CMS Measure ID	Measure Title	Measure Description	Denominator	Denominator Exclusions	Denominator Exceptions	Numerator	Numerator Exclusions	High Priority Measure	High Priority Type	Measure Type	NQF ID Number	NQS Domain	Meaningful Measure Area	Measure Care Settings	Inverse Measure	Measure Reported as	Number of performance rates calculated and submitted	Risk-Adjusted Measure
AQI18	Coronary Artery Bypass Graft (CABG): Prolonged Intubation – Inverse Measure	Percentage of patients aged 18 years and older undergoing isolated CABG surgery who require postoperative intubation > 24 hours	All patients, aged 18 years and older, undergoing isolated CABG surgery Definition: Isolated CABG refers to CABG using arterial and/or venous grafts only.	· Organ donors as designated by ASA Physical Status 6	None	Patients who require intubation > 24 hours following exit from the operating room	None	Yes	Outcome	Outcome	N/A	Effective Clinical Care	Preventable Healthcare Harm	Hospital Inpatient	Yes	Proportional	1	No
AQI48	Patient-Reported Experience with Anesthesia	Percentage of patients, aged 18 and older, who were surveyed on their patient experience and satisfaction with anesthesia care and who reported a positive experience. This measure will consist of two performance rates: AQI48a: Percentage of patients, aged 18 and older, who were surveyed on their patient experience and satisfaction with anesthesia care AQI48b: Percentage of patients, aged 18 and older, who completed a survey on their patient experience and satisfaction with anesthesia care who report a positive experience with anesthesia care NOTE: The measure requires that a valid survey, as defined in the numerator of AQI48a, be sent to patients between discharge from the facility and within 30 days of facility discharge. To report AQI48b, a minimum number of 20 surveys with the mandatory question completed must be reported. ** In order to be scored on this measure, clinicians must report BOTH AQI48a AND AQI48b.	Patients, aged 18 and older, who undergo a procedure* under anesthesia (AQI48a) and who complete a survey on their patient experience and satisfaction with anesthesia care (AQI48b) Definition: *Any procedure including surgical, therapeutic or diagnostic Denominator Note: In order to report AQI48b, the denominator must include a minimum of 20 returned surveys.	· AQI48a: Organ Donors as designated by ASA Physical Status 6 · AQI48a: Patient died within 30 days of the procedure · AQI48b: Patient did not complete the mandatory anesthesia satisfaction question	AQI48a: Documentation of patient reason(s), process reason(s)or medical reason(s) for not receiving survey (i.e. patients who are non-verbal, who are unable to be surveyed due to a medical or psychiatric reason, who are unable to be surveyed due to a language barrier, have not provided contact information, who are discharged to assisted living, skilled nursing facility or other similar location where direct access to the patient is not available, or who decline to be surveyed)	Numerator AQI48a: Patients who received a survey within 30 days of the procedure to assess their experience and satisfaction with anesthesia. Numerator Note: The survey should be administered to the patient shortly following discharge from the facility. Definition: Practices and eligible clinicians may customize their patient experience and satisfaction with anesthesia surveys to meet local needs but, at a minimum, a valid survey must include a core set of questions that address three of the four following criteria related to patient experience and satisfaction and one mandatory question described below. 1. Pre-operative Education and Preparation 2. Patient and/or Family Communication 3. Care Team Response to Comfort and Well-Being 4. Post-operative pain control and/or management Mandatory question that must be included in each valid survey (practices must also include an option for patient to indicate "Not Applicable"): 1. On a scale of 1 to 5, where 1 indicates the worst anesthesia experience and where 5 indicates the best anesthesia experience, how would you rate your anesthesia experience? Numerator AQI48b: Patients who reported a positive experience with anesthesia care. Definition: A positive experience is defined as a response of 4 or 5 on the following mandatory patient experience and satisfaction survey question: On a scale of 1 to 5, where 1 indicates the worst anesthesia experience and where 5 indicates the best anesthesia experience, how would you rate your overall anesthesia experience? (Practices must include an option for patient to indicate "Not Applicable")	None	Yes	Outcome	Patient Reported Outcome (PRO)	N/A	Person and Caregiver Centered Experience and Outcomes	Patient's Experience of Care	Ambulatory Care: Clinician Office; Ambulatory Care: Hospital; Hospital; Hospital Inpatient; Outpatient Services	No	Proportional	2 Note: AQI48b result will be used as the MIPS performance rate	No
AQI49	Adherence to Blood Conservation Guidelines for Cardiac Operations using Cardiopulmonary Bypass (CPB) – Composite	Percentage of patients, aged 18 years and older, who undergo a cardiac operation using cardiopulmonary bypass for whom selected blood conservation strategies were used.	Patients, aged 18 years and older, who undergo a cardiac operation using cardiopulmonary bypass Denominator Note: Patients undergoing a re-operation are included in the denominator to the measure	· Emergent cases - Lung transplants not using cardiopulmonary bypass.	None	Patients for whom selected blood conservation strategies were used. Numerator Scoring: Each blood conservation strategy of this measure accounts for 25% of the total composite score. Each of the four blood conservation strategies must be reported to be included in the performance measurement. The total composite score will be calculated by the data source and not the individual practitioner. 1. Use of Lysine analogues · Numerator Note: As indicated by Intraoperative Antifibrinolytic med: Aminocaproic acid Acid or Tranexamic acid Acid. 2. Use of mini-circuits or Retrograde Autologous Priming (RAP) or Ultrafiltration (Minimize hemodilution caused by cardiopulmonary bypass pump priming solution) · Numerator Note: Record the usage of retrograde autologous priming or a miniaturized circuit volume by the cardiopulmonary perfusion team prior to the onset of cardiopulmonary bypass. · Numerator Note: Capture the total volume of ultra filtrate removed by the cardiopulmonary perfusion team during cardiopulmonary bypass and during modified ultra-hemofiltration post-CPB. Record the data in milliliters. 3. Use of red cell salvage using centrifugation · Numerator Note: Capture the volume of cell saver collected and given. Do not include autologous, allogeneic, pump-residual, or chest-tube recirculated blood. 4. Use of transfusion algorithm supplemented with point-of-care testing · Numerator Note: Transfusion algorithm includes SCA/STS guideline recommendations or an evidence-based algorithm formulated at the local level.	None	No	N/A	Process	N/A	Effective Clinical Care	Preventable Healthcare Harm	Hospital Inpatient	No	Proportional	1	No
AQI55	Team-Based Implementation of a Care-and-Communication Bundle for ICU Patients	Percentage of patients, regardless of age, who are admitted to an intensive care unit (ICU) for ≥48 hours and who received critical care services who have documentation by managing physician of 1) attempted or actual identification of a surrogate decision maker, 2) an advance directive, and 3) the patient's preference for cardiopulmonary resuscitation, within 48 hours of ICU admission	All patients, regardless of age, who are admitted to an intensive care unit for ≥48 hours and who received critical care services	None	Documentation of patient reason(s) for not documenting all three required numerator elements within the first 48 hours of ICU admission (e.g., patient declines, patient unable to participate in discussion, other patient reason(s))	Patients who have documentation by managing physician of 1) attempted or actual identification of a surrogate decision maker, 2) an advance directive, and 3) the patient's preference for cardiopulmonary resuscitation, within the first 48 hours of ICU admission Numerator Note: To meet this measure, the managing physician must either document the required information or confirm that they have reviewed existing documentation of the information.	None	Yes	Care Coordination	Process	N/A	Communication and Care Coordination	Care is Personalized and Aligned with Patient's Goals	Hospital Inpatient	No	Proportional	1	No
AQI56	Use of Neuraxial Techniques and/or Peripheral Nerve Blocks for Total Knee Arthroplasty (TKA)	Percentage of patients, regardless of age, that undergo primary total knee arthroplasty for whom neuraxial anesthesia and/or a peripheral nerve block is performed	All patients, regardless of age, who undergo primary total knee arthroplasty	Revision of Total Knee Arthroplasty Prosthesis Removal	Documentation of patient reason(s) for not using either neuraxial anesthesia or a peripheral nerve block (e.g., patient refusal)	Patients for whom neuraxial anesthesia and/or a peripheral nerve block is performed. Numerator Note: For the purposes of this measure, a peripheral nerve block performed either as primary procedural anesthesia or performed for postoperative analgesia would meet the numerator.	None	No	N/A	Process	N/A	Effective Clinical Care	Appropriate use of Healthcare	Ambulatory Care: Hospital; Hospital Inpatient; Hospital Outpatient Services	No	Proportional	1	No
AQI57	Safe Opioid Prescribing Practices	Percentage of patients, aged 18 years and older, prescribed opioid medications for longer than six weeks' duration 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 encounter 2. Co-prescription of naloxone or documented discussion regarding offer of Naloxone co-prescription, if prescription is ≥50 MME/day 3. 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.	All patients aged 18 years and older prescribed opioid medications for longer than six weeks' duration	None	None	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 encounter 2. Co-prescription of Naloxone, or documented discussion regarding offer of Naloxone co-prescription, if opioid prescription is ≥50 MME/day 3. 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. Numerator Note: Chemical Dependency Screening: Questionnaires for chemical dependency screening can include the Opioid Risk Tool (ORT), Screener and Opioid Assessment for Patients with Pain (SOAPP), Screener and Opioid Assessment for Patients with Pain-Revised (SOAPP-R), or the Diagnosis, Intractability, Risk, Efficacy (DIRE) tool.	None	Yes	Opioid-related Measure	Process	N/A	Effective Clinical Care	Prevention and Treatment of Opioid and Substance Use Disorders	Ambulatory Care: Clinician Office/Clinic	No	Proportional	1	No
AQI62	Obstructive Sleep Apnea: Patient Education	Percentage of patients aged 18 years or older, who undergo an elective procedure requiring anesthesia services who are screened for obstructive sleep apnea (OSA) AND, if positive, have documentation that they received education regarding their risk for OSA prior to PACU discharge	All patients aged 18 years or older, who undergo an elective procedure requiring anesthesia services Denominator Note: For the purposes of this measure, anesthesia services only include cases using general anesthesia, neuraxial anesthesia and monitored anesthesia care (MAC)	Patient has an existing diagnosis of OSA Documentation of patient reason for not providing education regarding risk for OSA (e.g., severe dementia, patient is intubated, patient is not alert or responsive enough to participate in education, other patient reason(s)	None	Patients who are screened for obstructive sleep apnea (OSA) AND, if positive, have documented education regarding their risk for obstructive sleep apnea prior to PACU discharge Numerator Definition: Patient education regarding OSA must include documentation that a conversation addressing potential implications of OSA on the patient's perioperative course and any applicable recommendations for follow-up care and disease management occurred. Self-help materials (e.g., brochures, audio/video materials, pamphlets) alone are not sufficient to meet the numerator.	None	No	N/A	Process	N/A	Effective Clinical Care	Management of Chronic Conditions	Ambulatory Care: Clinician Office, Ambulatory Care Hospital Hospital: Hospital Inpatient, Outpatient Services	No	Proportional	1	No
AQI65	Avoidance of Cerebral Hyperthermia for Procedures Involving Cardiopulmonary Bypass	Percentage of patients, aged 18 years and older, undergoing a procedure using cardiopulmonary bypass who did not have a documented intraoperative pulmonary artery, oropharyngeal, or nasopharyngeal temperature ≥37.0 degrees Celsius during the period of cardiopulmonary bypass	All patients aged 18 years or older, who undergo a procedure using cardiopulmonary bypass	None	None	Patients who did not have an intraoperative pulmonary artery, oropharyngeal, or nasopharyngeal temperature ≥37.0 degrees Celsius during cardiopulmonary bypass	None	Yes	Outcome	Outcome	N/A	Patient Safety	Preventable Healthcare Harm	Hospital Inpatient	No	Proportional	1	No
AQI67	Consultation for Frail Patients	Percentage of patients aged 70 years or older, who undergo an inpatient procedure requiring anesthesia services and have a positive frailty screening result who receive a multidisciplinary consult or care during the hospital encounter	All patients aged 70 years or older, who undergo an inpatient procedure requiring anesthesia services and have a positive frailty screening result Denominator Definition: Frailty can be screened using an established tool including but not limited to following tools: - Fried Frailty Phenotype Criteria - Modified Frailty Index - The Vulnerable Elders Survey - Initial Clinical Impression ("First Minute Impression")	Emergent Cases	None	Patients who receive a multidisciplinary consult and/or multidisciplinary care during the hospital encounter Numerator Definition: A multidisciplinary consult should include documentation of a discussion of the frailty screening result and can include consultation initiated by the anesthesiologist or other qualified anesthesia provider with surgery, geriatrics, hospital medicine, palliative care, or other appropriate specialty to help manage the perioperative care of a frail patient.	None	Yes	Care Coordination	Process	N/A	Communication and Care Coordination	Management of Chronic Conditions	Hospital Inpatient	No	Proportional	1	No
AQI68	Obstructive Sleep Apnea: Mitigation Strategies	Percentage of patients aged 18 years or older, who undergo an elective procedure requiring anesthesia services who are screened for obstructive sleep apnea (OSA) AND, if positive, for whom two or more selected mitigation strategies was used prior to PACU discharge	All patients aged 18 years or older, who undergo an elective procedure requiring anesthesia services Denominator Note: For the purposes of this measure, anesthesia services only include cases using general anesthesia, neuraxial anesthesia and monitored anesthesia care (MAC)	None	Documentation of medical reason(s) for not screening for obstructive sleep apnea and/or documenting the use of two or more mitigation strategies (i.e. patient remains intubated postoperatively, listed mitigation strategies contraindicated, other medical reason(s))	Patients who are screened for obstructive sleep apnea (OSA) AND, if positive, have documentation that two or more of the following mitigation strategies were used prior to PACU discharge: - Preoperative initiation of continuous positive airway pressure (CPAP) or non-invasive positive pressure ventilation (NIPPV) - Preoperative use of mandibular advancement devices or oral appliances - Intraoperative administration of CPAP, nasopharyngeal airway, or oral appliance during sedation - Use of major conduction anesthesia (spinal/epidural) or peripheral nerve block - Multimodal analgesia - Extubation while patient is awake - Verification of full reversal of neuromuscular block - Extubation and recovery carried out in lateral, semi upright, or other no supine position - Postoperative administration of CPAP, nasopharyngeal airway, or oral appliance in the post anesthesia care unit (PACU)	None	Yes	Patient Safety	Process	N/A	Patient Safety	Preventable Healthcare Harm	Ambulatory Care: Clinician Office; Ambulatory Care: Hospital; Hospital; Hospital Inpatient; Outpatient Services	No	Proportional	1	No
ONSQIR21	Patient Reported Health-Related Quality of Life (HRQoL) during Treatment for Advanced Cancer	Percentage of patients aged 18 and older with an active diagnosis of advanced cancer (Stage III or Stage IV) receiving chemotherapy and/or immunotherapy for treatment of cancer, who have HRQOL assessed on the FACT-G (Version 4) or PROMIS Global Health short form (Version 1.2) at least twice during the measurement period at least 90 days apart, where the most recent total score indicates the same or better quality of life. Two rates are reported: 1. Percentage of patients aged 18 and older with an active diagnosis of advanced cancer (Stage III or Stage IV) receiving chemotherapy and/or immunotherapy for treatment of cancer, who have HRQOL assessed on the FACT-G (Version 4) or PROMIS Global Health short form (Version 1.2) at least twice during the measurement period at least 90 days apart. 2. Percentage of patients aged 18 and older with an active diagnosis of advanced cancer (Stage III or Stage IV) receiving chemotherapy and/or immunotherapy for treatment of cancer, who have HRQOL assessed on the FACT-G (Version 4) or PROMIS Global Health short form (Version 1.2) at least twice during the measurement period at least 90 days apart, where the most recent total score indicates the same or better quality of life.	All patients aged 18 and older with an active diagnosis of advanced cancer (Stage III or Stage IV) receiving a chemotherapy and/or immunotherapy for treatment of cancer during the measurement period. Population 1: Equals Initial Population. Population. 2: Equals Initial Population who were assessed on the FACT-G (Version 4) or PROMIS Global Health short form (Version 1.2) at least twice during the measurement period at least 90 days apart, where the same tool was used for both assessments.	Hospice care at any time during the measurement period. Patient expired during the measurement period.	None	Population 1: Patients who were assessed for health-related quality of life (HRQOL) using FACT-G (Version 4) or PROMIS Global Health short form (Version 1.2) assessment tool at least twice during the measurement period at least 90 days apart, where the same tool was used for both assessments. Population 2: Patients whose most recent assessment total score during the measurement period is equal to or greater than any earlier assessment total score during the measurement period that is at least 90 days prior to the most recent assessment, where the same tool was used for both assessments.	None	Yes	Outcome	Patient Reported Outcome (PRO)	N/A	Person and Caregiver Centered Experience and Outcomes	Functional Outcomes	Ambulatory Care: Clinician Office/Clinic	No	Proportional	2 Note: The second rate is the MIPS performance rate	No
ONSQIR22	PCR Test with MR2 or greater result (BCR-ABL1 transcript level <= 1% [IS]) for patients receiving TKI for at least 6 months for Chronic Myelogenous Leukemia	Percentage of patients aged 18 and older with chronic myelogenous leukemia who are receiving TKI therapy for at least 6 months, who have at least 1 PCR test performed with the most recent result equal to or greater than MR2 (BCR-ABL1 transcript level <= 1% [IS]) during the measurement period.	Percentage of patients aged 18 and older with chronic myelogenous leukemia who have been receiving TKI therapy for at least 6 months at any time during the measurement period.	Hospice care at any time during the measurement period. Patient expired during the measurement period	None	Percentage of patients that have at least 1 PCR test performed with the most recent result equal to or greater than MR2 (BCR-ABL1 transcript level <= 1% [IS]) during the measurement period.	None	Yes	Outcome	Intermediate Outcome	N/A	Effective Clinical Care	Medication Management	Ambulatory Care: Clinician Office/Clinic	No	Proportional	1	No

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ONSQIR23	Assessment for and management of immune-related adverse events during cancer treatment with checkpoint inhibitors (ICPi)	Percentage of patients aged 18 and older receiving a checkpoint inhibitor (ICPi) for cancer experiencing immune-related adverse events of documented grade 3+ diarrhea OR documented grade 3+ hypothyroidism OR documented grade 3+ dermatitis OR documented grade 3+ pneumonitis AND for each adverse event, there is guideline concordant intervention (per ASCO/NCCN guideline) during the measurement period.	Percentage of patients aged 18 and older receiving an immune checkpoint inhibitor (ICPi) for cancer experiencing immune-related adverse events of documented grade 3+ diarrhea OR documented grade 3+ hypothyroidism OR documented grade 3+ dermatitis OR documented grade 3+ pneumonitis during the measurement period.	None	None	Patients who have, for each immune-related adverse event, guideline concordant intervention during the measurement period to include the following interventions for these Checkpoint Inhibitor (ICPi) Medications – Atezolizumab – Avelumab – Durvalumab – Ipilimumab – Nivolumab – Pembrolizumab: Grade 3+ Diarrhea in the presence of ICPi: - 7+ stools/day over baseline - Requiring hospitalization for diarrhea - Limited ability to perform self-care - IV fluids required >24 hours - Enterocolitis diagnosis; Best-available intervention for Diarrhea: - Antidiarrheals (loperamide, atropine/diphenoxylate) - Corticosteroids (prednisone, prednisolone, methylprednisolone) - ICPi discontinuation or hold; Grade 3+ Hypothyroidism in the presence of ICPi: - TSH >10mIU/L - Bradycardia - Hypothermia - Limited ability to perform self-care - Hospitalization indicated; Best available intervention for Hypothyroidism: - Corticosteroids (prednisone, prednisolone, methylprednisolone) - ICPi discontinuation or hold - Endocrine consultation - Thyroid supplementation (levothyroxine sodium); Grade 3+ Dermatitis in the presence of ICPi: - Intense, widespread pruritus - Rash, pustules >30% of body - Limited ability to perform self-care - Sleep interruption due to pruritus; Best-available intervention for Dermatitis: - Corticosteroids (prednisone, prednisolone, methylprednisolone) - ICPi discontinuation or hold; Grade 3+ Pneumonitis in the presence of ICPi: - Diffuse lung parenchyma inflammation, >50%+ of lung parenchyma - Limited ability to perform self-care - Requiring hospitalization; Best available intervention for Pneumonitis: - ICPi discontinuation - Corticosteroids (prednisone, prednisolone, methylprednisolone) - Bronchoscopy with BAL - Infliximab, IVIG, mycophenolate, or mofetil - Pulmonary and/or infectious disease consultation.	None	Yes	Outcome	Intermediate Outcome	N/A	Effective Clinical Care	Medication Management	Ambulatory Care: Clinician Office/Clinic	No	Proportional	1	No
PINC55	Appropriate Documentation of a Malnutrition Diagnosis	Percentage of patients age 18 years and older who are found to be severely or moderately malnourished based on a nutrition assessment that have appropriate documentation in the medical record of a malnutrition diagnosis	All patients age 18 years and older on the date of the encounter with a completed nutrition assessment that resulted in findings of moderate or severe malnutrition. Included Populations: Patients age 18 years and older who have documented findings of severe or moderate malnutrition from a completed nutrition assessment as defined by value set OIDs: - Severe malnutrition: 2.16.840.1.113762.1.4.1095.43 - Moderate malnutrition: 2.16.840.1.113762.1.4.1095.47	None	None	Patients in the denominator with a documented diagnosis of malnutrition. Included Populations: Patients in the denominator with a documented diagnosis of malnutrition as defined by value set OID: 2.16.840.1.113762.1.4.1095.55	None	No	N/A	Process	N/A	Effective Clinical Care	Transfer of Health Information and Interoperability	Hospital	No	Proportional	1	No
PINC56	Assessment of Nutritionally At-Risk Patients for Malnutrition and Development of Nutrition Recommendations/Interventions by a Registered Dietitian Nutritionist	Percentage of patients age 18 years and older who are nutritionally at-risk that have documented nutrition intervention recommendations by a registered dietitian nutritionist or clinical qualified nutrition professional if identified with moderate or severe malnutrition as part of a nutrition assessment	All patients age 18 years and older who were identified to be at-risk for malnutrition based on a malnutrition screening, OR that were referred to a registered dietitian nutritionist or clinically qualified nutrition professional. It is recommended that a malnutrition screening be performed using a validated screening tool, which may include but is not limited to, one of the following validated tools: - Malnutrition Screening Tool (MST) (Wu, 2012), - Nutrition Risk Classification (NRC) (Kovacevich, 1997), - Nutritional Risk Index (NRI) (Honda, 2016), - Nutritional Risk Screening 2002 (NRS-2002) (Bauer, 2005), - Short Nutrition Assessment Questionnaire (SNAQ) (Pilgrim, 2016). Included Populations: Patients with a malnutrition screening result of "at risk" (as defined by value set OID: 2.16.840.1.113762.1.4.1095.38) OR who have a referral to a registered dietitian or clinically qualified nutrition professional.	None	Documented patient reason for not participating in nutrition assessment or with advanced care directives.	Patients in the denominator with a completed nutrition assessment by registered dietitian nutritionist or clinically qualified nutrition professional who have findings of moderate or severe malnutrition AND recommendations for nutrition intervention(s) OR a nutrition care plan documented in the medical record. Nutrition interventions are categorized by those outlined by the Academy of Nutrition and Dietetics' nutrition intervention terminology: 1. Food and Nutrient Delivery 2. Nutrition Education 3. Nutrition Counseling 4. Coordination of Nutrition Care Recommended nutrition assessment tools include: - Nutrition-Focused Physical Exam (White, 2012) - Subjective Global Assessment (Detsky, 1987), - Patient Generated Subjective Global Assessment (Bauer, 2002)	None	No	N/A	Process	N/A	Effective Clinical Care	Patient-Focused Episode of Care	Hospital	No	Proportional	1	No