordered by an emergency care provider D: All emergency department visits for patients age 18 years and older with an emergency department discharge diagnosis of chest pain	ACEP's Clinical Emergency Data Registry (CEDR)
▲12	Emergency Medicine	Affordable Care	Appropriate Use of Healthcare	Tests and services: Telemetry	None	Appropriate Use of Telemetry for Admission or Observation Placement N: Patients who did have telemetry monitoring ordered D: Any patient >=18 years of age evaluated by the Eligible Professional PLUS Patients admitted to the inpatient service or observation status PLUS Order for Telemetry Monitoring	E-CPR (Emergency - Clinical Performance Registry)
★13	Emergency Medicine	Affordable Care	Appropriate Use of Healthcare	Medications	0058	Avoidance of Antibiotic Treatment in Adults With Acute Bronchitis N: Patients who were not prescribed or dispensed antibiotics on or within 3 days of the initial date of service D: All patients aged 18 through 64 years of age with an outpatient, observation or emergency department (ED) visit with a diagnosis of acute bronchitis during the measurement period	National Committee for Quality Assurance

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
★14	Emergency Medicine	Affordable Care	Appropriate Use of Healthcare	Tests and services: Imaging	None	Emergency Medicine: Emergency Department Utilization of CT for Minor Blunt Head Trauma for Patients Aged 18 Years and Older N: Emergency department visits for patients who have an indication for a head CT D: All emergency department visits for patients aged 18 years and older who presented within 24 hours of a minor blunt head trauma with a Glasgow Coma Scale (GCS) score of 15 and who had a head CT for trauma ordered by an emergency care provider	American College of Emergency Physicians
★15	Emergency Medicine	Affordable Care	Appropriate Use of Healthcare	Tests and services: Imaging	None	Emergency Medicine: Emergency Department Utilization of CT for Minor Blunt Head Trauma for Patients Aged 2 Through 17 Years N: Emergency department visits for patients who are classified as low risk according to the PECARN prediction rules for traumatic brain injury D: All emergency department visits for patients aged 2 through 17 years who presented within 24 hours of a minor blunt head trauma with a Glasgow Coma Scale (GCS) score of 15 and who had a head CT for trauma ordered by an emergency care provider	American College of Emergency Physicians
▲16	Emergency Medicine	Communication and Coordination/ Care Coordination	Admissions and Read-missions to Hospitals	Return to ED	None	Three Day All Cause Return ED Visit Rate N: Number of Eligible Professional's ED Discharged Patients that Returned to the Same ED within Three Calendar Days of Prior ED Date of Service D: Any Patient Evaluated by the Eligible Professional in the ED PLUS Disposition of Discharged	E-CPR (Emergency - Clinical Performance Registry)

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
▲17	Emergency Medicine	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Treatment processes: Asthma	None	Tobacco Use: Screening and Cessation Intervention for Patients with Asthma and COPD N: Patients who were screened for tobacco use during any ED encounter AND who received tobacco cessation intervention if identified as a tobacco user D: All patients aged 18 years and older with a diagnosis of asthma or COPD seen in the ED	ACEP's Clinical Emergency Data Registry (CEDR)
▲18	Emergency Medicine	Effective Prevention and Treatment/ Clinical Care	Prevention and Treatment of Opioid and Substance Use Disorders	Opioid prescribing	None	Avoidance of Long-Acting (LA) or Extended-Release (ER) Opiate Prescriptions N: Patients who were not prescribed a long-acting (LA) or extended-release (ER) opiate D: Any patient >= 18 years of age evaluated by the Eligible Professional in the Emergency Department or Urgent Care Clinic PLUS Opiate prescribed PLUS ICD-10 diagnosis codes for pain, strains, sprains, lacerations, open wounds and fractures PLUS Disposition of Discharged	E-CPR (Emergency - Clinical Performance Registry)
▲19	Emergency Medicine	Effective Prevention and Treatment/ Clinical Care	Prevention and Treatment of Opioid and Substance Use Disorders	Opioid prescribing	None	Avoidance of Opiate Prescriptions for Greater Than 3 Days Duration for Acute Pain N: Patients who were not prescribed an opiate for greater than 3 days duration. D: Any patient >= 18 years of age evaluated by the Eligible Professional in the Emergency Department or Urgent Care Clinic PLUS Opiate prescribed PLUS ICD-10 diagnosis codes for pain, strains, sprains, lacerations, open wounds and fractures PLUS Disposition of Discharged	E-CPR (Emergency - Clinical Performance Registry)
▲20	Emergency Medicine	Effective Prevention and Treatment/ Clinical Care	Prevention and Treatment of Opioid and Substance Use Disorders	Opioid prescribing	None	Avoidance of Opiate Prescriptions for Low Back Pain or Migraines N: Patients who were not prescribed an opiate D: Any patient >= 18 years of age evaluated by the Eligible Professional in the Emergency Department or Urgent Care Clinic PLUS	E-CPR (Emergency - Clinical Performance Registry)

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
						Diagnosis of low back pain OR Diagnosis of migraine PLUS Disposition of Discharged	
▲21	Emergency Medicine	Effective Prevention and Treatment/ Clinical Care	Prevention and Treatment of Opioid and Substance Use Disorders	Opioid prescribing	None	Avoidance of Tramadol or Codeine for Children N: Pediatric Patients Who Were Not Dispensed or Prescribed Tramadol or Codeine D: Any patient < 18 years of age evaluated by the Eligible Professional in the Emergency Department or Urgent Care Clinic PLUS Disposition of Discharged	E-CPR (Emergency - Clinical Performance Registry)
☆22	Emergency Medicine	Effective Prevention and Treatment/ Clinical Care	Prevention and Treatment of Opioid and Substance Use Disorders	Referral or follow-up: Opioid/SUD	None	Follow-up After Emergency Department Visit for Alcohol and Other Drug Dependence (FUA) N: 30-Day Follow-Up (Rate 1) An outpatient visit, intensive outpatient encounter or partial hospitalization, with any practitioner, with a primary diagnosis of AOD within 30 days after the ED visit. Include outpatient visits, intensive outpatient visits or partial hospitalizations that occur on the date of the ED visit. 7-Day Follow-Up (Rate 2): An outpatient visit, intensive outpatient encounter or partial hospitalization, with any practitioner, with a primary diagnosis of AOD within 7 days after the ED visit. Include outpatient visits, intensive outpatient visits or partial hospitalizations that occur on the date of the ED visit. D: The number of ED visits by consumers in the eligible population	NCQA
▲23	Emergency Medicine	Effective Prevention and Treatment/ Clinical Care	Prevention and Treatment of Opioid and Substance Use Disorders	Screening/intervention: Opioid/SUD	None	Screening for risk of opioid misuse/overuse N: Patients who were screened for the potential risk of opioid misuse/overuse with a standardized tool (e.g., DAST, ASSIST) or assessed for the presence of any of the following risk factors: - Patient survived an opioid overdose	American College of Medical Toxicology (ACMT) ToxIC Registry

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
						- Patient is taking more opioid than prescribed - Patient is taking opioids prescribed for someone else - Patient currently prescribed both a benzodiazepine and opioid D: Patients aged 12 years or older.- Patient prescribed more than 50 mg morphine equivalents/day	
☆24	Emergency Medicine	Effective Prevention and Treatment/ Clinical Care	Prevention, Treatment, and Management of Mental Health	Referral or follow-up	None	Follow-Up After Emergency Department Visit for Mental Illness (FUM) N: 30-Day Follow-Up (Rate 1) An outpatient visit, intensive outpatient encounter or partial hospitalization, with any practitioner, with a primary diagnosis of a mental health disorder within 30 days after the ED visit. Include outpatient visits, intensive outpatient visits or partial hospitalizations that occur on the date of the ED visit. 7-Day Follow-Up (Rate 2) D: The number of ED visits by consumers in the eligible population An outpatient visit, intensive outpatient encounter or partial hospitalization, with any practitioner, with a primary diagnosis of a mental health disorder within 7 days after the ED visit. Include outpatient visits, intensive outpatient visits or partial hospitalizations that occur on the date of the ED visit.	NCQA
★25	Emergency Medicine	Effective Prevention and Treatment/ Clinical Care	Preventive Care	Immunization	None	Rh Immunoglobulin (Rhogam) for Rh-Negative Pregnant Women at Risk of Fetal Blood Exposure N: Patients who receive an order for Rh-Immunoglobulin (Rhogam) in the ED	American College of Emergency Physicians

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
						D: All pregnant female patients aged 14 to 50 years who are Rh-negative and at significant risk of fetal blood exposure	
▲26	Emergency Medicine	Effective Prevention and Treatment/ Clinical Care	Preventive Care	Screening	None	Rh Status Evaluation and Treatment of Pregnant Women at Risk of Fetal Blood Exposure N: Performance Met: Patients who had their Rh status evaluated and were confirmed Rh-positive OR Patients who had Rh status evaluated AND received an order for Rh-Immunoglobulin (Rhogam) if Rh-negative Definition of Rh status evaluated: Laboratory testing of Rh status or documented Rh status (e.g., “Patient known Rh+”) D: Any Female Patient >= 14 Years of Age and < 51 Years of Age Evaluated by the Eligible Professional in the ED PLUS ED Diagnosis of high risk pregnancy complication	E-CPR (Emergency - Clinical Performance Registry)
▲27	Emergency Medicine	Effective Prevention and Treatment/ Clinical Care	Risk Adjusted Mortality	Severe trauma	None	Mortality Rate Following Blunt Traumatic Injury to the Chest and/or Abdomen N: All patients meeting the following criteria: a) Trauma patient inclusion criteria b) ICD-10 Primary External Cause Code indicating Blunt Trauma Type c) AIS>=3 in the abdomen and/or chest d) Survival >=1 hour e) Documentation of death during the patient’s index admission to the hospital D: All patients meeting the following criteria: a) Trauma patient inclusion criteria b) ICD-10 Primary External Cause Code indicating Blunt Trauma Type c) AIS>=3 in the abdomen and/or chest d) Survival >=1 hour	Surgeon Specific Registry QCDR Trauma Measures

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
▲28	Emergency Medicine	Effective Prevention and Treatment/ Clinical Care	Risk Adjusted Mortality	Severe trauma	None	Mortality Rate Following Penetrating Traumatic Injury to the Chest and/or Abdomen N: All patients meeting the following criteria: a) Trauma patient inclusion criteriab) ICD-10 Primary External Cause Code indicating Penetrating Trauma Type c) AIS ≥ 3 in the abdomen and/or chest d) Evaluated in the emergency department (defined as ED disposition <> “not applicable”) e) Survival ≥ 1 hour f) Patients that die in the hospital D: All patients meeting the following criteria: a) Trauma patient inclusion criteriab) ICD-10 Primary External Cause Code indicating Penetrating Trauma Type c) AIS ≥ 3 in the abdomen and/or chest d) Evaluated in the emergency department (defined as ED disposition <> “not applicable”) e) Survival ≥ 1 hour	Surgeon Specific Registry QCDR Trauma Measures
★29	Emergency Medicine	Making Care Safer/ Safety	Preventable Healthcare Harm	Diagnostic accuracy	0651	Ultrasound Determination of Pregnancy Location for Pregnant Patients with Abdominal Pain N: Patients who receive a trans-abdominal or trans-vaginal ultrasound with documentation of pregnancy location in medical record D: All pregnant female patients aged 14 to 50 who present to the ED with a chief complaint of abdominal pain or vaginal bleeding	American College of Emergency Physicians
▲30	Emergency Medicine	Making Care Safer/ Safety	Preventable Healthcare Harm	Diagnostic accuracy	None	Pregnancy Test for Female Abdominal Pain Patients N: Emergency department visits for patients who have had a pregnancy test (urine or serum) ordered D: All emergency department visits for female patients aged 14 through 50 years old who present to the ED with a chief complaint of abdominal pain	ACEP's Clinical Emergency Data Registry (CEDR)

Table C-3: Neurology Measures Mapped to the Conceptual Framework (n = 48)

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
▲1	Neurology	Affordable Care	Appropriate Use of Healthcare	Medications	None	Antipsychotic Use in Persons with Dementia N: The number of patients in the denominator who had at least one prescription and > 30 days supply for any antipsychotic medication during the measurement period and do not have a diagnosis of schizophrenia, bipolar disorder, Huntington's disease or Tourette's syndrome. D: All patients 65 years of age and older continuously enrolled during the measurement period with a diagnosis of dementia and/or two or more prescription claims and >60 days supply for a cholinesterase inhibitor or an NMDA receptor antagonist.	Academic Research for Clinical Outcomes (ARCO) - ReportingMD
▲2	Neurology	Affordable Care	Appropriate Use of Healthcare	Medications	None	Inappropriate Use of Antiviral Monotherapy for Bell's Palsy (Inverse Measure) N: Patients who were prescribed antiviral therapy without concurrent systemic steroid therapy for the treatment of Bell's palsy. D: All patients age 16 years and older with new-onset diagnosis of Bell's palsy within the past 3 months.	American Academy of Otolaryngology Head and Neck Surgery Foundation (AAO-HNSF) Reg-ent[SM] Registry
▲3	Neurology	Affordable Care	Appropriate Use of Healthcare	Tests and services: Imaging	None	Appropriate use of advanced imaging by ordering provider with glucocorticoid management to spare motor neuron loss when physical findings suggest neuropathic etiology N: Numerator data are patients receiving advanced imaging in the reporting year ordered by the reporting provider. D: Denominator data are patients 18-75 years of age with advanced imaging ordered	Maine Osteopathic Association in Collaboration with Patient360

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
▲4	Neurology	Affordable Care	Appropriate Use of Healthcare	Tests and services: Imaging	None	Inappropriate Use of Magnetic Resonance Imaging or Computed Tomography Scan for Bell's Palsy (Inverse Measure) N: Patients for whom an MRI or CT scan of the internal auditory canal, head, neck, or brain was ordered for a primary diagnosis of Bell's palsy. D: All patients age 16 years and older with a new-onset diagnosis of Bell's palsy within the past 3 months.	American Academy of Otolaryngology Head and Neck Surgery Foundation (AAO-HNSF) Reg-ent℠ Registry
★5	Neurology	Affordable Care	Appropriate Use of Healthcare	Tests and services: Imaging	None	Overuse Of Neuroimaging For Patients With Primary Headache And A Normal Neurological Examination N: Patients with a normal neurological examination for whom advanced brain imaging Computed Tomography Angiography (CTA), Computed Tomography (CT), Magnetic Resonance Angiography (MRA), or Magnetic Resonance Imaging (MRI) was NOT ordered D: All patients with a diagnosis of primary headache	American Academy of Neurology
☆6	Neurology	Affordable Care	Patient-Focused Episode of Care	Condition specific episode-based cost measures: Stroke	NA	Intracranial Hemorrhage or Cerebral Infarction N: The numerator of the Intracranial Hemorrhage or Cerebral Infarction cost measure is the sum of the ratio of observed to expected payment-standardized cost to Medicare for all episodes attributed to a clinician. This is then multiplied by the national average observed episode cost to generate a dollar figure. D: The cost measure denominator is the total number of episodes from the Intracranial Hemorrhage or Cerebral Infarction episode group attributed to a clinician.	Centers for Medicare & Medicaid Services

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
▲7	Neurology	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Symptom Management: Migraines	None	Medication Prescribed for Acute Migraine Attack N: Patients who were prescribed a guideline recommended medication for acute migraine attacks within the 12 month measurement period. D: All patients age 12 years old and older with a diagnosis of migraine headache.	Axon Registry
▲8	Neurology	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Symptom Management: Muscle Spasticity	None	Assessment and Management of Muscle Spasticity—Inpatient Numerator 1: Patients with a documented assessment of muscle spasticity prior to discharge Numerator 2: Patients who have a documented plan of care to monitor and/or manage muscle spasticity prior to discharge Numerator 3: Patients with a documented assessment of muscle spasticity AND if muscle spasticity is present have a documented plan of care to monitor and/or manage muscle spasticity prior to discharge Denominator 1: All patients, regardless of age with any of the following diagnoses: stroke, acquired brain injury (ABI), spinal cord injury (SCI), cerebral palsy (CP), multiple sclerosis (MS) who are admitted to inpatient rehabilitation, skilled nursing facility, or long-term care hospital Denominator 2: All patients, regardless of age with any of the following diagnoses: stroke, acquired brain injury (ABI), spinal cord injury (SCI), cerebral palsy (CP), multiple sclerosis (MS) who are admitted to inpatient rehabilitation, skilled nursing facility, or long-term care hospital with muscle spasticity Denominator 3: All patients, regardless of age with any of the following diagnoses: stroke, acquired brain injury (ABI), spinal cord injury	AAPM&R's Registry

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
						(SCI), cerebral palsy (CP), multiple sclerosis (MS) who are admitted to inpatient rehabilitation, skilled nursing facility, or long-term care hospital	
▲9	Neurology	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Symptom Management: Muscle Spasticity	None	Botulinum Toxin Serotype A (BoNT-A) for spasticity or dystonia N: Patients who were evaluated OR treated OR referred for BoNT-A injection D: All patients < 18 years of age with moderate to severe localized/segmental spasticity or dystonia in the upper and/or lower extremities	Axon Registry
▲10	Neurology	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Symptom Management: Muscle Spasticity	None	Management of Muscle Spasticity—Outpatient N: Patients with a documented plan of care to monitor and/or manage muscle spasticity. D: All patients, regardless of age with any of the following diagnoses: stroke, acquired brain injury (TBI), spinal cord injury (SCI), cerebral palsy (CP), multiple sclerosis (MS) with muscle spasticity who are seen for an office visit during the measurement period	AAPM&R's Registry
▲11	Neurology	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Treatment Outcomes: Giant Cell Arteritis	None	Giant Cell Arteritis: Absence of fellow eye involvement after treatment N: Patients without fellow eye involvement 1-26 weeks after initiating treatment in patients with unilateral visual loss D: All patients aged 18 years or greater with giant cell arteritis with unilateral vision loss	American Academy of Ophthalmology IRIS® Registry (Intelligent Research in Sight)
★12	Neurology	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Treatment processes: Dementia	2872	Dementia: Cognitive Assessment N: Patients for whom an assessment of cognition is performed and the results reviewed at least once within a 12 month period D: All patients, regardless of age, with a diagnosis of dementia	PCPI

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
★13	Neurology	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Treatment processes: Dementia	None	Dementia: Caregiver Education and Support N: Patients with dementia whose caregiver(s) were provided with education on dementia disease management and health behavior changes AND were referred to additional resources for support in the last 12 months. D: All patients with a diagnosis of dementia	American Academy of Neurology
★14	Neurology	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Treatment processes: Dementia	None	Dementia: Counseling Regarding Safety Concerns N: Patients with dementia or their caregiver(s) for whom there was a documented safety concerns screening in two domains of risk: 1) dangerousness to self or others and 2) environmental risks; and if safety concerns screening was positive in the last 12 months, there was documentation of mitigation recommendations, including but not limited to referral to other resources or orders for home safety evaluation D: All patients with a diagnosis of dementia	American Academy of Neurology
★15	Neurology	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Treatment processes: Dementia	None	Dementia: Functional Status Assessment N: Patients for whom an assessment of functional status was performed at least once in the last 12 months. D: All patients with a diagnosis of dementia	American Academy of Neurology
★16	Neurology	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Treatment processes: Dementia	None	Dementia: Neuropsychiatric Symptom Assessment N: Patients with dementia for whom there was at least one documented symptoms screening in the last 12 months for at least one symptom each for three domains of behavioral and psychiatric symptoms, including depression and for whom, if symptoms screening was positive, there was also documentation of	American Academy of Neurology

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
						recommendations for symptoms management in the last 12 months. D: All patients with a diagnosis of dementia	
▲17	Neurology	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Treatment processes: Dementia	None	Pharmacological Treatment of Dementia N: Patients with dementia or their caregivers with whom available guideline/appropriate pharmacological treatment options and nonpharmacological behavior and lifestyle modifications were discussed at least once in the last12-month period D: All patients with dementia	PsychPRO
▲18	Neurology	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Treatment processes: Distal Symmetric Polyneuropathy	None	Diabetes/Pre-Diabetes Screening for Patients with DSP N: Patients who had screening tests for diabetes (e.g., fasting blood sugar testing, hemoglobin A1C, or a 2 hour Glucose Tolerance Test) reviewed, requested, or ordered when seen for an initial evaluation for distal symmetric polyneuropathy. D: All patients age 18 years and older with a diagnosis of distal symmetric polyneuropathy seen for an initial evaluation of distal symmetric polyneuropathy.	Axon Registry
★19	Neurology	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Treatment processes: Epilepsy	1814	Epilepsy: Counseling for Women of Childbearing Potential with Epilepsy N: Female patients or caregivers counseled at least once a year about how epilepsy and its treatment may affect contraception OR pregnancy D: All females of childbearing potential (12-44 years old) with a diagnosis of epilepsy	American Academy of Neurology

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
▲20	Neurology	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Treatment processes: Epilepsy	None	First line treatment for infantile spasms (IS) N: Patients who received any guideline recommended first line therapy as initial treatment for IS as soon as diagnosed, but no later than 1 week after initial, confirmed diagnosis D: All patients aged 2 weeks to 36 months diagnosed with IS	Axon Registry
▲21	Neurology	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Treatment processes: Multiple Sclerosis	None	Current MS Disability Scale Score N: Patients with MS who have a MS disability scale score documented in the medical record in the past 12 months. D: All patients with a diagnosis of MS.	Axon Registry
▲22	Neurology	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Treatment processes: Multiple Sclerosis	None	Exercise and Appropriate Physical Activity Counseling for Patients with MS N: Patients with MS counseled on the benefits of exercise and appropriate physical activity for patients with MS in past 12 months. D: All patients with a diagnosis of MS.	Axon Registry
★23	Neurology	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Treatment processes: Parkinson's disease	None	Parkinson's Disease: Cognitive Impairment or Dysfunction Assessment N: All patients with a diagnosis of Parkinson's Disease who were assessed for cognitive impairment or dysfunction in the past 12 months. D: All patients regardless of age with a diagnosis of Parkinson's Disease	American Academy of Neurology
★24	Neurology	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Treatment processes: Parkinson's disease	None	Parkinson's Disease: Rehabilitative Therapy Options N: All patients with a diagnosis of Parkinson's Disease (or caregiver(s), as appropriate) who had rehabilitative therapy options (i.e., physical,	American Academy of Neurology

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
						occupational, and speech therapy) discussed in the past 12 months. D: All patients regardless of age with a diagnosis of Parkinson's disease.	
▲25	Neurology	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Treatment processes: Spine care	None	Back Pain: Use of EMG & NCS N: Patients who had an electromyography (EMG) or nerve conduction study (NCS) within 30 days of the diagnosis. D: All Patients with a diagnosis of axial lumbar, thoracic or cervical spine pain during the measurement period	Clinigence QCDR
▲26	Neurology	Effective Prevention and Treatment/ Clinical Care	Prevention and Treatment of Opioid and Substance Use Disorders	Opioid prescribing: Chronic headaches	None	Overuse of barbiturate and opioid containing medications for primary headache disorders N: Patients assessed for opioid or barbiturate containing medication overuse headache within the 12 month measurement period, and if barbiturate or opioid medication overuse headache is identified, treatment or referral for treatment was provided. D: All patients aged 12 years and older diagnosed with a primary headache disorder and prescribed an opioid or barbiturate containing medication	Axon Registry
▲27	Neurology	Effective Prevention and Treatment/ Clinical Care	Prevention and Treatment of Opioid and Substance Use Disorders	Screening/I intervention: Alcohol	None	DSP Screening for Unhealthy Alcohol Use N: Patients with a diagnosis of DSP who were screened with a validated screening instrument for unhealthy alcohol use when seen for an initial evaluation and if positive, brief counseling provided D: All patients age 18 years and older with a diagnosis of distal symmetric polyneuropathy	Axon Registry

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
▲28	Neurology	Effective Prevention and Treatment/ Clinical Care	Prevention and Treatment of Opioid and Substance Use Disorders	Screening/ intervention: Opioid/SUD	None	Appropriate controlled substance prescribing (definitive diagnosis(es)) via adherence to Controlled Substance Agreements (CSA) or (OA's) with corrective action taken for pain and/or substance use disorder patients when violations occur	Maine Osteopathic Association in Collaboration with Patient360
▲29	Neurology	Effective Prevention and Treatment/ Clinical Care	Prevention, Treatment, and Management of Mental Health	Behavioral and psych screening: Anxiety/ Depression	None	Depression and Anxiety Assessment Prior to Spine-Related Therapies N: Number of patients aged 18 years and older with documentation of depression and/or anxiety assessment through discussion with the patient including the use of a standardized assessment tool prior to therapy(-ies) for treatment of spine-related pain symptoms. D: See spec manual	AAPM&R's Registry
▲30	Neurology	Effective Prevention and Treatment/ Clinical Care	Prevention, Treatment, and Management of Mental Health	Behavioral and psych screening: General	None	Querying for co-morbid conditions of tic disorder (TD) and Tourette syndrome (TS) N: Patients who were queried for symptoms of psychological and/or behavioral co-morbid conditions at least once per year, and if present, patient was treated or referred for treatment of co-morbid conditions. D: All patients aged < 18 years with the diagnosis of TD or TS who do not have an existing diagnosis of a comorbid condition	Axon Registry
▲31	Neurology	Effective Prevention and Treatment/ Clinical Care	Prevention, Treatment, and Management of Mental Health	Behavioral and psych screening: Anxiety/ Depression	None	Post-Acute Brain Injury: Depression Screening and Follow-Up Plan of Care N: Patients screened for depression using a validated tool AND if positive a follow up plan of care is documented on the date of the positive screen *Validated tool may include the PHQ-2, PHQ-9,	AAPM&R's Registry

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
						Stroke Aphasic Depression Questionnaire (SADQ) or another validated tool D: All patients aged 18 years and older who have experienced an acute brain injury (ischemic stroke, hemorrhagic stroke, acute brain injury) seen for an office visit during the measurement period	
★32	Neurology	Effective Prevention and Treatment/ Clinical Care	Prevention, Treatment, and Management of Mental Health	Behavioral and psych screening: General	None	Parkinson's Disease: Psychiatric Symptoms Assessment for Patients with Parkinson's Disease N: Patients with a diagnosis of PD who were assessed for psychiatric symptoms in the past 12 months. D: All patients regardless of age with a diagnosis of PD	American Academy of Neurology
▲33	Neurology	Effective Prevention and Treatment/ Clinical Care	Prevention, Treatment, and Management of Mental Health	Behavioral and psych screening: General	None	Screening for Psychiatric or Behavioral Health Disorders N: "Patient encounters where patient was screened for psychiatric or behavioral health disorders, but not limited to anxiety, depression, mood disorder, attention deficit hyperactive disorder, cognitive dysfunction, or other neurobehavioral disorders." D: All encounters for patients with diagnosis of epilepsy	Spectra-Medix eMeasures360™ QCDR
▲34	Neurology	Effective Prevention and Treatment/ Clinical Care	Prevention, Treatment, and Management of Mental Health	Behavioral and psych screening: General	None	Screening for Psychiatric or Behavioral Health Disorders N: Patient visits where patient was screened for psychiatric or behavioral health disorders. D: All visits for patients with diagnosis of epilepsy.	Axon Registry

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
☆35	Neurology	Making Care Safer/ Safety	Preventable Healthcare Harm	Adverse medication events	0555	INR Monitoring for Individuals on Warfarin N: The number of individuals in the denominator who have at least one INR monitoring test during each 56-day interval with active warfarin therapy. D: Individuals at least 18 years of age as of the beginning of the measurement period with warfarin therapy for at least 56 days during the measurement period.	Centers for Medicare & Medicaid Services
▲36	Neurology	Making Care Safer/ Safety	Preventable Healthcare Harm	Falls	None	Falls Outcome for Patients with Parkinson's Disease N: Patients who reported their fall rate during the July 1 to December 31, 20XX^ encounter was maintained or reduced from prior report during January 1 to June 30, 20XX encounter of the measurement period. D: Patients with a diagnosis of Parkinson's disease who had at least two encounters during the measurement period and had the number of falls documented at each encounter. One encounter must occur in January 1 to June 30, 20XX and another encounter must occur in July 1 to December 31, 20XX.	Axon Registry
▲37	Neurology	Making Care Safer/ Safety	Preventable Healthcare Harm	Falls	None	Falls screening (aggregation of AAN disease specific falls measures) N: Percentage of patients with Parkinson's disease, multiple sclerosis, distal symmetric polyneuropathy, ALS, epilepsy, dementia who were screened for falls at least annually and counseling provided on falls prevention for those with 2 or more falls or 1 fall with injury D: Patients with a current diagnosis of Parkinson's disease, multiple sclerosis, distal symmetric polyneuropathy, ALS, epilepsy, dementia	Axon Registry

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
▲38	Neurology	Making Care Safer/ Safety	Preventable Healthcare Harm	Potentially avoidable complications	0705	Proportion of Patients Hospitalized with Stroke that have a Potentially Avoidable Complication (during the Index Stay or in the 30-day Post-Discharge Period) N: Outcome: Potentially avoidable complications (PACs) in patients hospitalized for stroke occurring during the index stay or in the 30-day post-discharge period. D: Adult patients aged 18 – 65 years who had a relevant hospitalization for stroke (with no exclusions) and were followed for one-month after discharge.	Health Care Incentives Improvement Institute (HCI3)
▲39	Neurology	Making Care Safer/ Safety	Preventable Healthcare Harm	Potentially harmful drug-drug interactions	None	Addressing anxiety in pain patients with SNRI and SSRIs and reducing/eliminating benzodiazepines for chronic anxiety N: Numerator data are patients aged 18 and above with a documented complaint of or diagnosis of anxiety or sleep disorder and be provided SSRI/SNRI agents in lieu of benzodiazepines. If on benzodiazepines, these will be serially weaned unless a documented diagnosis of an anxiety syndrome exists from a psychiatric provider, and treated with SNRI/SSRI agents. D: Denominator data are patients aged 18 and meet specified code.* *See spec manual	Maine Osteopathic Association in Collaboration with Patient360
▲40	Neurology	Person and Family Engagement/ Patient and Caregiver Experience	Care is Personalized and Aligned with Patient's Goals	Patient education/ health literacy	None	Family Training—Inpatient Rehabilitation/Skilled Nursing Facility-Discharged to Home N: Patients whose family/caregiver(s) demonstrated successful teach-back* regarding skills for care of the patient in the home setting. *Ability to perform skills safely and without assistance on at least once occasion	AAPM&R's Registry

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
						D: All patients aged 18 years and older, who have experienced a stroke discharged from inpatient rehabilitation, skilled nursing facility, or long-term care hospital to home	
▲41	Neurology	Person and Family Engagement/ Patient and Caregiver Experience	Care is Personalized and Aligned with Patient's Goals	Self-management	None	Promoting self-care for prevention and management of chronic conditions N: Provider communicated/promoted self-care for prevention and management of chronic conditions within 30 days of office visit, during the reporting period D: Patients, regardless of age, with multiple chronic conditions (2 or more of the following) Hypertension, Heart Failure, Stroke, Atrial Fibrillation, Coronary Heart Disease, Peripheral Artery Disease, obesity, hyperlipidemia, tobacco dependence, depression	Academic Research for Clinical Outcomes (ARCO) - ReportingMD
★42	Neurology	Person and Family Engagement/ Patient and Caregiver Experience	EOL According to Preferences	Advance Care Plan	None	Amyotrophic Lateral Sclerosis (ALS) Patient Care Preferences N: Patients who were offered assistance in planning for end of life issues (e.g., advance directives, invasive ventilation, or hospice) at least once annually D: All patients with a diagnosis of Amyotrophic Lateral Sclerosis (ALS)	American Academy of Neurology
▲43	Neurology	Person and Family Engagement/ Patient and Caregiver Experience	Patient Reported Functional Outcomes	Functional status assessment: Change over time	None	Objectifying pain and/or functionality to determine manipulative medicine efficacy with correlative treatment adjustment N: Numerator data will equal total pain patients receiving manipulative medicine or therapy with a QVAS done with functionality less than or equal to a five (<5) or pain scale greater than or equal to seven (>7) points.	Maine Osteopathic Association in Collaboration with Patient360

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
						D: Denominator will equal patients aged 18-75 years on date of encounter during the reporting period	
▲44	Neurology	Person and Family Engagement/ Patient and Caregiver Experience	Patient Reported Functional Outcomes	Health Related QOL: Epilepsy	None	Quality of Life Assessment for Patients with Epilepsy N: Patients whose most recent QOLIE-10-P score is maintained or improved from the prior QOLIE-10-P score obtained in the measurement period D: Patients aged 18 years and older diagnosed with epilepsy who had two office visits during the two-year measurement period which occurred at least 4 weeks apart.	Axon Registry
▲45	Neurology	Person and Family Engagement/ Patient and Caregiver Experience	Patient Reported Functional Outcomes	Health Related QOL: General	None	Quality of Life Assessment N: Patients who had their PROMIS-29 scores reviewed and had appropriate follow up D: All patients aged 18 years and older with a neurologic condition who had a PROMIS-29 administered in the FIGMD module during the measurement period	Axon Registry
★46	Neurology	Person and Family Engagement/ Patient and Caregiver Experience	Patient Reported Functional Outcomes	Health Related QOL: Headache	None	Quality of Life Assessment For Patients With Primary Headache Disorders N: Patient whose health related quality of life was assessed with a tool(s) during at least two visits during the 12 month measurement period AND whose health related quality of life score stayed the same or improved D: All patients with a diagnosis of primary headache disorder	American Academy of Neurology

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
▲47	Neurology	Person and Family Engagement/ Patient and Caregiver Experience	Patient Reported Functional Outcomes	Health Related QOL: Stroke	None	Post Stroke Outcome and Follow-Up N: Number of patients counted in the denominator for whom a follow-up score is obtained which is not less than the baseline score D: Number of patients 18 or older, diagnosed with IS, ICH, or TIA, who received a baseline score, and who are eligible for a follow-up score during the measurement period.	Universal Research Solutions, LLC - OBERD QCDR
▲48	Neurology	Person and Family Engagement/ Patient and Caregiver Experience	Patient Reported Functional Outcomes	Symptom Assessment: Parkinson's Disease	None	Querying About Symptoms of Autonomic Dysfunction for Patients with Parkinson's Disease N: Percentage of all patients with a diagnosis of PD (or caregivers, as appropriate) who were queried about symptoms of autonomic dysfunction in the past 12 months and if autonomic dysfunction identified had appropriate follow-up. D: All patients with a diagnosis of PD.	Axon Registry

Table C-4: Physical Medicine and Rehabilitation Measures Mapped to the Conceptual Framework (n = 59)

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
▲1	Physical Medicine and Rehabilitation	Affordable Care	Appropriate Use of Healthcare	Procedures	None	Appropriate Patient Selection for Diagnostic Facet Joint Procedures N: Total number of encounters in which a patient receives a diagnostic facet joint procedure with documentation within the preceding 30 days of appropriate patient selection criteria having been met. D: Total number of encounters in which a patient receives a diagnostic facet joint procedure.	The ASIPP National Interventional Pain Management (NIPM) Qualified Clinical Data Registry, powered by ArborMetrix

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
▲2	Physical Medicine and Rehabilitation	Affordable Care	Appropriate Use of Healthcare	Procedures	None	Avoiding Excessive Use of Epidural Injections in Managing Chronic Pain Originating in the Cervical and Thoracic Spine N: Patients with at least 1 but less than 6 encounters in which a cervical/thoracic epidural injection was performed during the first 12 months following initiation of treatment. Or patients with at least 1 but less than 5 encounters in which a cervical/thoracic epidural injection was performed during subsequent 12 month periods. D: All patients who have received cervical/thoracic epidural injections during the reporting period.	The ASIPP National Interventional Pain Management (NIPM) Qualified Clinical Data Registry, powered by ArborMetrix
▲3	Physical Medicine and Rehabilitation	Affordable Care	Appropriate Use of Healthcare	Procedures	None	Avoiding Excessive Use of Therapeutic Facet Joint Interventions in Managing Chronic Cervical and Thoracic Spinal Pain N: Patients who underwent at least 1 but less than 5 therapeutic cervical/thoracic facet joint treatments during the measurement year (CPT Codes: 64490, 64491, 64492 with Quality Code IPM03 to indicate therapeutic intent as opposed to diagnostic intent). Or patients with at least 1 but less than 3 therapeutic cervical/thoracic facet joint denervation treatments during the measurement year (CPT Codes: 64633, 64634). Bilateral treatments that are performed unilaterally on separate days within 14 calendar days are considered a single treatment. D: All patients undergoing therapeutic cervical/thoracic facet joint interventions.	The ASIPP National Interventional Pain Management (NIPM) Qualified Clinical Data Registry, powered by ArborMetrix

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
▲4	Physical Medicine and Rehabilitation	Affordable Care	Appropriate use of Healthcare	Tests and services: Imaging	None	Appropriate use of advanced imaging by ordering provider with glucocorticoid management to spare motor neuron loss when physical findings suggest neuropathic etiology N: Numerator data are patients receiving advanced imaging in the reporting year ordered by the reporting provider. D: Denominator data are patients 18-75 years of age with advanced imaging ordered	Maine Osteopathic Association in Collaboration with Patient360
▲5	Physical Medicine and Rehabilitation	Affordable Care	Appropriate Use of Healthcare	Tests and services: Imaging	None	MRI of the lumbar spine without prior conservative care N: All patients ≥ than 18 years without conservative care for low back pain. D: All patients ≥ 18 years with low back pain receiving lumbar spine MRI study	The Spine Institute for Quality Conservative Care: QCDR For Individuals - Powered by Premier, Inc
▲6	Physical Medicine and Rehabilitation	Affordable Care	Appropriate Use of Healthcare	Tests and services: Imaging	None	Repeated X-ray Imaging N: Patients with two or more of the same x-ray imaging studies within the one year measurement period. D: All patients 18 years of age and older with a diagnosis of spine-related disorders on an eligible encounter during the measurement period in which an x-ray study is ordered or performed for the purpose of monitoring the patient's condition by an eligible clinician.	The Spine Institute for Quality Conservative Care: QCDR For Individuals - Powered by Premier, Inc
▲7	Physical Medicine and Rehabilitation	Communication and Coordination/ Care Coordination	Admissions and Readmissions to Hospitals	Admissions	None	Unplanned Admission to Hospital Following Percutaneous Spine Procedure within the 30-Day Post-procedure Period N: Number of patients aged 18 years and older who had any unplanned admission following percutaneous spine-related procedure within the 30-day post-procedure period. D: SQOD Spine Codes	AAPM&R's Registry

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
▲8	Physical Medicine and Rehabilitation	Communication and Coordination/ Care Coordination	Medication Management	High risk medications	None	Communicating concurrent opioid and benzodiazepine prescribing to other prescribers N: Percentage of patients 18 years of age and older who are prescribed opioids and have a letter or other communication sent to another clinician who is prescribing benzodiazepines. This measure is reported by the clinician who prescribes opioids to a patient already taking benzodiazepines. D: All patients aged 18 years and older who are prescribed both opioids and benzodiazepines from separate clinicians.	The ASIPP National Interventional Pain Management (NIPM) Qualified Clinical Data Registry, powered by ArborMetrix
▲9	Physical Medicine and Rehabilitation	Communication and Coordination/ Care Coordination	Medication Management	High risk medications	None	Outcome of High Risk Pain Medications Prescribed in Last 6 Months N: Patients prescribed and actively taking high risk pain medications in the last 6 months D: Patients 18 age and older on date of encounter	SCG Health
▲10	Physical Medicine and Rehabilitation	Communication and Coordination/ Care Coordination	Medication Management	High risk medications	None	Patient counseling regarding risks of co-prescribed opioids and benzodiazepines N: All patients aged 18 years and older who are concurrently prescribed both opioids and benzodiazepines and receive either written or verbal education regarding the risks of concurrent opioid and benzodiazepine use. D: All patients aged 18 years and older who are prescribed both opioids and benzodiazepines.	The ASIPP National Interventional Pain Management (NIPM) Qualified Clinical Data Registry, powered by ArborMetrix

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
☆11	Physical Medicine and Rehabilitation	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Symptom Management: Bowel Care	1617	Patients Treated with an Opioid who are Given a Bowel Regimen N: Patients from the denominator that are given a bowel regimen or there is documentation as to why this was not needed D: Vulnerable adults who are given a prescription for an opioid	RAND Corporation/UCLA
▲12	Physical Medicine and Rehabilitation	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Symptom Management: Bowel Care	None	Patients Treated with an Opioid Who Are Given a Bowel Regimen N: Patients where a bowel regimen was offered/prescribed, or documentation as to why this was not needed D: All adults 18 and older who are prescribed long-acting or regular use of short-acting opioids	ABFM PRIME
▲13	Physical Medicine and Rehabilitation	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Symptom Management: Muscle Spasticity	None	Assessment and Management of Muscle Spasticity—Inpatient N: Patients with a documented plan of care to monitor and/or manage muscle spasticity. Denominator 1: All patients, regardless of age with any of the following diagnoses: stroke, acquired brain injury (ABI), spinal cord injury (SCI), cerebral palsy (CP), multiple sclerosis (MS) who are admitted to inpatient rehabilitation, skilled nursing facility, or long-term care hospital Denominator 2: All patients, regardless of age with any of the following diagnoses: stroke, acquired brain injury (ABI), spinal cord injury (SCI), cerebral palsy (CP), multiple sclerosis (MS) who are admitted to inpatient rehabilitation, skilled nursing facility, or long-term care hospital with muscle spasticity Denominator 3: All patients, regardless of age with any of the following diagnoses: stroke, acquired brain injury (ABI), spinal cord injury (SCI), cerebral palsy (CP), multiple sclerosis	AAPM&R's Registry

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
						(MS) who are admitted to inpatient rehabilitation, skilled nursing facility, or long-term care hospital	
▲14	Physical Medicine and Rehabilitation	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Symptom Management: Muscle Spasticity	None	Management of Muscle Spasticity—Outpatient N: Patients with a documented plan of care to monitor and/or manage muscle spasticity. D: All patients, regardless of age with any of the following diagnoses: stroke, acquired brain injury (TBI), spinal cord injury (SCI), cerebral palsy (CP), multiple sclerosis (MS) with muscle spasticity who are seen for an office visit during the measurement period	AAPM&R's Registry
▲15	Physical Medicine and Rehabilitation	Effective Prevention and Treatment/ Clinical Care	Prevention and Treatment of Opioid and Substance Use Disorders	Care Plan	None	Perioperative Pain Plan N: All patients where documentation has been signed attesting to the review of a perioperative pain plan using a multimodal, narcotic sparing technique was discussed. D: All patients, aged 18 and older, who undergo a procedure with a chronic pain provider.	MiraMed
▲16	Physical Medicine and Rehabilitation	Effective Prevention and Treatment/ Clinical Care	Prevention and Treatment of Opioid and Substance Use Disorders	Opioid prescribing	None	Narcotic Pain Medicine Management Prior to and Following Spine Therapy N: Number of patients aged 18 years and older with documentation of narcotic use/requirements at baseline (initial encounter) and at 2 +/-1 months following initial assessment and therapy (ies) for treatment of spine-related pain symptoms and documentation of follow-up plan. D: SQOD Spine Codes	AAPM&R's Registry

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
▲17	Physical Medicine and Rehabilitation	Effective Prevention and Treatment/ Clinical Care	Prevention and Treatment of Opioid and Substance Use Disorders	Opioid prescribing	None	Safe Opioid Prescribing Practices N: Patients for whom ALL of the following opioid prescribing best practices are followed:1. Chemical dependency screening (includes laboratory testing and/or questionnaire) within the immediate 6 months prior to the encounter2. Co-prescription of Naloxone, or documented discussion regarding offer of Naloxone co-prescription, if opioid prescription is ≥50 MME/day3. Non co-prescription of benzodiazepine medications by prescribing pain physician and documentation of a discussion with patient regarding risks of concomitant use of benzodiazepine and opioid medications. D: All patients aged 18 years and older prescribed opioid medications for longer than six weeks' duration	Anesthesia Quality Institute (AQI) National Anesthesia Clinical Outcomes Registry (NACOR)
▲18	Physical Medicine and Rehabilitation	Effective Prevention and Treatment/ Clinical Care	Prevention and Treatment of Opioid and Substance Use Disorders	Opioid prescribing	None	SCG1 Evaluation of High Risk Pain Medications for MMEN: Percentage of patients prescribed and actively taking one or more high risk pain medications.D: Patients 18 age and older.	SCG Health
▲19	Physical Medicine and Rehabilitation	Effective Prevention and Treatment/ Clinical Care	Prevention and Treatment of Opioid and Substance Use Disorders	Opioid prescribing	None	Use of a "PEG Test" to Manage Patients Receiving Opioids N: Performance Met: Mednax 12A: Clinician used the PEG Test results to correctly continue opioid prescribing, meaning the PEG score showed a reduction of 30% or greater from baseline, and the patient was continued on the opioid regimen. OR	MEDNAX QCDR

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
						Mednax 12B: Clinician used the PEG Test result to correctly discontinue previous opioid regimen (PEG score was not reduced 30% or more from baseline), and then weaned the patient off opioids, adjusted the dose of opioid, or changed to a different opioid. OR Performance Not Met: Mednax 12C: Clinician did not administer the PEG Test or administered the test and did not alter opioid prescribing appropriately. D: All visits for patients aged 18 years and older, who have been prescribed opioids for greater than 6 weeks and are on a stable dose	
▲20	Physical Medicine and Rehabilitation	Effective Prevention and Treatment/ Clinical Care	Prevention and Treatment of Opioid and Substance Use Disorders	Opioid prescribing	None	Weight loss in pain patients with BMI >= 30 with opiate utilization for weight related pain conditions rather than opiate dose escalation for improved pain control N: Numerator data are patients aged 18 and above with a BMI >= 30 on opiates/opioids for chronic pain related to weight related pain conditions or pain conditions exacerbated by obesity with documented weight loss and BMI reduction AND dose reduction (24 hour MME) documented OR functional QVAS > 6 with serial reduction of BMI from 30 to 24-26 over 6 months, then opioid dosing may be maintained. D: Denominator data are patients who 18 age and older on chronic opiate therapy with BMI >= 30 with weight related or weight exacerbated pain conditions and meet the HCPCS/ICD data parameters.	Maine Osteopathic Association in Collaboration with Patient360

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
▲21	Physical Medicine and Rehabilitation	Effective Prevention and Treatment/ Clinical Care	Prevention and Treatment of Opioid and Substance Use Disorders	Screening/intervention: Opioid/SUD	None	Appropriate controlled substance prescribing (definitive diagnosis(es)) via adherence to Controlled Substance Agreements (CSA) or (OA's) with corrective action taken for pain and/or substance use disorder patients when violations occur N: Numerator data are patients aged 18 and above with specified code* D: Denominator data are all patients aged 18 and above with specified code**See spec manual	Maine Osteopathic Association in Collaboration with Patient360
▲22	Physical Medicine and Rehabilitation	Effective Prevention and Treatment/ Clinical Care	Prevention and Treatment of Opioid and Substance Use Disorders	Screening/intervention: Opioid/SUD	None	Screening for risk of opioid misuse/overuse N: Patients who were screened for the potential risk of opioid misuse/overuse with a standardized tool (e.g., DAST, ASSIST) or assessed for the presence of any of the following risk factors:- Patient survived an opioid overdose- Patient is taking more opioid than prescribed- Patient is taking opioids prescribed for someone else - Patient currently prescribed both a benzodiazepine and opioid D: Patients aged 12 years or older.- Patient prescribed more than 50 mg morphine equivalents/day	American College of Medical Toxicology (ACMT) ToxIC Registry
▲23	Physical Medicine and Rehabilitation	Effective Prevention and Treatment/ Clinical Care	Prevention and Treatment of Opioid and Substance Use Disorders	Screening/intervention: Opioid/SUD	None	Urine Drug Screen Utilization in Pain Management and Substance Use Disorders; no less than quarterly for pain and no less than monthly for substance use disorders N: Numerator data are patients aged 18 and above with a documented Controlled Substance or Opiate Agreement. D: Denominator data are all patients having received two (2) or more Schedule II controlled substances in (or around) the reporting period.	Maine Osteopathic Association in Collaboration with Patient360

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
▲24	Physical Medicine and Rehabilitation	Effective Prevention and Treatment/ Clinical Care	Prevention, Treatment, and Management of Mental Health	Behavioral and psych screening: Anxiety/Depression	None	Depression and Anxiety Assessment Prior to Spine-Related Therapies N: Number of patients aged 18 years and older with documentation of depression and/or anxiety assessment through discussion with the patient including the use of a standardized assessment tool prior to therapy(-ies) for treatment of spine-related pain symptoms D: See spec manual	AAPM&R's Registry
▲25	Physical Medicine and Rehabilitation	Effective Prevention and Treatment/ Clinical Care	Prevention, Treatment, and Management of Mental Health	Behavioral and psych screening: Anxiety/Depression	None	Post-Acute Brain Injury: Depression Screening and Follow-Up Plan of Care N: Patients screened for depression using a validated tool* AND if positive a follow up plan of care is documented on the date of the positive screen *Validated tool may include the PHQ-2, PHQ-9, (SADQ) or another validated tool D: All patients aged 18 years and older who have experienced an acute brain injury (ischemic stroke, hemorrhagic stroke, acute brain injury) seen for an office visit during the measurement period	AAPM&R's Registry
▲26	Physical Medicine and Rehabilitation	Making Care Safer/ Safety	Preventable Healthcare Harm	Infection control practices	None	Infection Control Practices for Open Interventional Pain Procedures N: Patients for whom ALL of the following infection control best practices are followed in addition to standard sterile technique: 1. Double gloving (two pairs of sterile gloves are worn) 2. Chlorhexidine with alcohol used 3. Weight-based preoperative antibiotic dosing and, if indicated by procedure duration, weight-based re-dosing 4. Administration of pre-operative antibiotics within 1 hour, or 2 hours for vancomycin, prior to	Anesthesia Quality Institute (AQI) National Anesthesia Clinical Outcomes Registry (NACOR)

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
						surgical incision (or start of procedure if no incision is required) D: All patients, regardless of age, who undergo an open interventional pain procedure	
▲27	Physical Medicine and Rehabilitation	Making Care Safer/Safety	Preventable Healthcare Harm	Potentially avoidable complications	None	Documentation of Anticoagulant and Antiplatelet Medications when Performing Neuraxial Anesthesia/Analgesia or Interventional Pain Procedures N: Patients where the name and date last taken, and, if applicable, time last taken of anticoagulant and/or antiplatelet medications prior to start of interventional pain procedure or administration of neuraxial anesthesia or analgesia are documented. D: All patients, regardless of age, taking anticoagulant and/or antiplatelet medications who undergo an interventional pain procedure or other surgical or therapeutic procedure under neuraxial anesthesia or analgesia	Anesthesia Quality Institute (AQI) National Anesthesia Clinical Outcomes Registry (NACOR)
▲28	Physical Medicine and Rehabilitation	Making Care Safer/Safety	Preventable Healthcare Harm	Potentially harmful drug-drug interactions	None	Addressing anxiety in pain patients with SNRI and SSRIs and reducing/eliminating benzodiazepines for chronic anxiety N: Numerator data are patients aged 18 and above with a documented complaint of or diagnosis of anxiety or sleep disorder and be provided SSRI/SNRI agents in lieu of benzodiazepines. If on benzodiazepines, these will be serially weaned unless a documented diagnosis of an anxiety syndrome exists from a psychiatric provider, and treated with SNRI/SSRI agents. D: Denominator data are patients aged 18 and meet certain codes.**See spec manual.	Maine Osteopathic Association in Collaboration with Patient360

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
▲29	Physical Medicine and Rehabilitation	Making Care Safer/Safety	Preventable Healthcare Harm	Potentially harmful drug-drug interactions	None	Avoiding Use of CNS Depressants in Patients on Long-Term Opioids N: Patients with no current prescription for a CNS depressant D: Adults with a current rx for an opioid lasting for at least 90 days	PPRNet
▲30	Physical Medicine and Rehabilitation	Person and Family Engagement/ Patient and Caregiver Experience	Care is Personalized and Aligned with Patient's Goals	Patient education/ health literacy	None	Family Training—Inpatient Rehabilitation/Skilled Nursing Facility-Discharged to Home N: Patients whose family/caregiver(s) demonstrated successful teach-back regarding skills for care of the patient in the home setting. D: All patients aged 18 years and older, who have experienced a stroke discharged from inpatient rehabilitation, skilled nursing facility, or long-term care hospital to home	AAPM&R's Registry
★31	Physical Medicine and Rehabilitation	Person and Family Engagement/ Patient and Caregiver Experience	Patient Reported Functional Outcomes	Functional status assessment: Change over time	0422	Functional status change for patients with Knee impairments N: Patient Level: The residual functional status score for the individual patient (residual scores are the actual change scores - predicted change after risk adjustment. Individual Clinician Level: The average of residuals in functional status scores in patients who were treated by a clinician in a 12 month time period for knee impairment. Clinic Level: The average of residuals in functional status scores in patients who were treated by a clinic in a 12 month time period for knee impairment. D: All patients 14 years and older with knee impairments who have initiated rehabilitation treatment and completed the FOTO knee FS PROM at admission and discharge.	Focus on Therapeutic Outcomes, Inc

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
★32	Physical Medicine and Rehabilitation	Person and Family Engagement/ Patient and Caregiver Experience	Patient Reported Functional Outcomes	Functional status assessment: Change over time	0423	Functional status change for patients with Hip impairments N: Patient Level: The residual functional status score for the individual patient (residual scores are the actual change scores - predicted change after risk adjustment. Individual Clinician Level: The average residuals in functional status scores in patients who were treated by a clinician in a 12 month time period for hip impairment. Clinic Level: The average residuals in functional status scores in patients who were treated by a clinic in a 12 month time period for hip impairment. D: All patients 14 years and older with hip impairments who have initiated rehabilitation treatment and complete the FOTO hip FS PROM at admission and discharge.	Focus on Therapeutic Outcomes, Inc
★33	Physical Medicine and Rehabilitation	Person and Family Engagement/ Patient and Caregiver Experience	Patient Reported Functional Outcomes	Functional status assessment: Change over time	0424	Functional status change for patients with Foot and Ankle impairments N: Patient Level: The residual functional status score for the individual patient (residual scores are the actual change scores - predicted change after risk adjustment) Individual Clinician Level: The average of residuals in functional status scores in patients who were treated by a clinician in a 12 month time period for foot and or ankle impairment. Clinic Level: The average of residuals in patients who were treated by a clinic in a 12 month time period for foot and or ankle impairment. D: All patients 14 years and older with foot or ankle impairments who have initiated rehabilitation treatment and completed the FOTO	Focus on Therapeutic Outcomes, Inc

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
						foot and ankle PROM at admission and discharge	
★34	Physical Medicine and Rehabilitation	Person and Family Engagement/ Patient and Caregiver Experience	Patient Reported Functional Outcomes	Functional status assessment: Change over time	0425	Functional status change for patients with lumbar impairments N: Patient Level: The residual functional status score for the individual patient (residual scores are the actual change scores - predicted change after risk adjustment).Individual Clinician Level: The average of residuals in functional status scores in patients who were treated by a clinician in a 12 month time period for lumbar impairment.Clinic Level: The average of residuals) in functional status scores in patients who were treated by a clinic in a 12 month time period for lumbar impairment. D: All patients 14 years and older with a lumbar impairment who have initiated rehabilitation treatment and completed the FOTO (lumbar) PROM.	Focus on Therapeutic Outcomes, Inc
★35	Physical Medicine and Rehabilitation	Person and Family Engagement/ Patient and Caregiver Experience	Patient Reported Functional Outcomes	Functional status assessment: Change over time	0426	Functional status change for patients with Shoulder impairments N: Patient Level: The residual functional status score for the individual patient (residual scores are the actual change scores - predicted change after risk adjustment. Individual Clinician Level: The average of residuals in functional status scores in patients who were treated by a clinician in a 12 month time period for shoulder impairment. Clinic Level: The average of residuals in functional status scores in patients who were treated by a clinic in a 12 month time period for shoulder impairment. D: All patients 14 years and older with shoulder impairments who have initiated rehabilitation	Focus on Therapeutic Outcomes, Inc

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
						treatment and completed the FOTO shoulder FS outcome instrument at admission and discharge.	
★36	Physical Medicine and Rehabilitation	Person and Family Engagement/ Patient and Caregiver Experience	Patient Reported Functional Outcomes	Functional status assessment: Change over time	0427	Functional status change for patients with elbow, wrist and hand impairments N: Patient Level: The residual functional status score for the individual patient (residual scores are the actual change scores - predicted change after risk adjustment). Individual Clinician Level: The average of residuals in functional status scores in patients who were treated by a clinician in a 12 month time period for elbow, wrist and hand impairment. Clinic Level: The average of residuals in functional status scores in patients who were treated by a clinic in a 12 month time period for elbow, wrist and hand impairments. D: All patients 14 years and older with elbow, wrist or hand impairments who have initiated rehabilitation treatment and completed the FOTO (elbow, wrist and hand) PROM.	Focus on Therapeutic Outcomes, Inc
★37	Physical Medicine and Rehabilitation	Person and Family Engagement/ Patient and Caregiver Experience	Patient Reported Functional Outcomes	Functional status assessment: Change over time	0428	Functional status change for patients with general orthopaedic impairments N: Patient Level: The residual functional status score for the individual patient (residual scores are the actual change scores - predicted change after risk adjustment).Individual Clinician Level: The average of residuals in functional status scores in patients who were treated by a clinician in a 12 month time period for general orthopaedic impairment. Clinic Level: The average of residuals in functional status scores in patients who were treated by a clinic in a 12 month time period for general orthopaedic impairment.	Focus on Therapeutic Outcomes, Inc

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
						D: All patients 14 years and older with general orthopaedic impairments who have initiated rehabilitation treatment and completed the FOTO (general orthopaedic) PROM.	
☆38	Physical Medicine and Rehabilitation	Person and Family Engagement/ Patient and Caregiver Experience	Patient Reported Functional Outcomes	Functional status assessment: Change over time	0429	Change in Basic Mobility as Measured by the AM-PAC: N: The number (or proportion) of a clinician's patients in a particular risk adjusted diagnostic category who meet a target threshold of improvement in Basic Mobility functioning. D: All patients in a risk adjusted diagnostic category with a mobility goal for an episode of care.	CREcare
☆39	Physical Medicine and Rehabilitation	Person and Family Engagement/ Patient and Caregiver Experience	Patient Reported Functional Outcomes	Functional status assessment: Change over time	0430	Change in Daily Activity Function as Measured by the AM-PAC: N: The number (or proportion) of a clinician's patients in a particular risk adjusted diagnostic category who meet a target threshold of improvement in Daily Activity (i.e., ADL and IADL) functioning. D: All patients in a risk adjusted diagnostic category with a Daily Activity goal for an episode of care.	CREcare
★40	Physical Medicine and Rehabilitation	Person and Family Engagement/ Patient and Caregiver Experience	Patient Reported Functional Outcomes	Functional status assessment: Change over time	2624	Functional Outcome Assessment N: Patients with a documented current functional outcome assessment using a standardized tool AND a documented care plan based on the identified functional outcome deficiencies. D: All visits for patients aged 18 years and older	Centers for Medicare & Medicaid Services

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
▲41	Physical Medicine and Rehabilitation	Person and Family Engagement/ Patient and Caregiver Experience	Patient Reported Functional Outcomes	Functional status assessment: Change over time	None	Change in Functional Outcomes N: Patients with a 30% point or greater decrease in PROMIS Pain Interference Score from initial assessment to final assessment during an episode of care for a spine-related disorder. D: All patients 18 years of age and older with an episode of care for spine-related disorders and at least two functional outcomes assessments (one baseline and at least one follow-up) using the PROMIS Pain Interference assessment during the episode of care.	The Spine Institute for Quality Conservative Care: QCDR For Individuals - Powered by Premier, Inc
▲42	Physical Medicine and Rehabilitation	Person and Family Engagement/ Patient and Caregiver Experience	Patient Reported Functional Outcomes	Functional status assessment: Change over time	None	Change in Pain Intensity N: Patients with a 30% point or greater decrease in PROMIS Pain Intensity Score from initial assessment to final assessment during an episode of care for a spine-related disorder. D: All patients 18 years of age and older with an episode of care for spine-related disorders and at least two functional outcomes assessments (first non-zero score will be used as the baseline assessment and at least one subsequent follow-up) using the PROMIS Pain Intensity assessment during the episode of care.	The Spine Institute for Quality Conservative Care: QCDR For Individuals - Powered by Premier, Inc
▲43	Physical Medicine and Rehabilitation	Person and Family Engagement/ Patient and Caregiver Experience	Patient Reported Functional Outcomes	Functional status assessment: Change over time	None	Functional Improvement in arm, shoulder, and hand rehabilitation in surgical patients with musculotendinous injury measured via the validated Disabilities of Arm, Shoulder, and Hand (DASH) score. N: Sum of DASH measure change scores of all surgical patients with musculotendinous injuries from their initial visits and final visits in PT/OT practice or PT/OT group during the observation window.	Intermountain ROMS

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
						D: The number of surgical patients with arm, shoulder, or hand musculotendinous injury evaluated and treated by a physical therapist (PT) or Occupational Therapist (OT), or PT or OT Group, during the observation window.	
▲44	Physical Medicine and Rehabilitation	Person and Family Engagement/ Patient and Caregiver Experience	Patient Reported Functional Outcomes	Functional status assessment: Change over time	None	Functional Improvement in hip, leg or ankle rehabilitation in patients with lower extremity injury measured via the validated Lower Extremity Functional Scale (LEFS) score. N: Sum of LEFS average change in the score of all patients with hip, leg, or ankle injuries from their initial visits and final visits in PT/OT practice or PT/OT group during the observation window. D: The number of patients with hip, leg, or ankle injury evaluated and treated by a physical therapist (PT) or Occupational Therapist (OT), or PT or OT Group.	Intermountain ROMS
▲45	Physical Medicine and Rehabilitation	Person and Family Engagement/ Patient and Caregiver Experience	Patient Reported Functional Outcomes	Functional status assessment: Change over time	None	Functional Improvement in knee rehabilitation of patients with knee injury measured via their validated Knee Outcome Survey (KOS) score. N: Sum of KOS average change in the score of all patients with knee injuries from their initial visits and final visits in PT or OT practice or PT or OT Group practice during the observation window. D: The number of all patients with knee injury evaluated and treated by a PT or OT, or PT or OT Group, during the observation window.	Intermountain ROMS
▲46	Physical Medicine and Rehabilitation	Person and Family Engagement/ Patient and Caregiver Experience	Patient Reported Functional Outcomes	Functional status assessment: Change over time	None	Functional Improvement in low back rehabilitation of non-surgical patients with low back pain measured via the validated Modified Low Back Pain Disability Questionnaire (MDQ). N: Sum of MDQ average change in the score of all patients with low back pain from their initial	Intermountain ROMS

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
						visits and final visits in PT/OT practice or PT/OT group during the observation window. D: The number of patients with low back pain evaluated and treated by a physical therapist (PT) or Occupational Therapist (OT), or PT or OT Group, during the observation window.	
▲47	Physical Medicine and Rehabilitation	Person and Family Engagement/ Patient and Caregiver Experience	Patient Reported Functional Outcomes	Functional status assessment: Change over time	None	Functional Improvement in neck pain/injury patients' rehabilitation measured via the validated Neck Disability Index (NDI). N: Sum of NDI average change in the score of all patients from their initial visits and final visits in PT/OT practice or PT/OT group during the observation window. D: The number of neck pain/injury patients evaluated and treated by a physical therapist (PT) or Occupational Therapist (OT), or PT or OT Group, during the observation window.	Intermountain ROMS
▲48	Physical Medicine and Rehabilitation	Person and Family Engagement/ Patient and Caregiver Experience	Patient Reported Functional Outcomes	Functional status assessment: Change over time	None	Functional Status Assessment for Cervical Medial Branch Radiofrequency Ablation N: Percentage of patients 18 years of age and older with cervical medial branch radiofrequency ablation who completed baseline and follow-up patient-reported functional status assessments, and achieved at least a 10% improvement in functional status score from baseline. Follow-up functional assessment must be completed within 90 days following the procedure. D: All patients aged 18 years and older who undergo cervical medial branch radiofrequency ablation.	The ASIPP National Interventional Pain Management (NIPM) Qualified Clinical Data Registry, powered by ArborMetrix
▲49	Physical Medicine and Rehabilitation	Person and Family Engagement/	Patient Reported Functional Outcomes	Functional status assessment:	None	Functional Status Assessment for Lumbar Medial Branch Radiofrequency Ablation N: Percentage of patients 18 years of age and older with lumbar medial branch radiofrequency	The ASIPP National Interventional Pain Management

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
		Patient and Caregiver Experience		Change over time		ablation who completed baseline and follow-up patient-reported functional status assessments, and achieved at least a 10% improvement in functional status score from baseline. Follow-up functional assessment must be completed within 90 days following the procedure. D: All patients aged 18 years and older who undergo lumbar medial branch radiofrequency ablation.	(NIPM) Qualified Clinical Data Registry, powered by ArborMetrix
▲50	Physical Medicine and Rehabilitation	Person and Family Engagement/ Patient and Caregiver Experience	Patient Reported Functional Outcomes	Functional status assessment: Change over time	None	Functional Status Assessment for Spinal Cord Stimulator Implantation N: Percentage of patients 18 years of age and older who undergo spinal cord stimulator implantation who completed baseline and follow-up patient-reported functional status assessments, and achieved at least a 10% improvement in functional status score from baseline. Follow-up functional assessment must be completed within 90 days following the procedure. D: All patients aged 18 years and older who undergo surgical implantation of a spinal cord stimulator with implantable pulse generator, excluding replacement or revision of existing spinal cord stimulation systems.	The ASIPP National Interventional Pain Management (NIPM) Qualified Clinical Data Registry, powered by ArborMetrix
▲51	Physical Medicine and Rehabilitation	Person and Family Engagement/ Patient and Caregiver Experience	Patient Reported Functional Outcomes	Functional status assessment: Change over time	None	Lower Body Functional Impairment (LBI) N: Patients with two or more office visits in the calendar year who report the same or improved lower body functional status D: Patients diagnosed with chronic pain of greater than three months and who have at least three office visits with their provider in the calendar year and have reported that they have lower body pain	ABG QCDR

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
▲52	Physical Medicine and Rehabilitation	Person and Family Engagement/ Patient and Caregiver Experience	Patient Reported Functional Outcomes	Functional status assessment: Change over time	None	Objectifying pain and/or functionality to determine manipulative medicine efficacy with correlative treatment adjustment N: Numerator data will equal total pain patients receiving manipulative medicine or therapy with a QVAS done with functionality less than or equal to a five (<5) or pain scale greater than or equal to seven (>7) points. D: Denominator will equal patients aged 18-75 years on date of encounter during the reporting period	Maine Osteopathic Association in Collaboration with Patient360
▲53	Physical Medicine and Rehabilitation	Person and Family Engagement/ Patient and Caregiver Experience	Patient Reported Functional Outcomes	Functional status assessment: Change over time	None	Reduction in Patient Reported Pain Following Cervical/Thoracic Medial Branch Radiofrequency Ablation N: 1. The percent reduction in pain score on a visual analog scale (0-10), comparing pre-procedure pain (recorded within 90 days prior to the procedure) and post-procedure pain (recorded within 90 days following the procedure) in the area targeted for treatment by cervical/thoracic medial branch radiofrequency ablation OR2. The reduction in pain as reported by the patient as a percent reduction in pain in the area targeted for treatment by cervical/thoracic medial branch radiofrequency ablation, comparing pre-procedure and post-procedure pain. Percent reduction in pain must be reported within 90 days following the procedure. D: Patient reported level of pain, defined as average level of pain during normal daily activities in the area targeted for treatment with cervical/thoracic medial branch radiofrequency ablation, on a scale of 0-10. Pain level must be documented within the 90-day period prior to the procedure.	The ASIPP National Interventional Pain Management (NIPM) Qualified Clinical Data Registry, powered by ArborMetrix

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
▲54	Physical Medicine and Rehabilitation	Person and Family Engagement/ Patient and Caregiver Experience	Patient Reported Functional Outcomes	Functional status assessment: Change over time	None	Reduction in Patient Reported Pain Following Lumbar Medial Branch Radiofrequency Ablation N: 1. The percent reduction in pain score on a visual analog scale (0-10), comparing pre-procedure pain (recorded within 90 days prior to the procedure) and post-procedure pain (recorded within 90 days following the procedure) in the area targeted for treatment by lumbar medial branch radiofrequency ablation OR 2. The reduction in pain as reported by the patient as a percent reduction in pain in the area targeted for treatment by lumbar medial branch radiofrequency ablation, comparing pre-procedure and post-procedure pain. Percent reduction in pain must be reported within 90 days following the procedure. D: Patient reported level of pain, defined as average level of pain during normal daily activities in the area targeted for treatment with lumbar medial branch radiofrequency ablation, on a scale of 0-10. Pain level must be documented within the 90-day period prior to the procedure.	The ASIPP National Interventional Pain Management (NIPM) Qualified Clinical Data Registry, powered by ArborMetrix
▲55	Physical Medicine and Rehabilitation	Person and Family Engagement/ Patient and Caregiver Experience	Patient Reported Functional Outcomes	Functional status assessment: Change over time	None	Reduction in Patient Reported Pain Following Spinal Cord Stimulator Implantation for Failed Back Surgery Syndrome N: 1. The percent reduction in pain score on a visual analog scale (0-10) in the area targeted for treatment by spinal cord stimulation, comparing pre-implantation pain (recorded within 90 days prior to surgical implantation) and post-implantation pain (recorded within 90 days following surgical implantation) OR2. The reduction in pain as reported by the patient as a percent reduction in pain in the area targeted for	The ASIPP National Interventional Pain Management (NIPM) Qualified Clinical Data Registry, powered by ArborMetrix

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
						treatment by spinal cord stimulation, comparing pre-procedure pain and post-procedure pain. Percent reduction in pain must be reported within 90 days following surgical implantation. D: Patient reported level of pain, defined as average level of pain during normal daily activities in the area targeted for treatment with spinal cord stimulation, on a scale of 0-10. Pain level must be documented within the 90-day period prior to implantation.	
▲56	Physical Medicine and Rehabilitation	Person and Family Engagement/ Patient and Caregiver Experience	Patient Reported Functional Outcomes	Functional status assessment: Change over time	None	Treatment of spinal stenosis with manipulative medicine and alternative medicine modalities N: Numerator data will equal total imaging confirmed spinal stenosis (M99) patients receiving manipulative medicine or therapy for this complaint that was inadequate at providing pain relief and necessitated the addition of an alternative medicine therapy (i.e.: acupuncture) during the reporting period. As such patients with a QVAS done with functionality less than or equal to a five (<5) or pain scale greater than or equal to seven (>7) points would be candidates for this measure. D: Denominator will equal patients aged 18-75 years with date of encounter during the reporting period	Maine Osteopathic Association in Collaboration with Patient360
▲57	Physical Medicine and Rehabilitation	Person and Family Engagement/ Patient and Caregiver Experience	Patient Reported Functional Outcomes	Health Related QOL: Pain	None	Pain Related Quality of Life Interference N: Patients with two or more office visits in the calendar year who receive a plan of care from their provider to improve their QOL D: Patients diagnosed with chronic pain of greater than three months who have at least three office visits with their provider in the calendar year	ABG QCDR

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
▲58	Physical Medicine and Rehabilitation	Person and Family Engagement/ Patient and Caregiver Experience	Patient Reported Functional Outcomes	Health Related QOL: Spine care	None	Quality-of-Life Assessment for Spine Intervention N: Percentage of patients aged 18 years and older undergoing spine therapy(-ies) who completed baseline and 2 +/- 1 month follow-up (patient-reported) quality-of-life assessment with an improvement in the quality of life status from the baseline. D: SQOD Spine Codes	AAPM&R's Registry
▲59	Physical Medicine and Rehabilitation	Person and Family Engagement/ Patient and Caregiver Experience	Patient's Experience of Care	Patient experience: Improvement over time	None	Patient Satisfaction with Spine Care N: Percentage of patients aged 18 years and older undergoing spine therapy(-ies) who completed satisfaction with care assessment prior to the treatment and at 2 +/- 1 month follow-up (patient-reported) satisfaction with care assessment with an improvement in the satisfaction with care status from the baseline. D: SQOD Spine Codes	AAPM&R's Registry

Table C-5: Rheumatology Measures Mapped to the Conceptual Framework (n = 17)

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
▲1	Rheumatology	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Treatment Outcomes: Ankylosing Spondylitis	None	Ankylosing Spondylitis: Appropriate Pharmacologic Therapy N: Patients who are newly diagnosed with ankylosing spondylitis and are within the first six (6) months of treatment who are prescribed a course of NSAIDs before initiation of biologics. D: Patients aged 18 years and older as of the date of service AND Newly diagnosed with ankylosing spondylitis and within the first six (6) months of treatment	UREQA (United Rheumatology Effectiveness and Quality Analytics)

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
▲2	Rheumatology	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Treatment Outcomes: Ankylosing Spondylitis	None	Ankylosing Spondylitis: Controlled Disease N: Visits for which a Bath Ankylosing Spondylitis Disease Activity Index (BASDAI) score was documented and within the controlled BASDAI score of less than 4.0. D: Patients aged 18 years and older as of the date of service AND Diagnosis of ankylosing spondylitis	UREQA (United Rheumatology Effectiveness and Quality Analytics)
☆3	Rheumatology	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Treatment Outcomes: Gout	2549	Gout: Serum Urate Target (Recommended for eMeasure Trial Approval) N: Patients whose most recent serum urate level is less than 6.8 mg/dL D: Adult patients aged 18 and older with a diagnosis of gout treated with urate lowering therapy (ULT) for at least 12 months	American College of Rheumatology
▲4	Rheumatology	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Treatment Outcomes: Gout	None	Controlled Gout for Patients on Urate-Lowering Pharmacologic Therapy N: Percentage of patients aged 18 years and older with a diagnosis of gout treated with urate-lowering pharmacologic therapy for at least 6 months whose most recent serum urate result is less than 6.0 mg/dL. D: Patients aged 18 years and older as of the date of service AND Patient undergoing urate-lowering pharmacologic therapy for at least six (6) months as of the date of the encounter AND Diagnosis of gout.	UREQA (United Rheumatology Effectiveness and Quality Analytics)
☆5	Rheumatology	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Treatment processes: Gout	2550	Gout: ULT Therapy (Recommended for eMeasure Trial Approval) N: Patients who are prescribed urate lowering therapy (ULT) D: Adult patients aged 18 and older with a diagnosis of gout and a serum urate level > 6.0	American College of Rheumatology

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
						mg/dL who have at least one of the following: presence of tophus/tophi or two or more gout flares (attacks) in the past year	
☆6	Rheumatology	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Treatment processes: Inflammatory Arthritis	2522	Rheumatoid Arthritis: Tuberculosis Screening (Recommended for eMeasure Trial Approval) N: Any record of TB testing documented or performed (PPD, IFN-gamma release assays, or other appropriate method) in the medical record in the 12 months preceding the biologic DMARD prescription. D: Patients 18 years and older with a diagnosis of rheumatoid arthritis who are seen for at least one face-to-face encounter for RA who are newly started on biologic therapy during the measurement period.	American College of Rheumatology
☆7	Rheumatology	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Treatment processes: Inflammatory Arthritis	2523	Rheumatoid Arthritis: Assessment of Disease Activity N: # of patients with >=50% of total number of outpatient RA encounters in the measurement year with assessment of disease activity using a standardized measure. D: Patients 18 years and older with a diagnosis of rheumatoid arthritis seen for two or more face-to-face encounters for RA with the same clinician during the measurement period.	American College of Rheumatology
☆8	Rheumatology	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Treatment processes: Inflammatory Arthritis	2525	Rheumatoid Arthritis: Disease Modifying Anti-Rheumatic Drug (DMARD) Therapy (Recommended for eMeasure Trial Approval) N: Patient received a DMARD D: Patient age 18 years and older with a diagnosis of rheumatoid arthritis seen for two or more face-to-face encounters for RA with the same clinician during the measurement period	American College of Rheumatology

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
▲9	Rheumatology	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Treatment processes: Inflammatory Arthritis	None	Folic or Folinic Acid Therapy for Patients Treated with Methotrexate N: Patients aged 18 years and older being treated with methotrexate who are concomitantly treated with folic or folinic acid. D: Patients aged 18 years and older as of the date of service AND Patient prescribed or currently taking Methotrexate AND Patient encounter during the performance period	UREQA (United Rheumatology Effectiveness and Quality Analytics)
▲10	Rheumatology	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Treatment processes: Inflammatory Arthritis	None	Psoriasis: Screening for Psoriatic Arthritis N: Patients with psoriasis (any type) are screened for psoriatic arthritis by documenting in the medical record the presence or absence of joint symptoms at least once during the performance period. D: All patients aged 18 and older with a diagnosis of psoriasis.	AAD'S DataDerm
▲11	Rheumatology	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Treatment processes: Inflammatory Arthritis	None	Regular Evaluation of Psoriatic Arthritis (PsA) N: Patients aged 18 years and older with a diagnosis of psoriatic arthritis (PsA) who have had a qualifying baseline office visit between January 1 and September 30 who also had subsequent visit(s) every 90 days thereafter during the performance period. D: Patients aged 18 years and older as of the date of service AND Diagnosis of psoriatic arthritis (PsA)	UREQA (United Rheumatology Effectiveness and Quality Analytics)

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
★12	Rheumatology	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Treatment processes: Inflammatory Arthritis	None	Rheumatoid Arthritis (RA): Assessment and Classification of Disease Prognosis N: Patients with at least one documented assessment and classification (good/poor) of disease prognosis utilizing clinical markers of poor prognosis within 12 months D: Patients aged 18 years and older with a diagnosis of RA	American College of Rheumatology
★13	Rheumatology	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Treatment processes: Inflammatory Arthritis	None	Rheumatoid Arthritis (RA): Glucocorticoid Management N: Patients who have been assessed for glucocorticoid use and for those on prolonged doses of prednisone ≥ 10 mg daily (or equivalent) with improvement or no change in disease activity, documentation of a glucocorticoid management plan within 12 months D: Patients aged 18 years and older with a diagnosis of RA	American College of Rheumatology
★14	Rheumatology	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Treatment processes: Inflammatory Arthritis	None	Rheumatoid Arthritis (RA): Periodic Assessment of Disease Activity N: Patients with disease activity assessed by a standardized descriptive or numeric scale or composite index and classified into one of the following categories: low, moderate or high, at least once within 12 months D: Patients aged 18 years and older with a diagnosis of RA	American College of Rheumatology

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
★15	Rheumatology	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Treatment processes: Inflammatory Arthritis	None	Rheumatoid Arthritis (RA): Tuberculosis Screening N: Patients for whom a TB screening was performed and results interpreted within 6 months prior to receiving a first course of therapy using a biologic DMARD D: All patients aged 18 years and older with a diagnosis of RA who are receiving a first course of therapy using a biologic DMARD	American College of Rheumatology
☆16	Rheumatology	Person and Family Engagement/ Patient and Caregiver Experience	Patient Reported Functional Outcomes	Functional status assessment: Rheumatoid Arthritis	2524	Rheumatoid Arthritis: Functional Status Assessment N: Number of patients with functional status assessment documented once during the measurement period. Functional status can be assessed using one of a number of valid and reliable instruments available from the medical literature. D: Patients age 18 and older with a diagnosis of rheumatoid arthritis seen for two or more face-to-face encounters for RA with the same clinician during the measurement period.	American College of Rheumatology
★17	Rheumatology	Person and Family Engagement/ Patient and Caregiver Experience	Patient Reported Functional Outcomes	Functional status assessment: Rheumatoid Arthritis	None	Rheumatoid Arthritis (RA): Functional Status Assessment N: Patients for whom a functional status assessment was performed at least once within 12 months D: All patients aged 18 years and older with a diagnosis of RA	American College of Rheumatology

Table C-6: Crosscutting Measures Mapped to the Conceptual Framework (n = 46)

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
★1	Crosscutting	Communication and Coordination/ Care Coordination	Medication Management	Medication management/ reconciliation	0097	Medication Reconciliation Post-Discharge N: Medication reconciliation conducted by a prescribing practitioner, clinical pharmacist or registered nurse on or within 30 days of discharge. Medication reconciliation is defined as a type of review in which the discharge medications are reconciled with the most recent medication list in the outpatient medical record. D: All discharges from an in-patient setting for patients who are 18 years and older.	National Committee for Quality Assurance
★2	Crosscutting	Communication and Coordination/ Care Coordination	Medication Management	Medication management/ reconciliation	0419	Documentation of Current Medications in the Medical Record N: Eligible clinician attests to documenting, updating, or reviewing a patient´s current medications using all immediate resources available on the date of the encounter. This list must include ALL prescriptions, over-the counters, herbals, vitamin/mineral/dietary (nutritional) supplements AND must contain the medications' name, dosages, frequency, and route of administration. D: All visits occurring during the 12 month reporting measurement period for patients aged 18 years and older.	Centers for Medicare & Medicaid Services
★3	Crosscutting	Communication and Coordination/ Care Coordination	Medication Management	High risk medications	0022	Use of High-Risk Medications in the Elderly N: Percentage of patients who were ordered at least one high-risk medication during the measurement period D: Patients 65 years and older who had a visit during the measurement period	National Committee for Quality Assurance

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
★4	Crosscutting	Communication and Coordination/ Care Coordination	Transfer of Health Information and Interoper-ability	Interprovider communication and/or collaboration: Transfer of referral report	None	Closing the Referral Loop: Receipt of Specialist Report N: Number of patients with a referral, for which the referring provider received a report from the provider to whom the patient was referred D: Number of patients, regardless of age, who were referred by one provider to another provider, and who had a visit during the measurement period	Centers for Medicare & Medicaid Services
▲5	Crosscutting	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Secondary Prevention: Immunizations	None	High Risk Pneumococcal Vaccination N: Patients who received a pneumococcal vaccination OR who reported previous receipt of a pneumococcal vaccination. D: Patient aged 19 through 64 with a high risk condition (e.g., diabetes, heart failure, COPD, end-stage kidney disease, nephritic syndrome, chronic kidney disease, chronic dialysis, asplenia, malignancy, solid organ transplant, on immunosuppressive medications, HIV, cystic fibrosis) and a valid patient encounter code.	American College of Physicians Genesis Registry, Powered by Premier, Inc.
☆6	Crosscutting	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Symptom Management: Dyspnea	1639	Hospice and Palliative Care -- Dyspnea Screening N: Patients who are screened for the presence or absence of dyspnea and its severity during the hospice admission evaluation / initial encounter for palliative care. D: Patients enrolled in hospice OR patients receiving hospital-based palliative care for 1 or more days.	University of North Carolina-Chapel Hill

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
☆7	Crosscutting	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Symptom Management: Pain	1634	Hospice and Palliative Care -- Pain Screening N: Patients who are screened for the presence or absence of pain (and if present, rating of its severity) using a standardized quantitative tool during the admission evaluation for hospice / initial encounter for palliative care. D: Patients enrolled in hospice OR patients receiving specialty palliative care in an acute hospital setting.	University of North Carolina-Chapel Hill
☆8	Crosscutting	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Symptom Management: Pain	1637	Hospice and Palliative Care -- Pain Assessment N: Patients who received a comprehensive clinical assessment to determine the severity, etiology and impact of their pain within 24 hours of screening positive for pain. D: Patients enrolled in hospice OR receiving specialty palliative care in an acute hospital setting who report pain when pain screening is done on the admission evaluation / initial encounter.	University of North Carolina-Chapel Hill
☆9	Crosscutting	Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions	Symptom Management: Pain	1638	Hospice and Palliative Care -- Dyspnea Treatment N: Patients who screened positive for dyspnea who received treatment within 24 hours of screening. D: Patients enrolled in hospice OR patients receiving hospital-based palliative care for 1 or more days.	University of North Carolina-Chapel Hill
★10	Crosscutting	Effective Prevention and Treatment/ Clinical Care	Prevention and Treatment of Opioid and Substance Use Disorders	Care Plan	None	Documentation of Signed Opioid Treatment Agreement N: Patients who signed an opioid treatment agreement at least once during opioid therapy D: All patients 18 and older prescribed opiates for longer than six weeks duration	American Academy of Neurology

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
★11	Crosscutting	Effective Prevention and Treatment/ Clinical Care	Prevention and Treatment of Opioid and Substance Use Disorders	Referral or follow-up: Opioid/SUD	None	Opioid Therapy Follow-up Evaluation N: Patients who had a follow-up evaluation conducted at least every three months during opioid therapy D: All patients 18 and older prescribed opiates for longer than six weeks duration	American Academy of Neurology
★12	Crosscutting	Effective Prevention and Treatment/ Clinical Care	Prevention and Treatment of Opioid and Substance Use Disorders	Screening/intervention: Alcohol	2152	Preventive Care and Screening: Unhealthy Alcohol Use: Screening & Brief Counseling N: Patients who were screened for unhealthy alcohol use using a systematic screening method at least once within the last 24 months AND who received brief counseling if identified as an unhealthy alcohol user D: All patients aged 18 years and older seen for at least two visits or at least one preventive visit during the measurement period	PCPI
☆13	Crosscutting	Effective Prevention and Treatment/ Clinical Care	Prevention and Treatment of Opioid and Substance Use Disorders	Screening/intervention: Opioid/SUD	2597	Substance Use Screening and Intervention Composite N: Patients who received the following substance use screenings at least once within the last 24 months AND who received an intervention for all positive screening results D: All patients aged 18 years and older who were seen twice for any visits or who had at least one preventive care visit during the 12 month measurement period	American Society of Addiction Medicine

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
▲14	Crosscutting	Effective Prevention and Treatment/ Clinical Care	Prevention and Treatment of Opioid and Substance Use Disorders	Screening/intervention: Opioid/SUD	None	Substance Use Screening N: Patients who received the following: substance use screenings at least once within the last 12 months D: Age Breakouts: Total number of active patients age >12 and <18 Total number of active patients age 18 years and older	Northern New England Practice Transformation Network in Collaboration with Mingle Analytics
▲15	Crosscutting	Effective Prevention and Treatment/ Clinical Care	Prevention and Treatment of Opioid and Substance Use Disorders	Screening/intervention: Opioid/SUD	None	Transforming Clinical Practice Initiative Common Measure Name: Substance Use Screening and Intervention Composite N: Patients who received the following substance use screenings at least once within the last 24 months AND who received an intervention for all positive screening results D: All patients aged 18 years and older who were seen twice for any visits or who had at least one preventive care visit during the 12-month measurement period	Northern New England Practice Transformation Network in Collaboration with Mingle Analytics
★16	Crosscutting	Effective Prevention and Treatment/ Clinical Care	Prevention and Treatment of Opioid and Substance Use Disorders	Screening/intervention: Opioid/SUD	None	Evaluation or Interview for Risk of Opioid Misuse N: Patients evaluated for risk of misuse of opiates by using a brief validated instrument (e.g., Opioid Risk Tool, Opioid Assessment for Patients with Pain, revised (SOAPP-R)) or patient interview at least once during opioid therapy D: All patients 18 and older prescribed opiates for longer than six weeks duration	American Academy of Neurology

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
★17	Crosscutting	Effective Prevention and Treatment/ Clinical Care	Prevention and Treatment of Opioid and Substance Use Disorders	Screening/intervention: Tobacco	0028	Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention N: Patients who were screened for tobacco use at least once within 24 months AND who received tobacco cessation intervention if identified as a tobacco user D: All patients aged 18 years and older seen for at least two visits or at least one preventive visit during the measurement period	PCPI
★18	Crosscutting	Effective Prevention and Treatment/ Clinical Care	Prevention and Treatment of Opioid and Substance Use Disorders	Screening/intervention: Tobacco	None	Tobacco Use and Help with Quitting Among Adolescents N: Patients who were screened for tobacco use at least once within 18 months (during the measurement period or the six months prior to the measurement period) AND who received tobacco cessation counseling intervention if identified as a tobacco user D: All patients aged 12-20 years with a visit during the measurement period	National Committee for Quality Assurance
★19	Crosscutting	Effective Prevention and Treatment/ Clinical Care	Prevention, Treatment, and Management of Mental Health	Behavioral and psych screening: Anxiety/Depression	0418	Preventive Care and Screening: Screening for Clinical Depression and Follow-Up Plan N: Patients screened for clinical depression on the date of the encounter using an age appropriate standardized tool AND, if positive, a follow-up plan is documented on the date of the positive screen D: All patients aged 12 years and older	Centers for Medicare & Medicaid Services

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
★20	Crosscutting	Effective Prevention and Treatment/ Clinical Care	Preventive Care	Immunization	0041	Preventive Care and Screening: Influenza Immunization N: Patients who received an influenza immunization OR who reported previous receipt of an influenza immunization D: All patients aged 6 months and older seen for a visit between October 1 and March 31	PCPI
★21	Crosscutting	Effective Prevention and Treatment/ Clinical Care	Preventive Care	Immunization	0043	Pneumococcal Vaccination Status for Older Adults N: Patients who have ever received a pneumococcal vaccination D: Patients 65 years of age and older with a visit during the measurement period	National Committee for Quality Assurance
☆22	Crosscutting	Effective Prevention and Treatment/ Clinical Care	Preventive Care	Immunization	3070	Preventive Care and Screening: Influenza Immunization N: Patients who received an influenza immunization OR who reported previous receipt of an influenza immunization D: All patients aged 6 months and older seen for a visit between October 1 and March 31	PCPI
☆23	Crosscutting	Effective Prevention and Treatment/ Clinical Care	Preventive Care	Immunization	NA	Zoster (Shingles) Vaccination N: Patients with a shingles vaccine ever recorded D: Patients 60 years of age and older	PPRNet
★24	Crosscutting	Effective Prevention and Treatment/ Clinical Care	Preventive Care	Screening	None	Elder Maltreatment Screen and Follow-Up Plan N: Patients with a documented elder maltreatment screen using an Elder Maltreatment Screening tool on the date of the encounter and follow-up plan documented on the date of the positive screen D: All patients aged 65 years and older	Centers for Medicare & Medicaid Services

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
★25	Crosscutting	Effective Prevention and Treatment/ Clinical Care	Preventive Care	Screening	None	Preventive Care and Screening: Screening for High Blood Pressure and Follow-Up Documented N: Patients who were screened for high blood pressure AND have a recommended follow-up plan documented, as indicated, if the blood pressure is pre-hypertensive or hypertensive D: All patients aged 18 years and older	Centers for Medicare & Medicaid Services
★26	Crosscutting	Making Care Safer/Safety	Preventable Healthcare Harm	Falls	0101	Falls: Screening, Risk-Assessment, and Plan of Care to Prevent Future Falls N: This measure has three rates. The numerators for the three rates are as follows: A) Screening for Future Fall Risk: Patients who were screened for future fall risk at last once within 12 months B) Falls Risk Assessment: Patients who had a risk assessment for falls completed within 12 months C) Plan of Care for Falls: Patients with a plan of care for falls documented within 12 months. D: A) Screening for Future Fall Risk: All patients aged 65 years and older seen by an eligible provider in the past year. B & C) Falls Risk Assessment & Plan of Care for Falls: All patients aged 65 years and older seen by an eligible provider in the past year with a history of falls (history of falls is defined as 2 or more falls in the past year or any fall with injury in the past year).	National Committee for Quality Assurance

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
☆27	Crosscutting	Making Care Safer/Safety	Preventable Healthcare Harm	Medical errors	2723	Wrong-Patient Retract-and-Reorder (Wrong Patient-RAR) Measure N: Total Wrong-Patient Retract-and-Reorder (Wrong-Patient RAR) events. D: All electronic orders.	New York-Presbyterian Hospital
☆28	Crosscutting	Making Care Safer/Safety	Preventable Healthcare Harm	Potentially avoidable complications	0709	Proportion of patients with a chronic condition that have a potentially avoidable complication during a calendar year. N: Outcome: Number of patients with at least one of the following six chronic conditions: Asthma, Chronic Obstructive Pulmonary Disease (COPD), Coronary Artery Disease (CAD), Heart Failure (HF), Hypertension (HTN), or Diabetes Mellitus (DM), and had one or more potentially avoidable complications (PACs), during the most recent 12 months. D: Adult patients aged 18+ years who were identified as having at least one of the following six chronic conditions: Asthma, Chronic Obstructive Pulmonary Disease (COPD), Coronary Artery Disease (CAD), Heart Failure (HF), Hypertension (HTN), or Diabetes Mellitus (DM), and were followed for at least 12 months.	Altarum Institute
☆29	Crosscutting	Person and Family Engagement/ Patient and Caregiver Experience	Care is Personalized and Aligned with Patient's Goals	Patient engagement and activation	2483	Gains in Patient Activation (PAM) Scores at 12 Months N: The numerator is the summary score change for the aggregate of eligible patients in that unit (e.g., patients in a primary care provider´s panel, or in a clinic). D: All patients can be included in the denominator, except patients under the age of 19 and adults with a diagnosis of dementia or cognitive impairments (based on ICD codes).	Insignia Health

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▲30	Crosscutting	Person and Family Engagement/ Patient and Caregiver Experience	Care is Personalized and Aligned with Patient's Goals	Patient's goals, values and preference incorporated in plan of care	None	Transforming Clinical Practice Initiative Common Measure Name: TCP01: Documentation of a Comprehensive Health and Life Plan Developed Collaboratively by the Patient and the Health Professional Team N: Number of patients, of all ages, with two or more chronic conditions in each practice for whom a comprehensive health and life plan is documented in the clinical record at each visit. D: Total number of patients, of all ages, with two or more chronic conditions in each practice	Northern New England Practice Transformation Network in Collaboration with Mingle Analytics
★31	Crosscutting	Person and Family Engagement/ Patient and Caregiver Experience	EOL According to Preferences	Advance Care Plan	0326	Advance Care Plan N: Patients who have an advance care plan or surrogate decision maker documented in the medical record or documentation in the medical record that an advance care plan was discussed but patient did not wish or was not able to name a surrogate decision maker or provide an advance care plan. D: All patients aged 65 years and older.	National Committee for Quality Assurance
☆32	Crosscutting	Person and Family Engagement/ Patient and Caregiver Experience	EOL According to Preferences	Advance Care Plan	1641	Hospice and Palliative Care – Treatment Preferences N: Patients whose medical record includes documentation of life sustaining preferences D: Seriously ill patients enrolled in hospice OR receiving specialty palliative care in an acute hospital setting.	University of North Carolina-Chapel Hill

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
▲33	Crosscutting	Person and Family Engagement/ Patient and Caregiver Experience	EOL According to Preferences	Advance Care Plan	None	Advance Care planning: Electronic submission of new POLST/MOLST/POST/MOST ("orders for life-sustaining treatment" or "orders for scope of treatment") into an eRegistry powered by Medcordance N: Patients with electronically submitted new POLST/MOLST/POST/MOST D: All patients aged 65 and older	Ventura County Medical Association Medcordance and POLST Collaboration
★34	Crosscutting	Person and Family Engagement/ Patient and Caregiver Experience	Patient Reported Functional Outcomes	Symptom Assessment: Pain	0420	Pain Assessment and Follow-Up N: Patient visits with a documented pain assessment using a standardized tool(s) AND documentation of a follow-up plan when pain is present D: All visits for patients aged 18 years and older	Centers for Medicare & Medicaid Services
★35	Crosscutting	Person and Family Engagement/ Patient and Caregiver Experience	Patient's Experience of Care	Patient experience: Access	0005	CAHPS Clinician & Group Surveys (CG-CAHPS)-Adult, Child Access to Specialists N: We recommend that CG-CAHPS Survey items and composites be calculated using a top-box scoring method. The top box score refers to the percentage of patients whose responses indicated that they "always" received the desired care or service for a given measure. D: The measure's denominator is the number of survey respondents. The target populations for the surveys are patients who have had at least one visit to the selected provider in the target 12-month time frame. This time frame is also known as the look back period. The sampling frame is a person-level list and not a visit-level list.	Agency for Healthcare Research and Quality

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
★36	Crosscutting	Person and Family Engagement/ Patient and Caregiver Experience	Patient's Experience of Care	Patient experience: Communication	0005	CAHPS Clinician & Group Surveys (CG-CAHPS)-Adult, Child Between Visit Communication N: We recommend that CG-CAHPS Survey items and composites be calculated using a top-box scoring method. The top box score refers to the percentage of patients whose responses indicated that they "always" received the desired care or service for a given measure. D: The measure's denominator is the number of survey respondents. The target populations for the surveys are patients who have had at least one visit to the selected provider in the target 12-month time frame. This time frame is also known as the look back period. The sampling frame is a person-level list and not a visit-level list.	Agency for Healthcare Research and Quality
★37	Crosscutting	Person and Family Engagement/ Patient and Caregiver Experience	Patient's Experience of Care	Patient experience: Communication	0005	CAHPS Clinician & Group Surveys (CG-CAHPS)-Adult, Child How Well Your Providers Communicate N: We recommend that CG-CAHPS Survey items and composites be calculated using a top-box scoring method. The top box score refers to the percentage of patients whose responses indicated that they "always" received the desired care or service for a given measure. D: The measure's denominator is the number of survey respondents. The target populations for the surveys are patients who have had at least one visit to the selected provider in the target 12-month time frame. This time frame is also known as the look back period. The sampling frame is a person-level list and not a visit-level list.	Agency for Healthcare Research and Quality

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★38	Crosscutting	Person and Family Engagement/ Patient and Caregiver Experience	Patient's Experience of Care	Patient experience: Coordination	0005	CAHPS Clinician & Group Surveys (CG-CAHPS)-Adult, Child Care Coordination D: The measure's denominator is the number of survey respondents. The target populations for the surveys are patients who have had at least one visit to the selected provider in the target 12-month time frame. This time frame is also known as the look back period. The sampling frame is a person-level list and not a visit-level list. N: We recommend that CG-CAHPS Survey items and composites be calculated using a top-box scoring method. The top box score refers to the percentage of patients whose responses indicated that they "always" received the desired care or service for a given measure.	Agency for Healthcare Research and Quality
★39	Crosscutting	Person and Family Engagement/ Patient and Caregiver Experience	Patient's Experience of Care	Patient experience: Courteous	0005	CAHPS Clinician & Group Surveys (CG-CAHPS)-Adult, ChildCourteous and Helpful Office StaffN: We recommend that CG-CAHPS Survey items and composites be calculated using a top-box scoring method. The top box score refers to the percentage of patients whose responses indicated that they "always" received the desired care or service for a given measure. D: The measure's denominator is the number of survey respondents. The target populations for the surveys are patients who have had at least one visit to the selected provider in the target 12-month time frame. This time frame is also known as the look back period. The sampling frame is a person-level list and not a visit-level list.	Agency for Healthcare Research and Quality

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
★40	Crosscutting	Person and Family Engagement/ Patient and Caregiver Experience	Patient's Experience of Care	Patient experience: Health Promotion	0005	CAHPS Clinician & Group Surveys (CG-CAHPS)-Adult, Child Health Promotion and Education N: We recommend that CG-CAHPS Survey items and composites be calculated using a top-box scoring method. The top box score refers to the percentage of patients whose responses indicated that they "always" received the desired care or service for a given measure. D: The measure's denominator is the number of survey respondents. The target populations for the surveys are patients who have had at least one visit to the selected provider in the target 12-month time frame. This time frame is also known as the look back period. The sampling frame is a person-level list and not a visit-level list.	Agency for Healthcare Research and Quality
★41	Crosscutting	Person and Family Engagement/ Patient and Caregiver Experience	Patient's Experience of Care	Patient experience: Medications	0005	CAHPS Clinician & Group Surveys (CG-CAHPS)-Adult, Child Helping You to Take Medications as Directed N: We recommend that CG-CAHPS Survey items and composites be calculated using a top-box scoring method. The top box score refers to the percentage of patients whose responses indicated that they "always" received the desired care or service for a given measure. D: The measure's denominator is the number of survey respondents. The target populations for the surveys are patients who have had at least one visit to the selected provider in the target 12-month time frame. This time frame is also known as the look back period. The sampling frame is a person-level list and not a visit-level list.	Agency for Healthcare Research and Quality

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
★42	Crosscutting	Person and Family Engagement/ Patient and Caregiver Experience	Patient's Experience of Care	Patient experience: Provider Rating	0005	CAHPS Clinician & Group Surveys (CG-CAHPS)-Adult, Child Patient's Rating of Provider N: We recommend that CG-CAHPS Survey items and composites be calculated using a top-box scoring method. The top box score refers to the percentage of patients whose responses indicated that they "always" received the desired care or service for a given measure. D: The measure's denominator is the number of survey respondents. The target populations for the surveys are patients who have had at least one visit to the selected provider in the target 12-month time frame. This time frame is also known as the look back period. The sampling frame is a person-level list and not a visit-level list.	Agency for Healthcare Research and Quality
★43	Crosscutting	Person and Family Engagement/ Patient and Caregiver Experience	Patient's Experience of Care	Patient experience: Shared Decision-Making	0005	CAHPS Clinician & Group Surveys (CG-CAHPS)-Adult, Child Shared Decision-Making N: We recommend that CG-CAHPS Survey items and composites be calculated using a top-box scoring method. The top box score refers to the percentage of patients whose responses indicated that they "always" received the desired care or service for a given measure. D: The measure's denominator is the number of survey respondents. The target populations for the surveys are patients who have had at least one visit to the selected provider in the target 12-month time frame. This time frame is also known as the look back period. The sampling frame is a person-level list and not a visit-level list.	Agency for Healthcare Research and Quality

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
★44	Crosscutting	Person and Family Engagement/ Patient and Caregiver Experience	Patient's Experience of Care	Patient experience: Status	0005	CAHPS Clinician & Group Surveys (CG-CAHPS)-Adult, Child Health Status and Functional Status N: We recommend that CG-CAHPS Survey items and composites be calculated using a top-box scoring method. The top box score refers to the percentage of patients whose responses indicated that they "always" received the desired care or service for a given measure. D: The measure's denominator is the number of survey respondents. The target populations for the surveys are patients who have had at least one visit to the selected provider in the target 12-month time frame. This time frame is also known as the look back period. The sampling frame is a person-level list and not a visit-level list.	Agency for Healthcare Research and Quality
★45	Crosscutting	Person and Family Engagement/ Patient and Caregiver Experience	Patient's Experience of Care	Patient experience: Stewardship	0005	CAHPS Clinician & Group Surveys (CG-CAHPS)-Adult, Child Stewardship of Patient Resources N: We recommend that CG-CAHPS Survey items and composites be calculated using a top-box scoring method. The top box score refers to the percentage of patients whose responses indicated that they "always" received the desired care or service for a given measure. D: The measure's denominator is the number of survey respondents. The target populations for the surveys are patients who have had at least one visit to the selected provider in the target 12-month time frame. This time frame is also known as the look back period. The sampling frame is a person-level list and not a visit-level list.	Agency for Healthcare Research and Quality

#	Clinical Specialty	Priority	Topic	Subtopic	NQF ID	Measure Title Numerator N: and Denominator D: Statements	Steward
★46	Crosscutting	Person and Family Engagement/ Patient and Caregiver Experience	Patient's Experience of Care	Patient experience: Timeliness	0005	CAHPS Clinician & Group Surveys (CG-CAHPS)-Adult, Child Getting Timely Care, Appointments and Information N: We recommend that CG-CAHPS Survey items and composites be calculated using a top-box scoring method. The top box score refers to the percentage of patients whose responses indicated that they "always" received the desired care or service for a given measure. D: The measure's denominator is the number of survey respondents. The target populations for the surveys are patients who have had at least one visit to the selected provider in the target 12-month time frame. This time frame is also known as the look back period. The sampling frame is a person-level list and not a visit-level list.	Agency for Healthcare Research and Quality

APPENDIX D. CROSSCUTTING MEASURE SUBTOPICS FOR FUTURE DISCUSSION

Table D-1: Crosscutting Measure Subtopics for Consideration Pending Further Discussion (either identified through the literature or suggested by TEP members)

Meaningful Measures Priority/ MACRA Domain	Meaningful Measure Area	Crosscutting
Effective Prevention and Treatment/ Clinical Care[xii]	Preventive Care	Immunization (4; 2 MIPS, 2 other) -Specific conditions/ages* (0) Screening (2; 2 MIPS) Stroke risk factors screening* (0)
	Management of Chronic Conditions	Early diagnosis and appropriate treatment (0) Effective interventions to decrease disparities in chronic conditions (0) Secondary prevention (1) -Immunizations (1; 1 QCDR) Symptom management (4) -Pain (3; 3 other) -Dyspnea (1; 1 other) Telehealth monitoring (0) Treatment outcomes (0) Referral for rehabilitation services* (0)
	Prevention, Treatment, and Management of Mental Health	Behavioral and psych screening (1) -Anxiety/ Depression (1; 1 MIPS & QCDR) Referral or follow-up (0) -Depression (0) Longitudinal follow-up* (0)
	Prevention and Treatment of Opioid and Substance Use Disorders (SUD)	Care plan (1; 1 MIPS) -Pain management* (0) Opioid prescribing (0) Referral or follow-up (1) -Opiate/SUD (1) Screening/intervention (7) -Alcohol (1; 1 MIPS) -Opioid/SUD (4; 1 MIPS, 2 QCDR, 1 other) -Tobacco (2; 1 MIPS, 1 MIPS & QCDR)
	Risk-Adjusted Mortality	No subtopics identified

[xii] Domain includes measures of screening, prevention, and primary care.

Meaningful Measures Priority/ MACRA Domain	Meaningful Measure Area	Crosscutting
Making Care Safer/Safety	Healthcare-Associated Infections	No subtopics identified
	Preventable Health Care Harm	Adverse medication events (0) -Medication errors (0) Diagnostic accuracy (0) Falls (1; 1 MIPS) Medical errors (1; 1 other) Potentially avoidable complications (1; 1 other) Unintended consequences of treatment (0) Potentially harmful drug-drug interactions (0) Antibiotic use (0) -Overuse (0) -Appropriate use (0)
Communication and Coordination/ Care Coordination	Medication Management	Comorbid condition prescribing (0) High-risk medications (1; 1 MIPS) Medication management/reconciliation (2; 2 MIPS) Medication persistence monitoring (0)
	Admissions and Readmissions to Hospitals	Admission (0) -Multiple chronic conditions (0) -Medication-related side effects* (0) Attendance at first post-discharge appointment (0) Readmission (0) -All-cause (0) -Multiple chronic conditions (0)
	Transfer of Health Information and Interoperability	Communication between patient and provider (0) -Communication of results to patient/family (0) Interprovider communication and/or collaboration (1) -Transitions of care from provider to provider (0) -Transfer of referral report (1; 1 MIPS) Patient access to records (0) Timely transition of specified EHR data elements (0) Care visit information available via health information exchange (0) Collaborative care plans for frequent ED users (0) Communication of patient progress available online* (0)

Meaningful Measures Priority/ MACRA Domain	Meaningful Measure Area	Crosscutting
Person and Family Engagement/ Patient and Caregiver Experience	Care Is Personalized and Aligned With Patient's Goals	Adherence to follow-up instructions (0) -Med adherence (0) -Missed appointments (0) -Tests ordered but not complete (0) -Self-management (0) Patient education/ health literacy (0) -Medication literacy* (0) Patient engagement and activation (1; 1 other) Patient's goals, values and preference incorporated in plan of care (1; 1 QCDR) Progress monitoring* (0) Patient's preferences are included in transition of care (0)
	End-of-Life Care According to Preferences	Advance care plan (3; 1 MIPS,1 QCDR, 1 other) Care delivered according to preferences (0) Unnecessary care at the end of life (0)
	Patient's Experience of Care	Convenience of receiving needed care (0) Cultural and linguistic appropriateness (0) Patient adherence to care plan (0) Patient experience (12) -Access (1; 1 MIPS & QCDR) -Communication (2; 2 MIPS & QCDR) -Coordination (1; 1 MIPS & QCDR) -Courteous (1; 1 MIPS & QCDR) -Health promotion (1; 1 MIPS & QCDR) -Medications (1; 1 MIPS & QCDR) -Provider rating (1; 1 MIPS & QCDR) -Shared decision-making (1; 1 MIPS & QCDR) -Status (1; 1 MIPS & QCDR) -Stewardship (1; 1 MIPS & QCDR) -Timeliness (1; 1 MIPS & QCDR) -Symptom management/ functional outcomes* (0) -Clearly communicate diagnosis and management of condition* (0) Patient-reported patient safety (0) Perception of cost of care (0) Improvement over time* (0)
	Patient-Reported Functional Outcomes	Functional status assessment (0) -Baseline (0) -Change over time (0) Meeting expected outcomes (0) -Meeting expected outcomes with proxy allowed to report (0) Health-related QOL (0) -Multiple chronic conditions (0) Symptom assessment (1) -Fatigue* (0) -Pain (1; 1 MIPS & QCDR)

Meaningful Measures Priority/ MACRA Domain	Meaningful Measure Area	Crosscutting
Healthy Living/ Population Health and Prevention	Equity of Care	Access to care (0) Cultural competency (0) Implement interventions to reduce disparities (0) Outcomes of intervention to reduce disparities (0)
	Community Engagement	Collaboration across health and non-health sectors to improve equity of care (0) Home and community-based services (0) Referral to community resources as appropriate (0) Identification of community supports and services (0)
Affordable Care	Appropriate Use of Health Care	Balancing measures to avoid unintended consequences (0) Tests and services (0) -Imaging (0) -Labs (0)
	Patient-Focused Episode of Care	Condition-specific episode-based cost (0) Medication cost to patient outcome ratio (0)
	Risk-Adjusted Total Cost of Care	Total cost of care per beneficiary (0)

APPENDIX E. POST-TEP CONCEPTUAL FRAMEWORK

Table E-1: Reconciled Conceptual Framework With Counts of Measures by Meaningful Measures Priority, Topic Area, and Specialty[xiii]

Key: * TEP-recommended subtopic

Meaningful Measures Priority/ MACRA Domain	Meaningful Measure Area	Specialty				
		Allergy/ Immunology	Emergency Medicine	Neurology	Physical Medicine and Rehabilitation	Rheumatology
Effective Prevention and Treatment/ Clinical Care[xiv]	Preventive Care	Identification of non-medication care plan* (0) -Behavioral intervention* (0) -Communication of triggers* (0) -Environmental amelioration* (0)	Immunization (1; 1 MIPS) Screening (1; 1 QCDR) HIV testing for at-risk populations* (0)	No subtopics identified	Diagnosis-specific primary prevention* (0) -Traumatic brain injury* (0) -Ultrasounds in spinal cord injuries* (0) Interventions to prevent falls* (0) Patient/caregiver interventions to prevent complications related to disability* (0)	Immunizations for patients on biological therapy* (0)
	Management of Chronic Conditions	Allergy testing and treatment* (0) Treatment outcomes (1) - Asthma (1; 1 MIPS) Treatment processes (6) - Allergies (1; 1 QCDR) - Asthma (5; 4 QCDR, 1 other)	Treatment processes (1) - Asthma (1; 1 QCDR)	Symptom management (4) - Migraines (1; 1 QCDR) - Muscle spasticity (3; 3 QCDR) Treatment outcomes (1) - Giant cell arteritis (1; 1 QCDR) Treatment processes (14) - Dementia (6; 5 MIPS, 1 QCDR)	Complex conditions (0) Symptom management (4) - Bowel care (2; 1 QCDR, 1 other) - Muscle spasticity (2; 2 QCDR) -Pain* (0)	Treatment outcomes (4) - Ankylosing spondylitis (2; 2 QCDR) - Gout (2; 1 QCDR, 1 other) -Rheumatoid arthritis* (0) Treatment processes (11) - Gout (1; 1 other) - Inflammatory arthritis (10; 4 MIPS, 3 QCDR, 3 other)

[xiii] QCDR measures were not assessed for availability for MIPS eligible clinicians who are not subscribers of a particular QCDR.
[xiv] Domain includes measures of screening, prevention, and primary care.

Meaningful Measures Priority/ MACRA Domain	Meaningful Measure Area	Specialty				
		Allergy/ Immunology	Emergency Medicine	Neurology	Physical Medicine and Rehabilitation	Rheumatology
Effective Prevention and Treatment/ Clinical Care	Management of Chronic Conditions			- Distal symmetric polyneuropathy (1; 1 QCDR) - Epilepsy (2; 1 MIPS, 1 QCDR) - Multiple sclerosis (2; 2 QCDR) - Parkinson's disease (2; 2 MIPS - Spine care (1; 1 QCDR) Referral for rehabilitation services* (0)		
	Prevention, Treatment, and Management of Mental Health	No subtopics identified	Behavioral and psych screening (0) - Anxiety/ Depression (0) Referral or follow-up (1; 1 other)	Behavioral and psych screening (6) - Anxiety/Depression (2; 2 QCDR) - General (4; 1 MIPS, 3 QCDR)	Behavioral and psych screening (2) -Anxiety/ Depression (2; 2 QCDR)	No subtopics identified
	Prevention and Treatment of Opioid and Substance Use Disorders (SUD)	No subtopics identified	Opioid prescribing (4; 4 in QCDR) Referral or follow-up (1) - Opioid/SUD (1; 1 other) Screening/ intervention (1) - Opioid/SUD (1; 1 QCDR)	Opioid prescribing (1) - Chronic headaches (1; 1 QCDR) Screening/interventio n (2) - Alcohol (1; 1 QCDR) - Opioid/SUD (1; 1 QCDR)	Care plan (1; 1 QCDR) Opioid prescribing (5; 5 QCDR) Screening/ intervention (3) - Opioid/SUD (3; 3 QCDR)	No subtopics identified
	Risk-Adjusted Mortality	No subtopics identified	Severe trauma (2; 2 QCDR)	No subtopics identified	No subtopics identified	No subtopics identified

Meaningful Measures Priority/ MACRA Domain	Meaningful Measure Area	Specialty				
		Allergy/ Immunology	Emergency Medicine	Neurology	Physical Medicine and Rehabilitation	Rheumatology
Making Care Safer/Safety	Healthcare-Associated Infections	No subtopics identified	No subtopics identified	No subtopics identified	No subtopics identified	No subtopics identified
	Preventable Health Care Harm	Penicillin allergy testing (1; 1 QCDR)	Adverse medication events (0) Diagnostic accuracy (2; 1 MIPS, 1 QCDR)	Adverse medication events (1; 1 other) Falls (2; 2 QCDR) Potentially avoidable complications (1; 1 QCDR) Potentially harmful drug-drug interactions (1; 1 QCDR) Accuracy of differential diagnosis* (0)	Infection control practices (1; 1 QCDR) Potentially avoidable complications (1; 1 QCDR) Potentially harmful drug-drug interactions (2; 2 QCDR)	No subtopics identified
Communication and Coordination/ Care Coordination	Medication Management	Medication persistence monitoring (1; 1 MIPS) Treat to target (appropriate dosing) (1; 1 QCDR)	No subtopics identified	Patient understanding of medications* (0) - Neuropathy management* (0) - Education of risks* (e.g., gabapentin) (0)	High-risk medications (3; 3 QCDR)	Treat to target (appropriate dosing) (0)
	Admissions and Readmissions to Hospitals	No subtopics identified	Return to ED (1; 1 QCDR)	No subtopics identified	Admissions (1; 1 QCDR	No subtopics identified
	Transfer of Health Information and Inter-operability	No subtopics identified	EMS information included in transfer of care summary (0) Timely transition of ED specified data elements to next level of care (0)	No subtopics identified	No subtopics identified	No subtopics identified

Meaningful Measures Priority/ MACRA Domain	Meaningful Measure Area	Specialty				
		Allergy/ Immunology	Emergency Medicine	Neurology	Physical Medicine and Rehabilitation	Rheumatology
Person and Family Engagement/ Patient and Caregiver Experience	Care Is Personalized and Aligned With Patient's Goals	Patient's goals, values and preference incorporated in plan of care* (0) -Asthma* (0) Self-management* (0) -Anaphylaxis* (0) -Asthma* (0) -Food* (0)	Assessment of post-discharge patient needs* (0)	Patient education/ health literacy (1; 1 QCDR) Self-management (1; 1 QCDR) Patient/caregiver confidence in self-management* (0)	Patient education/ health literacy (1; 1 QCDR) Family/caregiver education* (0) Family/caregiver training* (0) Treatment tailored to patient goals* (0) Patient goal attainment* (0) Patient self-efficacy/barriers to completion* (0) -Pain in gaining function* (0)	Plan of care* (0)
	End-of-Life Care According to Preferences	No subtopics identified	No subtopics identified	Advance care plan (1; 1 MIPS)	No subtopics identified	No subtopics identified
	Patient's Experience of Care	No subtopics identified	Patient and caregiver satisfaction survey* (0) Discharge instructions including point of contact for patient/ caregiver questions* (0)	No subtopics identified	Patient experience (1) - Improvement over time (1; 1 QCDR)	No subtopics identified

Meaningful Measures Priority/ MACRA Domain	Meaningful Measure Area	Specialty				
		Allergy/ Immunology	Emergency Medicine	Neurology	Physical Medicine and Rehabilitation	Rheumatology
Person and Family Engagement/ Patient and Caregiver Experience	Patient-Reported Functional Outcomes	Treatment outcomes (1) -Asthma (1; 1 QCDR) -Allergies* (0) -Eczema* (0)	Patient outcome follow-up after ED visit* (0)	Functional status assessment (1) -Change over time (1; 1 QCDR) Health-related QOL (4) - Epilepsy (1; 1 QCDR) - General (1; 1 QCDR) - Headache (1; 1 MIPS) - Stroke (1; 1 QCDR) - Comprehensive HRQOL for neurology with proxy allowed to report* (0) Symptom assessment (1) - Parkinson's disease (1; 1 QCDR) Neurological functional outcomes with proxy allowed to report* (0)	Functional status assessment (26) - Change over time (26; 5 MIPS, 16 QCDR, 3 MIPS and QCDR, 2 other) Health-related QOL (2) - Pain (1; 1 QCDR) - Spine care (1; 1 QCDR) -General* (0) Multiple chronic conditions (0) Symptom Assessment* (0) -Pain* (0)	Functional status assessment (2) - Rheumatoid arthritis (2; 1 MIPS, 1 other) Health-related QOL for rheumatoid arthritis (0) Symptom assessment for fatigue* (0) Stability of symptom severity/disease activity over time* (0)
Healthy Living/ Population Health and Prevention	Equity of Care	Asthma disparities* (0)	No subtopics identified	No subtopics identified	Cultural competency* (0)	No subtopics identified
	Community Engagement	Community intervention* (0) -Home environmental triggers* (0)	No subtopics identified	Home and community-based services with caregiver support and education* (0)	No subtopics identified	No subtopics identified

Meaningful Measures Priority/ MACRA Domain	Meaningful Measure Area	Specialty				
		Allergy/ Immunology	Emergency Medicine	Neurology	Physical Medicine and Rehabilitation	Rheumatology
Affordable Care	Appropriate Use of Health Care	Medications (1; 1 QCDR) Tests and services (1) - Labs (1; 1 QCDR)	Medications (1; 1 MIPS) Procedures (4; 4 QCDR) Tests and services (10) - Imaging (6; 2 MIPS, 4 QCDR) - Labs (3; 1 MIPS, 2 QCDR) - Telemetry (1; 1 QCDR)	Medications (2; 2 QCDR) Tests and services (3) - Imaging (3; 1 MIPS, 2 QCDR) Reduction of ED use for headache management* (0)	Procedures (3; 3 QCDR) Tests and services (3) - Imaging (3; 3 QCDR)	Medications* (0) -csDMARDs* (0) -Steroids* (0) -Biologics* (0)
	Patient-Focused Episode of Care	Biologic medication cost to asthma and comorbidity control ratio* (0) Electronic medication monitoring devices* (0) Telemonitoring* (0)	No subtopics identified	Condition specific episode-based cost measures (1) - Stroke (1; 1 other)	Episode of care based on specific diagnosis* (0) - Amputation* (0) - Spinal cord injury* (0) - Spine care* (0) - Stroke* (0) - Traumatic Brain Injury* (0)	Biologic medication cost to rheumatoid arthritis control ratio (Transparency and value)* (0)
	Risk-Adjusted Total Cost of Care	No subtopics identified	Total cost of care for high volume diagnosis* (e.g., chest pain) (0)	No subtopics identified	No subtopics identified	No subtopics identified