



Missouri Quality Outcome Measures

Measure Title	Identifier	Source	Measure Description	Measure Numerator	Measure Denominator	Ratio/Risk-Adjustment
Managing Chronic Diseases						
1 Management of Diabetes – Short-term complications admission rate	PQI 01	AHRQ	Admissions for principal diagnosis with short-term complications per 100,000 population, ages 18 and older.	Discharges, for patients 18+ with a principal ICD-9-CM diagnosis code for diabetes short-term complications (ketoacidosis, hyperosmolarity or coma).	Population 18+ in the county. Discharges in the numerator are assigned to the denominator based on the metropolitan area or county of the patient residence.	Age and sex
2 Management of Diabetes – Long-term complications admission rate	PQI 02	AHRQ	Admissions for principal diagnosis with long-term complications per 100,000 population, ages 18 and older.	Discharges, for patients 18+ with a principal ICD-9-CM diagnosis code for diabetes long-term complications (renal, eye, neurological, circulatory, or complications not otherwise specified).	Population 18+ in the county. Discharges in the numerator are assigned to the denominator based on the metropolitan area or county of the patient residence.	Age and sex
3 Management of Diabetes – Uncontrolled diabetes admission rate	PQI 14	AHRQ	Admissions for principal diagnosis without mention of short-term or long-term complications per 100,000 population, ages 18 and older.	Discharges, for patients 18+ with a principal ICD-9-CM diagnosis code for uncontrolled diabetes without mention of a short-term or long-term complication.	Population 18+ in the county. Discharges in the numerator are assigned to the denominator based on the metropolitan area or county of the patient residence.	Age and sex
4 Management of COPD	PQI 05	AHRQ	Admissions with a principal diagnosis of chronic obstructive pulmonary disease (COPD) or asthma per 100,000 population, ages 40 years and older.	Discharges, for patients ages 40 years and older, with either <ul style="list-style-type: none"> • a principal ICD-9-CM diagnosis code for COPD (excluding acute bronchitis); or • a principal ICD-9-CM diagnosis code for asthma; or • a principal ICD-9-CM diagnosis code for acute bronchitis and any secondary ICD-9-CM diagnosis codes for COPD (excluding acute bronchitis). 	Population 18+ in the county. Discharges in the numerator are assigned to the denominator based on the metropolitan area or county of the patient residence.	Age and sex
5 Management of Hypertension	PQI 07	AHRQ	Admissions with a principal diagnosis of hypertension per 100,000 population, ages 18 years and older.	Discharges, for patients ages 18 years and older, with a principal ICD-9-CM diagnosis code for hypertension.	Population 18+ in the county. Discharges in the numerator are assigned to the denominator based on the metropolitan area or county of the patient residence.	Age and sex
6 Management of CHF	PQI 08	AHRQ	Admissions with a principal diagnosis of heart failure per 100,000 population, ages 18 years and older.	Discharges, for patients ages 18 years and older, with a principal ICD-9-CM diagnosis code for heart failure.	Population 18+ in the county. Discharges in the numerator are assigned to the denominator based on the metropolitan area or county of the patient residence.	Age and sex
Preventing Infections						
7 Catheter Associated UTIs - Hospital acquired		NHSN	Patients who have a hospital acquired CAUTI	Number of observed infections	Number of predicted infections	SIR: In-Plan CAU Data Patient care location, hospital affiliation with medical school, bed size of the patient care location
8 CLABSI		NHSN	Central venous catheter-related bloodstream infections	Number of observed infections	Number of predicted infections	SIR: In-Plan CLAB Data Patient care location, hospital affiliation with medical school, bed size of the patient care location
9 SSI- Colon Surgery		NHSN	Surgical Site Infections in patients who had colon surgery as primary or any secondary procedure	Number of observed infections	Number of predicted infections	SIR: Complex 30-day SSI Model Duration of surgery, surgical wound class, use of endoscopes, re-operation status, patient age, patient assessment at time of anesthesiology
10 SSI – Abdominal Hysterectomy		NHSN	Surgical Site Infections in patients who had abdominal hysterectomy as primary or any secondary procedure	Number of observed infections	Number of predicted infections	SIR: Complex 30-day SSI Model Duration of surgery, surgical wound class, use of endoscopes, re-operation status, patient age, patient assessment at time of anesthesiology
11 Postoperative Sepsis Rate	PSI 13	AHRQ	Postoperative sepsis cases (secondary diagnosis) per 1,000 elective surgical discharges for patients ages 18 years and older.	Discharges among cases meeting the inclusion and exclusion rules for the denominator with ICD-9-CM code for sepsis in any secondary diagnosis field.	All elective* surgical discharges age 18 and older defined by specific DRGs or MS-DRGs and an ICD-9-CM code for an operating room procedure.	Age group, sex and medical condition
12 C Difficile		NHSN	Patients who had <i>Clostridium difficile</i> - C Diff Number of all Incident CDI LabID Events identified >3 days after admission to the facility	Number of observed infections	Number of predicted infections	SIR: Medical School affiliation, Facility Bedsize, CDI Test type, Facility Type and State
13 MRSA		NHSN	Patients who had Methicillin-resistant <i>Staphylococcus aureus</i> – MRSA. Facility MRSA Bloodstream Infection Incidence SIR = Number of all unique blood source LabID Events identified >3 days after admission to the facility.	Number of observed infections	Number of predicted infections	SIR: Medical School affiliation, Facility Bedsize, Facility Type and State

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Preventing Harm						
14	Falls (Injuries from falls and trauma)	HAC 5	CMS	Injuries from Falls and Trauma	Patients with Hospital acquired occurrences of fracture, dislocation, intracranial injury, crushing injury, burn and other injury codes within range.	All inpatient discharges None
15	Venous Thromboembolism (Post op PE or DVT)	PSI 12	AHRQ	Perioperative pulmonary embolism or deep vein thrombosis (secondary diagnosis) per 1,000 surgical discharges for patients ages 18 years and older.	Discharges, among cases meeting the inclusion and exclusion rules for the denominator, with a secondary ICD-9-CM diagnosis code for deep vein thrombosis or a secondary ICD-9-CM diagnosis code for pulmonary embolism.	Surgical discharges, for patients ages 18 years and older, with any listed ICD-9-CM procedure codes for an operating room procedure. Surgical discharges are defined by specific DRG or MS-DRG codes. Age group, sex and medical condition
16	Mortality – all conditions composite	PSI 2	AHRQ	In-hospital deaths per 1,000 discharges for low mortality (< 0.5%) Diagnosis Related Groups (DRGs) among patients ages 18 years and older or obstetric patients.	Number of deaths (DISP=20) among cases meeting the inclusion and exclusion rules for the denominator.	Discharges, for patients ages 18 years and older or MDC 14 (pregnancy, childbirth, and puerperium), with a low-mortality (less than 0.5%) DRG or MS-DRG code. If a DRG or MS-DRG is divided into "without/with complications," both codes without complications and codes with complications must have mortality rates below 0.5% to qualify for inclusion. Age group, sex and medical condition
17	Pressure Ulcers	PSI 3	AHRQ	Stage III or IV pressure ulcers (secondary diagnosis) per 1,000 discharges among patients ages 18 years and older.	Discharges, among cases meeting the inclusion and exclusion rules for the denominator, with any secondary ICD-9-CM diagnosis codes for pressure ulcer and any secondary ICD-9-CM diagnosis codes for pressure ulcer stage III or IV (or unstageable).	Surgical and medical discharges, for patients ages 18 years and older. Surgical and medical discharges are defined by specific DRG or MS-DRG codes. Age group, sex and medical condition
Managing Readmissions						
18	Readmissions – Hospitalwide	EOM-READ-75	CMS and Custom	Adult inpatients who were readmitted within 30 days for any reason (All Cause, all diagnosis, 18 and older, all payer)	Number of inpatients (not number of readmissions) returning as an acute care inpatient to a Missouri and/or St. Louis area metropolitan hospital within 30 days of date of discharge.	Total adult inpatient acute discharges SDS - age, medical condition, Medicaid eligibility and poverty
19	Readmissions – Congestive Heart Failure	EOM-READ-77	CMS and Custom	Adult inpatients who were readmitted following hospitalization for HF to a Missouri and/or St. Louis metropolitan area hospital within 30 days for any reason (All Cause, all diagnosis, 18 and older, all payer)	Number of inpatients (not number of readmissions) returning as an acute care inpatient to a Missouri and/or St. Louis area metropolitan area hospital within 30 days of date of discharge.	Total adult inpatient acute HF discharges SDS - age, medical condition, Medicaid eligibility and poverty CMS/Yale - Age and Medical Condition
20	Readmissions – Acute Myocardial Infarction	EOM-READ-76	CMS and Custom	Adult inpatients who were readmitted following hospitalization for AMI to a Missouri and/or St. Louis metropolitan area hospital within 30 days for any reason (All Cause, all diagnosis, 18 and older, all payer)	Number of inpatients (not number of readmissions) returning as an acute care inpatient to a Missouri and/or St. Louis metropolitan area hospital within 30 days of date of discharge.	Total adult inpatient acute AMI discharges SDS - age, medical condition, Medicaid eligibility and poverty CMS/Yale - Age and Medical Condition
21	Readmissions – Pneumonia	EOM-READ-78	CMS and Custom	Adult inpatients who were readmitted following hospitalization for PN to a Missouri and/or St. Louis metropolitan area hospital within 30 days for any reason (All Cause, all diagnosis, 18 and older, all payer)	Number of inpatients (not number of readmissions) returning as an acute care inpatient to a Missouri and/or St. Louis area metropolitan area hospital within 30 days of date of discharge.	Total adult inpatient acute PN discharges SDS - age, medical condition, Medicaid eligibility and poverty CMS/Yale - Age and Medical Condition
22	Readmissions – Chronic Obstructive Pulmonary Disease	READM-30-COPD	CMS and Custom	Adult inpatients who were readmitted following hospitalization for COPD to a Missouri and/or St. Louis metropolitan area hospital within 30 days for any reason (All Cause, all diagnosis, 18 and older, all payer)	Number of inpatients (not number of readmissions) returning as an acute care inpatient to a Missouri and/or St. Louis area metropolitan area hospital within 30 days of date of discharge.	Total adult inpatient acute COPD discharges SDS - age, medical condition, Medicaid eligibility and poverty CMS/Yale - Age and Medical Condition
23	Readmissions – Hip/Knee Replacement	READM-30-HIP-KNEE	CMS and Custom	Adult inpatients who were readmitted following hospitalization for hip/knee replacement to a Missouri and/or St. Louis metropolitan area hospital within 30 days for any reason (All Cause, all diagnosis, 18 and older, all payer)	Number of inpatients (not number of readmissions) returning as an acute care inpatient to a Missouri and/or St. Louis area metropolitan area hospital within 30 days of date of discharge.	Total adult inpatient acute hip/knee replacement discharges SDS - age, medical condition, Medicaid eligibility and poverty CMS/Yale - Age and Medical Condition