Health Services Advisory Group (HSAG)
Hospital Quality Improvement Contract (HQIC)

Compendium of Measures (CoM)

Updated: June 11, 2021

HSAG HQIC

		Version History
Date	**Version Number**	**Update History**
March 26, 2021	Version 1.0	• Initial release
April 6, 2021	Version 1.1	• Added: Peri-Operative Care, Airway Safety Checklist
June 7, 2021	Version 1.2	• Added VAC SIR, IVAC SIR • Modified NHSN units for CAUTI, CLABSI, and CDI measures • Modified Benzodiazepine Co-Prescribing from beneficiary level to discharge level • Clarified Overall Sepsis Rate denominator • Modified Catheter and Central Line Utilization Ratio measures • Removed icons
June 11, 2021	Version 1.3	• Added Hospital-Acquired Pressure Ulcer Rate • Removed Measures Table with links (use Table of Contents)

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Background

As part of the HQIC, HSAG is tasked with collecting operational and quality improvement metrics from participating providers to quickly test and implement interventions. The HQIC contract includes three goals as shown in the figure below.

Figure 1: HQIC Goals

Goal 1: Improve behavioral health outcomes, focusing on decreased opioid misuse

Goal 2: Increase patient safety

Goal 4: Increase quality care transitions

![HSAG HQIC logo]
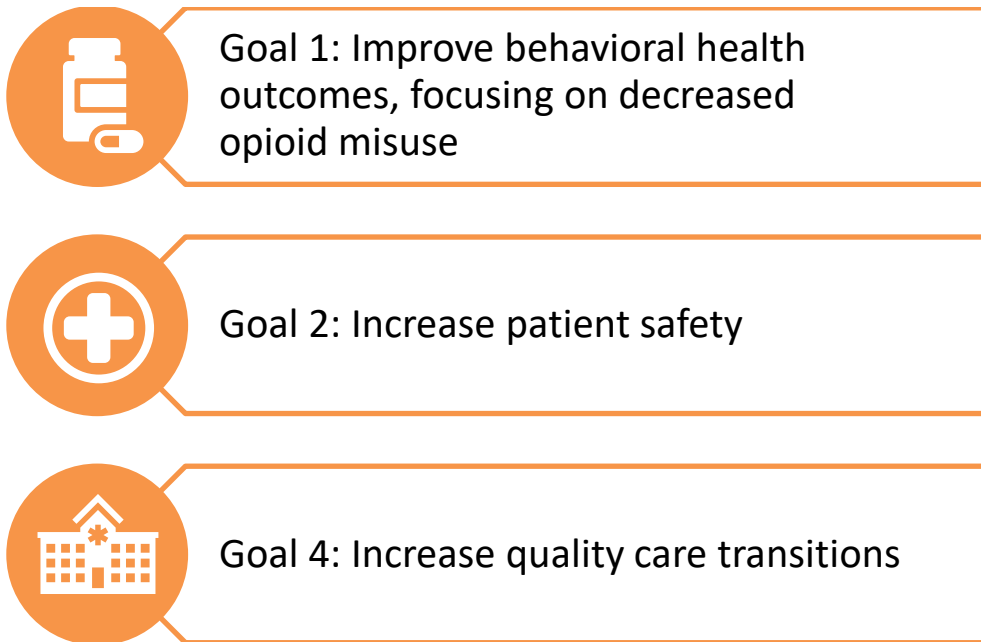
💊 Goal 1: Improve Behavioral Health Outcomes, Focusing on Decreased Opioid Misuse

Opioid Stewardship

Hospital ADEs for Opioids

Claims

	Description
Numerator	Opioid-related ADEs, not POA
Denominator	Inpatient admissions
Rate Calculation	(Numerator/Denominator) x 1,000
Data Source(s)	Medicare FFS Part A claims
Baseline Period	CY 2019

Definitions

Element	Definition
ADE	See the Opioid ADE tab in the Reference Codes excel for the codes used to identify opioid ADEs.
Admission	Admission records with the type of claim identified as "inpatient" that are from one of our recruited hospitals.
Not POA	For an ICD-10-CM diagnosis code to be considered not POA, the POA flag must indicate "No" or "Unknown" (often notated as "N" or "U")—qualifying a patient for the measure numerator.

Resources

Resource	Location
ADE	Adapted from: Digmann R, et al. Use of Medicare Administrative Claims to Identify a Population at High Risk for Adverse Drug Events and Hospital Use for Quality Improvement. *J Manag Care Spec Pharm*. 2019 Mar;25(3):402-410.
CDC Opioids	https://www.cdc.gov/drugoverdose/resources/data.html
IHI Trigger Tool for Measuring Adverse Drug Events	http://www.ihi.org/resources/Pages/Tools/TriggerToolforMeasuringAdverseDrugEvents.aspx

Opioid Prescriptions ≥ 90 MME

Claims

	Description
Numerator	Opioid prescriptions with a daily MME ≥ 90
Denominator	Opioid prescriptions filled within two days of discharge
Exclusions	Exclude prescriptions for beneficiaries with a claim of cancer, sickle cell disease, hospice, or palliative care during the hospital stay
Rate Calculation	Numerator/Denominator
Data Source(s)	Medicare FFS Part A and Part D claims
Baseline Period	CY 2019

Self-Reported (Optional)

	Description
Numerator	Opioid prescriptions with a daily MME ≥ 90
Denominator	Opioid prescriptions prescribed at discharge
Exclusions	Exclude prescriptions for beneficiaries with a claim of cancer, sickle cell disease, hospice, or palliative care during the hospital stay
Rate Calculation	Numerator/Denominator
Data Source(s)	Self-Reported
Baseline Period	CY 2019

Definitions

Element	Definition
Cancer Diagnosis	See the Cancer tab in the Reference Codes excel for the codes used to identify cancer.
Daily MME	Prescription strength x MME conversion factor x Daily quantity.
Daily Quantity	Total prescription quantity/days' supply.
Hospice Patient	See the Hospice tab in the Reference Codes excel for the codes used to identify hospice patients.
MME	Conversion factor used to equate different opioids into a standard value based on its potency.
Opioid Prescription	See the Opioid tab in the Reference Codes excel for the codes used to identify opioids.
Palliative Care	See the Palliative_Care tab in the Reference Codes excel for the codes used to identify palliative care.
Sickle Cell Diagnosis	See the Sickle_Cell tab in the Reference Codes excel for the codes used to identify sickle cell.

Resources

Resource	Location
Cancer Reference Codes	https://www.medicaid.gov/medicaid/quality-of-care/downloads/medicaid-adult-core-set-manual.pdf https://www.medicaid.gov/license-agreement.html?file=%2Fmedicaid%2Fquality-of-care%2Fdownloads%2F2019-adult-non-hedis-value-set-directory.zip (Table OHD-B)
CDC Opioid and MME Conversions	https://www.cdc.gov/drugoverdose/resources/data.html
Hospice Reference Codes	Hospice codes were pulled from reference tables using "Hospice" as a keyword.
Palliative Care Reference Codes	https://journals.sagepub.com/doi/full/10.1177/1049909117691020?url_ver=Z39.88-2003&rfr_id=ori%3Arid%3Acrossref.org&rfr_dat=cr_pub%3Dpubmed
Sickle Cell Disease Reference Codes	https://www2.ccwdata.org/web/guest/condition-categories *Select Sickle Cell Disease

Naloxone Use for Reversal of Opioid Over Sedation

Self-Reported (Optional)

	Description
Numerator	Number of inpatient days naloxone was given
Denominator	Number of inpatient days for patients 18 years and older on an opioid
Denominator Exclusions	Opioid prescriptions given in the ED
Rate Calculation	(Numerator/Denominator) x 1,000
Data Source(s)	Self-Reported
Baseline Period	CY 2019

Definitions

Element	Definition
Patient Days	The sum of the number of patients on an opioid prescription in the facility on each day of the month. The entire length of stay is counted for the patient even if an opioid is administered only a subset of the days.

Resources

Resource	Location
CDC Opioids	https://www.cdc.gov/drugoverdose/resources/data.html

Opioid Risk Assessment

Self-Reported (Optional)

	Description
Numerator	Patients where an opioid risk assessment was used
Denominator	Patients 18 years of age or older on an opioid
Exclusions	Patient given opioid in the ED and operating room
Rate Calculation	Numerator/Denominator
Data Source(s)	Self-Reported
Baseline Period	CY 2019

Definitions

Element	Definition
Opioid Prescription	See the Opioid tab in the Reference Codes excel for the codes used to identify opioids.
Opioid Risk Assessment	Opioid risk assessments include: 1. Pasero Opioid-Induced Sedation Scale 2. Richmond Agitation Sedation Scale 3. Other opioid risk assessment scale
Patient Days	The sum of the number of patients on an opioid prescription in the facility on each day of the month.

Resources

Resource	Location
CDC Opioids	https://www.cdc.gov/drugoverdose/resources/data.html

Benzodiazepine Co-Prescribing

Claims

	Description
Numerator	Benzodiazepine prescription that overlaps with an opioid prescription
Denominator	Discharges where an opioid prescription was filled within two days of discharge
Exclusions	Patients with active cancer, palliative, and end of life care
Rate Calculation	Numerator/Denominator
Data Source(s)	Medicare FFS Part A and Part D claims
Baseline Period	CY 2019

Definitions

Element	Definition
Benzodiazepine	See the Benzo tab in the Reference Codes excel for the codes used to identify benzodiazepines.
Cancer Diagnosis	See the Cancer tab in the Reference Codes excel for the codes used to identify cancer.
Opioid Prescriptions	See the Opioid tab in the Reference Codes excel for the codes used to identify opioids.
Palliative Care	See the Palliative_Care tab in the Reference Codes excel for the codes used to identify palliative care.

Resources

Resource	Location
Cancer Reference Codes	https://www.medicaid.gov/medicaid/quality-of-care/downloads/medicaid-adult-core-set-manual.pdf https://www.medicaid.gov/license-agreement.html?file=%2Fmedicaid%2Fquality-of-care%2Fdownloads%2F2019-adult-non-hedis-value-set-directory.zip (Table OHD-B)
CDC Opioid Quality Measures	https://www.cdc.gov/drugoverdose/pdf/prescribing/CDC-DUIP-FactSheet-At-A-Glance_Opioid-Measures-508.pdf
Hospice Reference Codes	Hospice codes were pulled from reference tables using "Hospice" as a keyword.
Palliative Care Reference Codes	https://journals.sagepub.com/doi/full/10.1177/1049909117691020?url_ver=Z39.88-2003&rfr_id=ori%3Arid%3Acrossref.org&rfr_dat=cr_pub%3Dpubmed

⊕ Goal 2: Increase Patient Safety

ADEs

Hospital ADEs for Anticoagulants

Claims

	Description
Numerator	Anticoagulant related ADEs, not POA
Denominator	Inpatient admissions
Rate Calculation	(Numerator/Denominator) x 1,000
Data Source(s)	Medicare FFS Part A claims
Baseline Period	CY 2019

Definitions

Element	Definition
ADE	See the Anticoag_ADE tab in the Reference Codes excel for the codes used to identify anticoagulant ADEs.
Admission	Admission records with the type of claim identified as "inpatient" that are from one of our recruited hospitals.
Not POA	For an ICD-10-CM diagnosis code to be considered not POA, the POA flag must indicate "No" or "Unknown" (often notated as "N" or "U")—qualifying a patient for the measure numerator.

Resources

Resource	Location
ADE	Adapted from: Digmann R, et al. Use of Medicare Administrative Claims to Identify a Population at High Risk for Adverse Drug Events and Hospital Use for Quality Improvement. *J Manag Care Spec Pharm*. 2019 Mar;25(3):402-410.
IHI Trigger Tool for Measuring Adverse Drug Events	http://www.ihi.org/resources/Pages/Tools/TriggerToolforMeasuringAdverseDrugEvents.aspx

INR > 5

Self-Reported (Optional)

	Description
Numerator	Patient days with at least one INR reading > 5 for adult patients on Warfarin
Denominator	Patient days for adult (18 years of age or older) patients on Warfarin
Denominator Exclusions	Exclude patient days from the ED
Rate Calculation	(Numerator/Denominator) x 1,000
Data Source(s)	Self-Reported
Baseline Period	CY 2019

Definitions

Element	Definition
Patient Days	The sum of the number of patients on Warfarin in the facility on each day of the month.

Resources

Resource	Location
IHI Trigger Tool for Measuring Adverse Drug Events	http://www.ihi.org/resources/Pages/Tools/TriggerToolforMeasuringAdverseDrugEvents.aspx

Hospital ADEs for Hypoglycemics

Claims

	Description
Numerator	Hypoglycemic related ADEs, not POA
Denominator	Inpatient admissions
Rate Calculation	(Numerator/Denominator) x 1,000
Data Source(s)	Medicare FFS Part A claims
Baseline Period	CY 2019

Definitions

Element	Definition
ADE	See the Diabetic_ADE tab in the Reference Codes excel for the codes used to identify hypoglycemic related ADEs.
Admission	Admission records with the type of claim identified as "inpatient" that are from one of our recruited hospitals.
Not POA	For an ICD-10-CM diagnosis code to be considered not POA, the POA flag must indicate "No" or "Unknown" (often notated as "N" or "U")—qualifying a patient for the measure numerator.

Resources

Resource	Location
IHI Trigger Tool for Measuring Adverse Drug Events	http://ihi.org/resources/Pages/Tools/TriggerToolforMeasuringAdverseDrugEvents.aspx

Blood Glucose < 50

Self-Reported (Optional)

	Description
Numerator	Patient days with at least one glucose reading < 50 mg/dL for adult patients on insulin
Denominator	Patient days for adult patients on insulin
Denominator Exclusions	Exclude patients in the ED
Rate Calculation	(Numerator/Denominator) x 1,000
Data Source(s)	Self-Reported
Baseline Period	CY 2019

Definitions

Element	Definition
Patient Days	The sum of the number of patients on insulin in the facility on each day of the month.

Resources

Resource	Location
IHI Trigger Tool for Measuring Adverse Drug Events	http://ihi.org/resources/Pages/Tools/TriggerToolforMeasuringAdverseDrugEvents.aspx

CLABSI

CLABSI SIR

NHSN

	Description
Numerator	Observed CLABSIs in included inpatient care locations
Denominator	Predicted CLABSIs in included inpatient care locations
Rate Calculation	SIR: Numerator/Denominator stratified by three unit groups
Data Source(s)	NHSN
Baseline Period	CY 2019

Definitions

Element	Definition
CLABSI	Infection of the bloodstream related to intravascular catheter placement that terminates at or close to the heart, or in one of the great vessels that is used for infusion, withdrawal of blood, or hemodynamic monitoring.
Inpatient Care Locations	Included inpatient care locations refer to the following: 1. Critical care; 2. Medical, surgical, and medical-surgical wards; 3. All reported inpatient care locations. See the NHSN_Units_CAUTI_CLABSI tab in the Reference Codes excel for NHSN location codes used to identify inpatient care locations.
Observed Infection	Infections that occurred after the placement of central line.
Predicted Infection	Infections of the bloodstream that are predicted to occur. Calculated based on national HAI aggregate data and adjusted for facility using predictive variables. Logistic regression or negative binomial regression models may be used.
SIR	Summary measure used to track HAIs over time. An SIR value greater than 1.0 indicates that more HAIs occurred than were predicted while an SIR value less than 1.0 indicates that fewer HAIs occurred than were predicted. SIR is not calculated when the number of predicted infections is fewer than 1.0.

Resources

Resource	Location
CDC Measure Definition/Specification	https://www.cdc.gov/nhsn/PDFs/pscManual/4PSC_CLABScurrent.pdf

Resource	Location
CDC Surveillance for Bloodstream Infections Resources	https://www.cdc.gov/nhsn/acute-care-hospital/clabsi/index.html
NHSN SIR Guide	https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/nhsn-sir-guide.pdf

CLABSI Rate

NHSN

	Description
Numerator	Observed CLABSI in included inpatient care locations
Denominator	Central line days in included inpatient care locations
Rate Calculation	(Numerator/Denominator) x 1,000 stratified by three unit groups
Data Source(s)	NHSN
Baseline Period	CY 2019

Definitions

Element	Definition
Central Line Days	The sum of the number of patients with at least one central line in place in the facility on each day of the month.
CLABSI	Infection of the bloodstream related to intravascular catheter placement that terminates at or close to the heart, or in one of the great vessels that is used for infusion, withdrawal of blood, or hemodynamic monitoring.
Inpatient Care Locations	Included inpatient care locations refer to the following: 1. Critical care; 2. Medical, surgical, and medical-surgical wards; 3. All reported inpatient care locations. See the NHSN_Units_CAUTI_CLABSI tab in the Reference Codes excel for NHSN location codes used to identify inpatient care locations.
Patient Days	The sum of the number of patients in the facility on each day of the month.

Resources

Resource	Location
CDC Measure Definition/Specification	https://www.cdc.gov/nhsn/PDFs/pscManual/4PSC_CLABScurrent.pdf
CDC Surveillance for Bloodstream Infections Resources	https://www.cdc.gov/nhsn/acute-care-hospital/clabsi/index.html

Central Line SUR

NHSN

	Description
Numerator	Observed central line days in included inpatient care locations
Denominator	Predicted central line days in included inpatient care locations
Rate Calculation	SUR: Numerator/Denominator stratified by three unit groups
Data Source(s)	NHSN
Baseline Period	CY 2019

Definitions

Element	Definition
Inpatient Care Locations	Included inpatient care locations refer to the following: 1. Critical care; 2. Medical, surgical, and medical-surgical wards; 3. All reported inpatient care locations. See the NHSN_Units_CAUTI_CLABSI tab in the Reference Codes excel for NHSN location codes used to identify inpatient care locations.
Observed Central Line Days	The sum of the number of patients with at least one central line in place in the facility on each day of the month.
Predicted Central Line Days	Central line days that are predicted to occur. Calculated based on national device utilization aggregate data and adjusted for facility using predictive variables. Logistic regression or negative binomial regression models may be used.
SUR	Summary measure used to compare device utilization across facilities, states, and nationally. An SUR value greater than 1.0 indicates that more device days occurred than were predicted while an SUR value less than 1.0 indicates that fewer device days occurred than were predicted. SUR is not calculated when the number of predicted device days is fewer than 1.0.

Resources

Resource	Location
CDC Measure Definition/Specification	https://www.cdc.gov/nhsn/PDFs/pscManual/4PSC_CLABScurrent.pdf
CDC Surveillance for Bloodstream Infections Resources	https://www.cdc.gov/nhsn/acute-care-hospital/clabsi/index.html
NHSN Guide to SURs	https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/nhsn-sur-guide-508.pdf

CAUTI

CAUTI SIR

NHSN

	Description
Numerator	Observed CAUTIs in included inpatient care locations
Denominator	Predicted CAUTIs in included inpatient care locations
Rate Calculation	SIR: Numerator/Denominator stratified by three unit groups
Data Source(s)	NHSN
Baseline Period	CY 2019

Definitions

Element	Definition
CAUTI	UTI where indwelling urinary catheter was in place for at least two consecutive days in an inpatient location, with the device placement being day 1 and the indwelling urinary catheter was in place the day of the UTI or the day before the UTI. If the indwelling urinary catheter was in place prior to admission, the first day of admission is considered day 1 of device placement.
Inpatient Care Locations	Included inpatient care locations refer to the following: 1. Critical care; 2. Medical, surgical, and medical-surgical wards; 3. All reported inpatient care locations. See the NHSN_Units_CAUTI_CLABSI tab in the Reference Codes excel for NHSN location codes used to identify inpatient care locations.
Levels III and IV Neonatal Critical Care Units	NICUs which are equipped to provide basic, advanced, subspecialty, or acute care to infants. See the NHSN_Units_Neonatal tab in the Reference Codes excel for the codes used to identify Levels III and IV neonatal critical care units.
Observed Infection	Infections that occurred after placement of indwelling urinary catheter.
Predicted Infection	Infections of the urinary tract that are predicted to happen after placement of urinary catheter. Predicted infections are calculated based on national HAI aggregate data and adjusted for facility. Logistic regression or negative binomial regression models may be used.
SIR	Summary measure used to track HAIs over time. An SIR value greater than 1.0 indicates that more HAIs occurred than were predicted while an SIR value less than 1.0 indicates that fewer HAIs occurred than were predicted. SIR is not calculated when the number of predicted infections is fewer than 1.0.

Resources

Resource	Location
CDC Measure Definition/Specification	https://www.cdc.gov/nhsn/PDFs/pscManual/7pscCAUTIcurrent.pdf
CDC Surveillance for UTIs Resources	https://www.cdc.gov/nhsn/acute-care-hospital/cauti/index.html
NHSN SIR Guide	https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/nhsn-sir-guide.pdf

CAUTI Rate

NHSN

	Description
Numerator	Observed CAUTIs in included inpatient care locations
Denominator	Indwelling urinary catheter days in included inpatient care locations
Exclusions	Exclude patients in Level III and Level IV neonatal critical care units
Rate Calculation	(Numerator/Denominator) x 1,000 stratified by three unit groups
Data Source(s)	NHSN
Baseline Period	CY 2019

Definitions

Element	Definition
Indwelling Urinary Catheter Days	The sum of the number of patients with an indwelling urinary catheter in the facility on each day of the month.
Inpatient Care Locations	Included inpatient care locations refer to the following: 1. Critical care; 2. Medical, surgical, and medical-surgical wards; 3. All reported inpatient care locations. See the NHSN_Units_CAUTI_CLABSI tab in the Reference Codes excel for NHSN location codes used to identify inpatient care locations.
Levels III and IV Neonatal Critical Care Units	NICUs which are equipped to provide basic, advanced, subspecialty, or acute care to infants. See the NHSN_Units_Neonatal tab in the Reference Codes excel for the codes used to identify Levels III and IV neonatal critical care units.
Patient Days	The sum of the number of patients in the facility on each day of the month.

Resources

Resource	Location
CDC Measure Definition/Specification	https://www.cdc.gov/nhsn/PDFs/pscManual/7pscCAUTIcurrent.pdf
CDC Surveillance for UTIs Resources	https://www.cdc.gov/nhsn/acute-care-hospital/cauti/index.html

Catheter SUR

NHSN

	Description
Numerator	Observed catheter days in included inpatient care locations
Denominator	Predicted catheter days in included inpatient care locations
Exclusions	Exclude patients in Levels III and IV neonatal critical care units
Rate Calculation	(Numerator/Denominator) x 10,000 stratified by three unit groups
Data Source(s)	NHSN
Baseline Period	CY 2019

Definitions

Element	Definition
Inpatient Care Locations	Included inpatient care locations refer to the following: 1. Critical care; 2. Medical, surgical, and medical-surgical wards; 3. All reported inpatient care locations. See the NHSN_Units_CAUTI_CLABSI tab in the Reference Codes excel for NHSN location codes used to identify inpatient care locations.
Levels III and IV Neonatal Units	NICUs which are equipped to provide basic, advanced, subspecialty, or acute care to infants. See the NHSN_Units_Neonatal tab in the Reference Codes excel for the codes used to identify Levels III and IV neonatal units.
Observed Catheter Days	The sum of the number of patients with an indwelling urinary catheter in the facility on each day of the month.
Predicted Catheter Days	Catheter days that are predicted to occur. Calculated based on national device utilization aggregate data and adjusted for facility using predictive variables. Logistic regression or negative binomial regression models may be used.
SUR	Summary measure used to compare device utilization across facilities, states, and nationally. An SUR value greater than 1.0 indicates that more device days occurred than were predicted while an SUR value less than 1.0 indicates that fewer device days occurred than were predicted. SUR is not calculated when the number of predicted device days is fewer than 1.0.

Resources

Resource	Location
CDC Measure Definition/Specification	https://www.cdc.gov/nhsn/PDFs/pscManual/7pscCAUTIcurrent.pdf
CDC Surveillance for UTIs Resources	https://www.cdc.gov/nhsn/acute-care-hospital/cauti/index.html
NHSN Guide to SURs	https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/nhsn-sur-guide-508.pdf

Antibiotic Stewardship

CDI SIR

NHSN

	Description
Numerator	Observed hospital-onset CDI lab identified events among all inpatients in the facility
Denominator	Predicted cases of patients with CDI (facility-wide)
Exclusions	Exclude neonatal units
Rate Calculation	SIR: Numerator/Denominator
Data Source(s)	NHSN
Baseline Period	CY 2019

Definitions

Element	Definition
CDI Event	Positive laboratory test result for CDI toxin A and/or toxin B or the detection of toxin-producing CDI organisms by culture or laboratory test on stool specimen.
Neonatal Units	Hospital units which specialize in care of infants requiring additional support.
Observed Hospital-Onset Infection	Infections that occurred after admission to the hospital.
Predicted Infection	Infections that are predicted to happen. Predicted infections are calculated based on national HAI aggregate data and adjusted for facility. Logistic regression or negative binomial regression models may be used.
SIR	Summary measure used to track HAIs over time. An SIR value greater than 1.0 indicates that more HAIs occurred than were predicted while an SIR value less than 1.0 indicates that fewer HAIs occurred than were predicted. SIR is not calculated when the number of predicted infections is fewer than 1.0.

Resources

Resource	Location
CDC *C. diff* Guidelines and Prevention Resources	http://www.cdc.gov/hai/organisms/cdiff/Cdiff_settings.html
CDC Measure Definition/Specification	https://www.cdc.gov/nhsn/PDFs/pscManual/12pscMDRO_CDADcurrent.pdf
NHSN SIR Guide	https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/nhsn-sir-guide.pdf

CDI Rate

NHSN

	Description
Numerator	Observed hospital-onset CDI lab identified events among all inpatients in the facility
Denominator	Patient days (facility-wide)
Exclusions	Exclude neonatal units
Rate Calculation	(Numerator/Denominator) x 10,000
Data Source(s)	NHSN
Baseline Period	CY 2019

Definitions

Element	Definition
CDI Event	Positive laboratory test result for CDI toxin A and/or toxin B or the detection of toxin-producing CDI organisms by culture or laboratory test on stool specimen.
Neonatal Units	Hospital units which specialize in care of infants requiring additional support.
Patient Days	The sum of the number of patients in the facility on each day of the month.

Resources

Resource	Location
CDC *C. diff* Guidelines and Prevention Resources	http://www.cdc.gov/hai/organisms/cdiff/Cdiff_settings.html
CDC Measure Definition/Specification	https://www.cdc.gov/nhsn/PDFs/pscManual/12pscMDRO_CDADcurrent.pdf

Hand Hygiene Adherence Rate

Self-Reported (Optional)

	Description
Numerator	Hand hygiene performed consistent with guidelines
Denominator	Hand-hygiene observation opportunities
Rate Calculation	Numerator/Denominator
Data Source(s)	Self-Reported
Baseline Period	CY 2019

Definitions

Element	Definition
Hand Hygiene Guidelines	Hand hygiene guidelines include the following: 1. Use of gloves when entering patient rooms and during care, and 2. Performance of hand hygiene with alcohol-based hand sanitizer or soap and water after removing gloves.
Hand Hygiene Observation Opportunities	Total number of times a provider performs or has the opportunity to perform hand hygiene.

Resources

Resource	Location
CDC Hand Hygiene Guidelines	https://www.cdc.gov/cdiff/clinicians/faq.html#:~:text=Use%20gloves%20when%20entering%20patients,than%20alcohol%2Dbased%20hand%20rubs.
CDC Information for Clinicians about *C. diff*	https://www.cdc.gov/cdiff/clinicians/index.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fhai%2Forganisms%2Fcdiff%2Fcdiff_clinicians.html

MRSA SIR

NHSN

	Description
Numerator	Observed hospital-onset MRSA lab identified events among all inpatients in the facility
Denominator	Predicted cases of patients with MRSA (facility-wide)
Rate Calculation	SIR: Numerator/Denominator
Data Source(s)	NHSN
Baseline Period	CY 2019

Definitions

Element	Definition
MRSA Infection	Staphylococcus aureus infection that is resistant to certain antibiotics.
Observed MRSA Event	MRSA infections that occurred as a result of hospital admission.
Predicted MRSA Event	MRSA infections as a result of hospital admission that were predicted to occur at the facility.
SIR	Summary measure used to track HAIs over time. An SIR value greater than 1.0 indicates that more HAIs occurred than were predicted while an SIR value less than 1.0 indicates that fewer HAIs occurred than were predicted. SIR is not calculated when the number of predicted infections is fewer than 1.0.

Resources

Resource	Location
CDC Measure Specification	https://www.cdc.gov/nhsn/PDFs/pscManual/12pscMDRO_CDADcurrent.pdf
CDC Overview of MRSA Surveillance	https://www.cdc.gov/nhsn/PDFs/Overview_MRSA_Surveillance_Final12_08.pdf
NHSN SIR Guide	https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/nhsn-sir-guide.pdf

MRSA Rate

NHSN

	Description
Numerator	Observed hospital-onset MRSA lab identified events among all inpatients in the facility
Denominator	Patient days (facility-wide)
Rate Calculation	(Numerator/Denominator) x 1,000
Data Source(s)	NHSN
Baseline Period	CY 2019

Definitions

Element	Definition
MRSA Infection	Staphylococcus aureus infection that is resistant to certain antibiotics.
Observed MRSA Event	MRSA infections that occurred as a result of hospital admission.
Patient Days	The sum of the number of patients in the facility on each day of the month.

Resources

Resource	Location
CDC Measure Specification	https://www.cdc.gov/nhsn/PDFs/pscManual/12pscMDRO_CDADcurrent.pdf
CDC Overview of MRSA Surveillance	https://www.cdc.gov/nhsn/PDFs/Overview_MRSA_Surveillance_Final12_08.pdf
CDC Preventing the Spread of MRSA	https://www.cdc.gov/mrsa/healthcare/index.html

Sepsis and Septic Shock

Postoperative Sepsis Rate (PSI-13)

Claims

	Description
Numerator	Discharges with a secondary diagnosis codes for sepsis
Denominator	Elective surgical discharges for operating room procedures for patients ages 18 years and older
Denominator Exclusions	Exclude cases with any of the following from the denominator: 1. Principle diagnosis of sepsis (or secondary diagnosis of sepsis POA), or 2. Principle diagnosis of infection (or secondary diagnosis of infection POA), or 3. MDC 14 (pregnancy, childbirth, puerperium).
Rate Calculation	(Numerator/Denominator) x 1,000
Data Source(s)	Medicare FFS Part A claims
Baseline Period	CY 2019

Definitions

Element	Definition
Discharges	Discharges are claims for inpatient stays that are from one of our recruited hospitals.
Elective Surgical Discharge	Discharge for procedure that is scheduled in advance and not emergent. See the Surgical_Discharges tab in the Reference Codes excel sheet for the codes used to identify surgical discharges. Elective surgical discharges are defined by specific MS-DRG codes with an admission type recorded as elective.
Infection Diagnosis	See the Infection_Diagnosis tab in the Reference Codes excel for the codes used to identify infection.
MDC 14	See the MDC_14 tab in the Reference Codes excel for codes used to identify MDC 14.
Operating Room Procedures	See the OR_Procedures tab in the Reference Codes excel for the codes used to identify operating room procedures.
POA	For a diagnosis code to be considered POA, the POA flag must indicate "Yes."
Sepsis Diagnosis	See the Sepsis tab in the Reference Codes excel for the codes used to identify sepsis.

Resources

Resource	Location
AHRQ Measure Specification	https://www.qualityindicators.ahrq.gov/Downloads/Modules/PSI/V2020/TechSpecs/PSI_13_Postoperative_Sepsis_Rate.pdf

Resource	Location
Sepsis Diagnosis Codes	https://www.qualityindicators.ahrq.gov/Downloads/Modules/PSI/V2020/TechSpecs/PSI_13_Postoperative_Sepsis_Rate.pdf
Surviving Sepsis Campaign	http://www.survivingsepsis.org/Pages/default.aspx

Overall Sepsis Rate

Claims

	Description
Numerator	Primary or secondary diagnosis of sepsis, not POA
Denominator	Admission to a hospital with any diagnosis
Rate Calculation	(Numerator/Denominator) x 1,000
Data Source(s)	Medicare FFS Part A claims
Baseline Period	CY 2019

Definitions

Element	Definition
Admission	Admission records with the type of claim identified as "inpatient" that are from one of our recruited hospitals.
Not POA	For an ICD-10-CM diagnosis code to be considered not POA, the POA flag must indicate "No" or "Unknown" (often notated as "N" or "U")—qualifying a patient for the measure numerator.
Sepsis Diagnosis	See the Sepsis tab in the Reference Codes excel for the codes used to identify sepsis.

Resources

Resource	Location
Sepsis Diagnosis Codes	https://www.qualityindicators.ahrq.gov/Downloads/Modules/PSI/V2020/TechSpecs/PSI_13_Postoperative_Sepsis_Rate.pdf
Surviving Sepsis Campaign	http://www.survivingsepsis.org/Pages/default.aspx

Sepsis Bundle Compliance (SEP-1)

Self-Reported (Optional)

	Description
Numerator	Sepsis patients who receive all elements of the bundle
Denominator	Adult inpatients with principal or other diagnosis code of sepsis, severe sepsis, or septic shock
Denominator Exclusions	Exclude any of the following from the denominator: 1. Severe sepsis is not present, or 2. Patients transferred in from another facility, or 3. Patients receiving IV antibiotics for more than 24 hours prior to presentation of severe sepsis, or 4. Patients with a Directive for Comfort Care or Palliative Care within 3 hours of presentation of severe sepsis or septic shock, or 5. Patients with an Administrative Contraindication for Care within 6 hours of presentation of severe sepsis or septic shock, or 6. Patients with septic shock or severe sepsis who are discharged within 6 hours of presentation, or 7. Patients with length of stay > 120 days, or 8. Patients included in a clinical trial
Rate Calculation	Numerator/Denominator
Data Source(s)	Self-Reported
Baseline Period	CY 2019

Definitions

Element	Definition
Sepsis Bundle	Components of the sepsis bundle include the following: 1. Initial lactate levels, and 2. Blood cultures, and 3. Antibiotics, and 4. Fluid resuscitation, and 5. Repeat lactate level, and 6. Vasopressors, and 7. Volume status and tissue perfusion reassessment.

Resources

Resource	Location
CMS Sepsis and Septic: Management Bundle	https://cmit.cms.gov/CMIT_public/ReportMeasure?measureRevisionId=300
Surviving Sepsis Bundle	https://journals.lww.com/ccmjournal/Fulltext/2017/03000/A_Users__Guide_to_the_2016_Surviving_Sepsis.1.aspx
Surviving Sepsis Campaign	http://www.survivingsepsis.org/Pages/default.aspx

30-Day Unplanned Sepsis Readmissions

Claims

	Description
Numerator	Patients that are readmitted to an acute care hospital or CAH within 30 days of discharge
Denominator	Inpatient discharges for beneficiaries diagnosed with sepsis
Numerator Exclusions	Exclude planned admissions
Denominator Exclusions	Exclude expired patients, AMA, and transfers during hospital stay
Rate Calculation	Numerator/Denominator
Data Source(s)	Medicare FFS Part A claims
Baseline Period	CY 2019

Definitions

Element	Definition
AMA	Discharge status code = 07 (left against medical advice or discontinued care).
Discharges	Discharges are claims for inpatient stays that are from one of our recruited hospitals.
Expired Patients	Discharge status code = 20, 40, 41, or 42 (patients that expire during hospital stay).
Planned Hospitalization	Planned hospitalizations are excluded from this measure. There are three different criteria that will flag an admission as planned: 1. Admission for bone marrow, kidney, or other organ transplant (see the PR1 codes in the Planned_Hospitalization tab in the Reference Codes excel), or 2. Admission for maintenance chemotherapy or rehabilitation (see the PR2 codes in the Planned_Hospitalization tab in the Reference Codes excel), or 3. Admission includes a potentially planned procedure (see the PR3 codes in the Planned_Hospitalization tab in the Reference Codes excel), excluding those that are acute or a complication of care (see the PR4 codes in the Planned_Hospitalization tab in the Reference Codes excel).
Readmission	An admission to a short term (general or specialty) hospital (0001 to 0899 for the last four digits of CCN) or CAH (1300 to 1399 for the last four digits of CCN) that occurred within 30 days of an index discharge. Each hospital admission within 30 days following an index discharge is considered a readmission (e.g., a beneficiary with four readmissions in the measurement period counts as four separate readmissions).
Sepsis Diagnosis	See the Sepsis tab in the Reference Codes excel for the codes used to identify sepsis.

Element	Definition
Transfers	Admissions to a short term (general or specialty) hospital (0001 to 0899 for the last four digits of CCN) or CAH (1300 to 1399 for the last four digits of CCN) within one day of discharge from another hospital are considered transfers. For patients transferred from one to another, only the last admission in the transfer chain is included. For example, if a patient is admitted to Hospital A, transferred to Hospital B within one day, and then discharged from Hospital B, only the Hospital B discharge would count toward the denominator.

Resources

Resource	Location
2020 All-Cause Hospital Readmission Specifications	https://www.qualitynet.org/inpatient/measures/readmission/methodology
CMS CCN Guide	https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/SurveyCertificationGenInfo/Downloads/Survey-and-Cert-Letter-16-09.pdf
Discharge Status Codes	https://www.resdac.org/cms-data/variables/patient-discharge-status-code-ffs
Sepsis Diagnosis Codes	https://www.qualityindicators.ahrq.gov/Downloads/Modules/PSI/V2020/TechSpecs/PSI_13_Postoperative_Sepsis_Rate.pdf
Surviving Sepsis Campaign	http://www.survivingsepsis.org/Pages/default.aspx

30-Day Sepsis Mortality

Claims

	Description
Numerator	All-cause deaths within 30 days of the start of the index admission
Denominator	Index admissions with a principal diagnosis of sepsis
Denominator Exclusions	Exclude AMA, hospice patients, and transfers during hospital stay
Rate Calculation	Numerator/Denominator
Data Source(s)	Medicare FFS Part A claims; BIC
Baseline Period	CY 2019

Definitions

Element	Definition
Admission	Admission records with the type of claim identified as "inpatient" that are from one of our recruited hospitals.
AMA	Discharge status code = 07 (left against medical advice or discontinued care).
Deceased Patients	Patients who died within 30 days of admission for any reason.
Hospice Patients	See the Hospice tab in the Reference Codes excel for the codes used to identify hospice patients.
Sepsis Diagnosis	See the Sepsis tab in the Reference Codes excel for the codes used to identify sepsis.
Transfers	Admissions to a short term (general or specialty) hospital (0001 to 0899 for the last four digits of CCN) or CAH (1300 to 1399 for the last four digits of CCN) within one day of discharge from another hospital are considered transfers. For patients transferred from one hospital to another, only the first admission in the transfer chain is included. For example, if a patient is admitted to Hospital A, transferred to Hospital B within one day, and then discharged from Hospital B, only the Hospital A admission would count toward the denominator.

Resources

Resource	Location
CMS Mortality Measures Methodology	Adapted from: https://qualitynet.cms.gov/inpatient/measures/mortality/methodology
Sepsis Diagnosis Codes	https://www.qualityindicators.ahrq.gov/Downloads/Modules/PSI/V2020/TechSpecs/PSI_13_Postoperative_Sepsis_Rate.pdf
Surviving Sepsis Campaign	http://www.survivingsepsis.org/Pages/default.aspx

Pressure Ulcers

HAPI Stage 3 or Greater (PSI-3)

Claims

	Description
Numerator	Discharges with any secondary diagnosis codes for pressure ulcer stage III or IV (or unstageable)
Denominator	Surgical or medical discharges, for patients ages 18 years and older
Exclusions	Exclude cases with any of the following from the denominator: 1. LOS of less than three days, or 2. Principle diagnosis code for pressure ulcer stage III or IV (or unstageable) or deep tissue injury, or 3. All secondary diagnosis codes for pressure ulcer stage III or IV (or unstageable) or deep tissue injury POA (if more than one diagnosis of pressure ulcer is present, all diagnoses must be POA for the discharge to be excluded), or 4. Diagnosis code for severe burns ($\geq$ 20% body surface area), or 5. Diagnosis code for exfoliative disorders of the skin ($\geq$ 20% body surface area), or 6. MDC 14 (pregnancy, childbirth, and puerperium)
Rate Calculation	(Numerator/Denominator) x 1,000
Data Source(s)	Medicare FFS Part A claims
Baseline Period	CY 2019

Definitions

Element	Definition
Discharges	Discharge records with the type of claim identified as "inpatient" that are from one of our recruited hospitals.
Exfoliative Disorders	See Exfoliative_Disorders in the Reference Codes excel for codes used to identify exfoliative disorders.
LOS	The total number of days which the patient was admitted to the hospital.
MDC 14	See the MDC_14 tab in the Reference Codes excel for codes used to identify MDC 14.
Medical and Surgical Discharges	See the Medical_Discharges and Surgical_Discharges tabs in the Reference Codes excel for codes used to identify medical and surgical discharges.
POA	For a diagnosis code to be considered POA, the POA flag must indicate "Yes."
Pressure Ulcer or Deep Tissue Injury	See the Pressure_Ulcer tab in the Reference Codes excel for the codes used to identify unstageable, stage III, or stage IV pressure ulcers and deep tissue injuries.
Severe Burns	See the Burns tab in the Reference Codes excel for codes used to identify severe burns.

Resources

Resource	Location
AHRQ Measure Specification	https://qualityindicators.ahrq.gov/Downloads/Modules/PSI/V2020/TechSpecs/PSI_03_Pressure_Ulcer_Rate.pdf
AHRQ Pressure Ulcer Prevention Resources	https://www.ahrq.gov/patient-safety/settings/hospital/resource/pressureulcer/tool/put5.html

Pressure Ulcer Prevalence Hospital Acquired Stage 2+

Self-Reported/NDNQI® (Optional)

	Description
Numerator	Patients that have at least one category/stage II or greater hospital-acquired pressure ulcer
Denominator	All patients 18 years of age or older
Rate Calculation	(Numerator/Denominator) x 1,000
Data Source(s)	Self-Reported/NDNQI
Baseline Period	CY 2019

Definitions

Element	Definition
Stage II Pressure Ulcer	Pressure ulcer characterized by partial-thickness skin loss or exposed dermis.
Stage III Pressure Ulcer	Pressure ulcer characterized by full-thickness skin loss.
Stage IV Pressure Ulcer	Pressure ulcer characterized by full-thickness skin loss and tissue loss.

Resources

Resource	Location
AHRQ Pressure Ulcer Toolkit	https://www.ahrq.gov/patient-safety/settings/hospital/resource/pressureulcer/tool/put5.html
NPIAP—Pressure Injury Stages	https://cdn.ymaws.com/npiap.com/resource/resmgr/online_store/npiap_pressure_injury_stages.pdf

Pressure Ulcer Risk Assessment Completed Within 24 Hours of Admission

Self-Reported (Optional)

	Description
Numerator	Inpatients with documentation in medical records of a complete pressure-ulcer risk assessment within 24 hours of admission
Denominator	All adult inpatients admitted to hospital
Rate Calculation	Numerator/Denominator
Data Source(s)	Self-Reported
Baseline Period	CY 2019

Definitions

Element	Definition
Pressure Ulcer Risk Assessment	Skin assessment used to identify risk of developing pressure ulcers. Standardized pressure ulcer risk assessments include the following: 1. Braden Scale 2. Norton Scale 3. Other standardized pressure ulcer risk assessment

Resources

Resource	Location
AHRQ Pressure Ulcer Risk Assessment	https://www.ahrq.gov/patient-safety/settings/hospital/resource/pressureulcer/tool/pu7b.html#Tool3A

Hospital-Acquired Pressure Ulcer Rate—All Stages

Claims

	Description
Numerator	Total number of pressure ulcers (any stage) identified after admission
Denominator	Total number of discharges, with pressure ulcer not POA
Rate Calculation	(Numerator/Denominator) x 1,000
Data Source(s)	Medicare FFS Part A claims
Baseline Period	CY 2019

Definitions

Element	Definition
Discharges	Discharges are claims for inpatient stays that are from one of our recruited hospitals.
Not POA	For an ICD-10-CM diagnosis code to be considered not POA, the POA flag must indicate "No" or "Unknown" (often notated as "N" or "U") – qualifying a patient for the measure numerator.
Pressure Ulcers	See the HAPU_Rate tab in the Reference Codes excel for the codes used to identify pressure ulcers.

Resources

Resource	Location
AHRQ Pressure Ulcer Toolkit	https://www.ahrq.gov/patient-safety/settings/hospital/resource/pressureulcer/tool/put5.html
NPIAP – Pressure Injury Stages	https://cdn.ymaws.com/npiap.com/resource/resmgr/online_store/npiap_pressure_injury_stages.pdf

SSI

Colon SSI SIR

NHSN

	Description
Numerator	Observed colon SSIs
Denominator	Predicted colon SSIs
Rate Calculation	SIR: Numerator/Denominator
Data Source(s)	NHSN
Baseline Period	CY 2019

Definitions

Element	Definition
Observed Infection	Infections that occurred after surgical procedure of the colon.
Predicted Infection	Infections that are predicted to happen. Predicted infections are calculated based on national HAI aggregate data and adjusted for facility. Logistic regression or negative binomial regression models may be used.
SIR	Summary measure used to track HAIs over time. An SIR value greater than 1.0 indicates that more HAIs occurred than were predicted while an SIR value less than 1.0 indicates that fewer HAIs occurred than were predicted. SIR is not calculated when the number of predicted infections is fewer than 1.0.

Resources

Resource	Location
CDC Measure Specification	https://www.cdc.gov/nhsn/pdfs/pscmanual/9pscssicurrent.pdf
CDC Surveillance for SSI Events	https://www.cdc.gov/nhsn/acute-care-hospital/SSI/index.html
CDC—Using the "SIR-Complex 30-Day SSI Data for Hospital IQR" Output Option	https://www.cdc.gov/nhsn/pdfs/cms/ssi/cms-ipps-ssi-sir.pdf
NHSN SIR Guide	https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/nhsn-sir-guide.pdf
NQF SSI Measure	http://www.qualityforum.org/QPS/MeasureDetails.aspx?standardID=218&print=1&entityTypeID=1

Colon SSI Rate

NHSN

	Description
Numerator	Colon SSIs
Denominator	Patients having an NHSN operative colon procedure
Rate Calculation	Numerator/Denominator
Data Source(s)	NHSN
Baseline Period	CY 2019

Definitions

Element	Definition
Colon SSI	Infection incurred after surgical procedure of the colon.
Operative Colon Procedure	Surgical procedure of the colon in which at least one incision is made through the skin or mucus membrane which is performed in an OR.

Resources

Resource	Location
CDC Measure Specification	https://www.cdc.gov/nhsn/pdfs/pscmanual/9pscssicurrent.pdf
CDC Surveillance for SSI Events	https://www.cdc.gov/nhsn/acute-care-hospital/SSI/index.html

Abdominal Hysterectomy SSI SIR

NHSN

	Description
Numerator	Observed abdominal hysterectomy SSIs
Denominator	Predicted abdominal hysterectomy SSIs
Rate Calculation	SIR: Numerator/Denominator
Data Source(s)	NHSN
Baseline Period	CY 2019

Definitions

Element	Definition
Observed Infection	Infections that occurred after abdominal hysterectomy procedure.
Predicted Infection	Infections that are predicted to happen. Predicted infections are calculated based on national HAI aggregate data and adjusted for facility. Logistic regression or negative binomial regression models may be used.
SIR	Summary measure used to track HAIs over time. An SIR value greater than 1.0 indicates that more HAIs occurred than were predicted while an SIR value less than 1.0 indicates that fewer HAIs occurred than were predicted. SIR is not calculated when the number of predicted infections is fewer than 1.0.

Resources

Resource	Location
CDC Measure Specification	https://www.cdc.gov/nhsn/pdfs/pscmanual/9pscssicurrent.pdf
CDC Surveillance for SSI Events	https://www.cdc.gov/nhsn/acute-care-hospital/SSI/index.html
NHSN SIR Guide	https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/nhsn-sir-guide.pdf

Abdominal Hysterectomy SSI Rate

NHSN

	Description
Numerator	Abdominal hysterectomy SSIs
Denominator	Patients having an NHSN operative abdominal hysterectomy procedure
Rate Calculation	Numerator/Denominator
Data Source(s)	NHSN
Baseline Period	CY 2019

Definitions

Element	Definition
Abdominal Hysterectomy SSI	Infections incurred during abdominal hysterectomy.
Operative Hysterectomy Procedure	Surgical procedure to remove the uterus in which at least one incision is made through the skin or mucus membrane which is performed in an OR.

Resources

Resource	Location
CDC Measure Specification	https://www.cdc.gov/nhsn/pdfs/pscmanual/9pscssicurrent.pdf
CDC Surveillance for SSI Events	https://www.cdc.gov/nhsn/acute-care-hospital/SSI/index.html

Total Hip Replacement SSI SIR

NHSN

	Description
Numerator	Observed total hip replacement SSIs
Denominator	Predicted total hip replacement SSIs
Rate Calculation	SIR: Numerator/Denominator
Data Source(s)	NHSN
Baseline Period	CY 2019

Definitions

Element	Definition
Observed Infection	Infections that occurred after total hip replacement procedure.
Predicted Infection	Infections that are predicted to happen. Predicted infections are calculated based on national HAI aggregate data and adjusted for facility. Logistic regression or negative binomial regression models may be used.
SIR	Summary measure used to track HAIs over time. An SIR value greater than 1.0 indicates that more HAIs occurred than were predicted while an SIR value less than 1.0 indicates that fewer HAIs occurred than were predicted. SIR is not calculated when the number of predicted infections is fewer than 1.0.
SSI Model	The NHSN Complex A/R SSI Model is used to calculate Total Hip Replacement SSIs. The Complex A/R SSI Model includes all NHSN procedure categories, procedures in patients $\geq$ 18 years old, inpatient procedures only, and deep incisional primary SSIs.

Resources

Resource	Location
CDC Measure Specification	https://www.cdc.gov/nhsn/pdfs/pscmanual/9pscssicurrent.pdf
CDC Surveillance for SSI Events	https://www.cdc.gov/nhsn/acute-care-hospital/SSI/index.html
NHSN SIR Guide	https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/nhsn-sir-guide.pdf

Total Hip Replacement SSI Rate

NHSN

	Description
Numerator	Total hip replacement SSIs
Denominator	Patients having an NHSN operative total hip replacement procedure
Rate Calculation	Numerator/Denominator
Data Source(s)	NHSN
Baseline Period	CY 2019

Definitions

Element	Definition
Operative Total Hip Replacement Procedure	Surgical procedure to replace the hip joint with a prosthesis in which at least one incision is made through the skin or mucus membrane which is performed in an OR.
SSI Model	The NHSN Complex A/R SSI Model is used to calculate Total Hip Replacement SSIs. The Complex A/R SSI Model includes all NHSN procedure categories, procedures in patients $\geq$ 18 years old, inpatient procedures only, and deep incisional primary SSIs.
Total Hip Replacement SSI	Infections incurred during hip replacement surgery.

Resources

Resource	Location
CDC Measure Specification	https://www.cdc.gov/nhsn/pdfs/pscmanual/9pscssicurrent.pdf
CDC Surveillance for SSI Events	https://www.cdc.gov/nhsn/acute-care-hospital/SSI/index.html

Total Knee Replacement SSI SIR

NHSN

	Description
Numerator	Observed total knee replacement SSIs
Denominator	Predicted total knee replacement SSIs
Rate Calculation	SIR: Numerator/Denominator
Data Source(s)	NHSN
Baseline Period	CY 2019

Definitions

Element	Definition
Observed Infection	Infections that occurred after total knee replacement procedure.
Predicted Infections	Infections that are predicted to happen. Predicted infections are calculated based on national HAI aggregate data and adjusted for facility. Logistic regression or negative binomial regression models may be used.
SIR	Summary measure used to track HAIs over time. An SIR value greater than 1.0 indicates that more HAIs occurred than were predicted while an SIR value less than 1.0 indicates that fewer HAIs occurred than were predicted. SIR is not calculated when the number of predicted infections is fewer than 1.0.
SSI Model	The NHSN Complex A/R SSI Model is used to calculate Total Hip Replacement SSIs. The Complex A/R SSI Model includes all NHSN procedure categories, procedures in patients $\geq$ 18 years old, inpatient procedures only, and deep incisional primary SSIs.

Resources

Resource	Location
CDC Measure Specification	https://www.cdc.gov/nhsn/pdfs/pscmanual/9pscssicurrent.pdf
CDC Surveillance for SSI Events	https://www.cdc.gov/nhsn/acute-care-hospital/SSI/index.html
NHSN SIR Guide	https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/nhsn-sir-guide.pdf

Total Knee Replacement SSI Rate

NHSN

	Description
Numerator	Total knee replacement SSIs
Denominator	Patients having an NHSN operative total knee replacement procedure
Rate Calculation	Numerator/Denominator
Data Source(s)	NHSN
Baseline Period	CY 2019

Definitions

Element	Definition
Operative Total Knee Replacement Procedure	Surgical procedure to replace the knee joint with a prosthesis in which at least one incision is made through the skin or mucus membrane which is performed in an OR.
SSI Model	The NHSN Complex A/R SSI Model is used to calculate Total Hip Replacement SSIs. The Complex A/R SSI Model includes all NHSN procedure categories, procedures in patients $\geq$ 18 years old, inpatient procedures only, and deep incisional primary SSIs.
Total Knee Replacement SSI	Infections incurred during knee replacement surgery.

Resources

Resource	Location
CDC Measure Specification	https://www.cdc.gov/nhsn/pdfs/pscmanual/9pscssicurrent.pdf
CDC Surveillance for SSI Events	https://www.cdc.gov/nhsn/acute-care-hospital/SSI/index.html

Peri-Operative Care: Discontinuation of Prophylactic Parenteral Antibiotics (Non-Cardiac Procedures)

Self-Reported (Optional)

	Description
Numerator	Non-cardiac surgical patients who have an order for discontinuation of prophylactic parenteral antibiotics within 24 hours of surgical end time
Denominator	Non-cardiac surgical patients 18 years of age or older undergoing procedures with indications for prophylactic parenteral antibiotics and who received a prophylactic parenteral antibiotic
Rate Calculation	Numerator/Denominator
Data Source(s)	Self-Reported
Baseline Period	CY 2019

Definitions

Element	Definition
Prophylactic Parenteral Antibiotics	Antibiotics initiated prior to surgery that are intended to prevent SSIs.

Resources

Resource	Location
CMS Measure Guidelines	https://cmit.cms.gov/CMIT_public/ReportMeasure?measureRevisionId=82

VTE

VTE Postoperative PE or DVT Rate (PSI-12)

Claims

	Description
Numerator	Surgical patients with secondary diagnosis of postoperative PE or DVT
Denominator	Surgical discharges for patients ages 18 and older with an operating room procedure code
Exclusions	Exclude cases with any of the following from the denominator: 1. Principle diagnosis code or secondary diagnosis POA for proximal DVT, or 2. Principle diagnosis code or secondary diagnosis POA for PE, or 3. Procedure for interruption of vena cava occurs before or on the same day as the first operating room procedure, or 4. Only operating room procedure was for interruption of vena cava, 5. Any diagnosis code POA for acute brain or spinal injury, or 6. Any procedure code for ECMO, or 7. Procedure for pulmonary arterial thrombectomy occurs before or on the same day as the first operating room procedure, or 8. Only operating room procedure was pulmonary arterial thrombectomy, or 9. MDC 14 (pregnancy, childbirth, and puerperium)
Rate Calculation	(Numerator/Denominator) x 1,000
Data Source(s)	Medicare FFS Part A claims
Baseline Period	CY 2019

Definitions

Element	Definition
Acute Brain or Spinal Surgery	See the Brain_Spine tab in the Reference Codes excel for the codes used to identify acute brain or spinal surgeries.
DVT	See the DVT tab in the Reference Codes excel for the codes used to identify DVTs.
ECMO	See the ECMO tab in the Reference Codes excel for the codes used to identify ECMO procedures.
MDC 14	See the MDC_14 tab in the Reference Codes excel for codes used to identify MDC 14.
Operating Room Procedures	See the OR_Procedures tab in the Reference Codes excel for the codes used to identify operating room procedures.
PE	See the Pulmonary_Embolism tab in the Reference Codes excel for codes used to identify PEs.
POA	For an ICD-10-CM diagnosis code to be considered POA, the POA flag must indicate "Yes."

Element	Definition
Pulmonary Arterial Thrombectomy	See the Thrombectomy tab in the Reference Codes excel for codes used to identify pulmonary arterial thrombectomy.
Surgical Discharge	Surgical discharges are defined by specific DRGs and MS-DRGs with a procedure code for an operating room procedure. See the Surgical_Discharges tab in the Reference Codes excel sheet for the codes used to identify surgical discharges.
Vena Cava	See the Vena_Cava tab in the Reference Codes excel for the codes used to identify interruption of vena cava.

Resources

Resource	Location
AHRQ Measure Specification	https://www.qualityindicators.ahrq.gov/Downloads/Modules/PSI/V2020/TechSpecs/PSI_12_Perioperative_Pulmonary_Embolism_or_Deep_Vein_Thrombosis_Rate.pdf

VTE Prophylaxis

Self-Reported (Optional)

	Description
Numerator	Patients who received VTE prophylaxis (or have documentation for why no VTE prophylaxis was given): Surgery inpatients should receive VTE prophylaxis the day of or the day after surgery (for surgeries that start the day of or the day after hospital admission). All other inpatients should receive VTE prophylaxis the day of or day after hospital admission.
Denominator	All patients
Rate Calculation	Numerator/Denominator
Data Source(s)	Self-Reported
Baseline Period	CY 2019

Definitions

Element	Definition
VTE Prophylaxis	Interventions designed to reduce the risk of thromboembolism. These interventions can include anticoagulation and/or compression.

Resources

Resource	Location
AHRQ Preventing Hospital-Associated Venous Thromboembolism	https://www.ahrq.gov/sites/default/files/publications/files/vteguide.pdf

VAE

VAC Rate

NHSN

	Description
Numerator	Events that meet the criteria of VAC; including those that meet the criteria for IVAC and PVAP
Denominator	Ventilator days for each location under surveillance
Rate Calculation	(Numerator/Denominator) x 1,000
Data Source(s)	NHSN
Baseline Period	CY 2019

Definitions

Element	Definition
IVAC	Complications that are a result of infectious process caused by ventilator use.
Locations Under Surveillance	See the NHSN_Units_VAE tab in the Reference Codes excel for NHSN location codes used to identify locations under surveillance.
PVAP	Possible pneumonia infection which occurs after patient has been placed on ventilator.
VAC	Baseline period of stability or improvement on the ventilator followed by immediate indication of worsening oxygenation.
Ventilator Days	The sum of the number of patients on a ventilator in the facility on each day of the month.

Resources

Resource	Location
CDC Measure Specification	https://www.cdc.gov/nhsn/PDFs/pscManual/10-VAE_FINAL.pdf
CDC Surveillance for Ventilator Associated Events	https://www.cdc.gov/nhsn/acute-care-hospital/vae/index.html

VAC SIR

NHSN

	Description
Numerator	Observed events that meet the criteria of VAC; including those that meet the criteria for IVAC and PVAP
Denominator	Predicted VAC events for each location under surveillance
Rate Calculation	SIR: Numerator/Denominator
Data Source(s)	NHSN
Baseline Period	CY 2019

Definitions

Element	Definition
IVAC	Complications that are a result of infectious process caused by ventilator use.
Locations Under Surveillance	See the NHSN_Units_VAE tab in the Reference Codes excel for NHSN location codes used to identify locations under surveillance.
Observed Events	Events that occurred after ventilator placement.
Predicted Events	Events that are predicted to happen. Predicted events are calculated based on national VAE aggregate data and adjusted for facility. Logistic regression or negative binomial regression models may be used.
PVAP	Possible pneumonia infection which occurs after patient has been placed on ventilator.
SIR	Summary measure used to track HAIs over time. An SIR value greater than 1.0 indicates that more HAIs occurred than were predicted while an SIR value less than 1.0 indicates that fewer HAIs occurred than were predicted. SIR is not calculated when the number of predicted infections is fewer than 1.0.
VAC	Baseline period of stability or improvement on the ventilator followed by immediate indication of worsening oxygenation.

Resources

Resource	Location
CDC Measure Specification	https://www.cdc.gov/nhsn/PDFs/pscManual/10-VAE_FINAL.pdf
CDC Surveillance for Ventilator Associated Events	https://www.cdc.gov/nhsn/acute-care-hospital/vae/index.html

ICU Liberation Bundle Compliance

Self-Reported (Optional)

	Description
Numerator	Patients on a ventilator who were assessed with elements A–F of the ICU Liberation Bundle where all bundle elements were completed
Denominator	Patients on a ventilator
Rate Calculation	Numerator/Denominator
Data Source(s)	Self-Reported
Baseline Period	CY 2019

Definitions

Element	Definition
ICU Liberation Bundle	Guidelines used to care for critically ill patients. Elements of the bundle include the following: 1. Assess, prevent, and manage pain 2. Both SAT and SBT 3. Choice of analgesia and sedation 4. Delirium: Assess, prevent, and manage 5. Early mobility and exercise 6. Family engagement and empowerment

Resources

Resource	Location
Society of Critical Care Medicine ABCDEF Bundle	https://www.sccm.org/ICULiberation/ABCDEF-Bundles

Infection-Related VAC Rate

NHSN

	Description
Numerator	Events that meet the criteria of IVAC; including those that meet the criteria for possible/probable VAP
Denominator	Ventilator days for each location under surveillance
Rate Calculation	(Numerator/Denominator) x 1,000
Data Source(s)	NHSN
Baseline Period	CY 2019

Definitions

Element	Definition
IVAC	Complications including pneumonia, aspiration, VTE events, and sepsis which occur after a patient has been placed on a ventilator caused by infectious process.
Locations Under Surveillance	See the NHSN_Units_VAE tab in the Reference Codes excel for NHSN location codes used to identify locations under surveillance.
VAP	Pneumonia infection which occurs after patient has been placed on ventilator.
Ventilator Days	The sum of the number of patients on a ventilator in the facility on each day of the month.

Resources

Resource	Location
CDC Measure Specification	https://www.cdc.gov/nhsn/PDFs/pscManual/10-VAE_FINAL.pdf
CDC Surveillance for Ventilator Associated Events	https://www.cdc.gov/nhsn/acute-care-hospital/vae/index.html

Infection-Related VAC SIR

NHSN

	Description
Numerator	Observed events that meet the criteria of IVAC; including those that meet the criteria for possible/probable VAP
Denominator	Predicted events that meet the criteria of IVAC; including those that meet the criteria for possible/probable VAP
Rate Calculation	SIR: Numerator/Denominator
Data Source(s)	NHSN
Baseline Period	CY 2019

Definitions

Element	Definition
IVAC	Complications including pneumonia, aspiration, VTE events, and sepsis which occur after a patient has been placed on a ventilator caused by infectious process.
Locations Under Surveillance	See the NHSN_Units_VAE tab in the Reference Codes excel for NHSN location codes used to identify locations under surveillance.
Observed Events	Events that occurred after ventilator placement.
Predicted Events	Events that are predicted to happen. Predicted events are calculated based on national VAE aggregate data and adjusted for facility. Logistic regression or negative binomial regression models may be used.
SIR	Summary measure used to track HAIs over time. An SIR value greater than 1.0 indicates that more HAIs occurred than were predicted while an SIR value less than 1.0 indicates that fewer HAIs occurred than were predicted. SIR is not calculated when the number of predicted infections is fewer than 1.0.
VAP	Pneumonia infection which occurs after patient has been placed on ventilator.

Resources

Resource	Location
CDC Measure Specification	https://www.cdc.gov/nhsn/PDFs/pscManual/10-VAE_FINAL.pdf
CDC Surveillance for Ventilator Associated Events	https://www.cdc.gov/nhsn/acute-care-hospital/vae/index.html

PVAP Rate

NHSN

	Description
Numerator	Events that meet the criteria for PVAP
Denominator	Ventilator days for each location under surveillance
Rate Calculation	(Numerator/Denominator) x 1,000
Data Source(s)	NHSN
Baseline Period	CY 2019

Definitions

Element	Definition
Locations Under Surveillance	See the NHSN_Units_VAE tab in the Reference Codes excel for NHSN location codes used to identify locations under surveillance.
PVAP	Possible pneumonia infection which occurs after patient has been placed on ventilator.
Ventilator Days	The sum of the number of patients on a ventilator in the facility on each day of the month.

Resources

Resource	Location
CDC Measure Specification	https://www.cdc.gov/nhsn/PDFs/pscManual/10-VAE_FINAL.pdf
CDC Surveillance for Ventilator Associated Events	https://www.cdc.gov/nhsn/acute-care-hospital/vae/index.html

Falls

Inpatient Fall-Related Injuries

Claims

	Description
Numerator	Admissions with a diagnosis of fall or fall-related injury, not POA
Denominator	Admissions to a hospital with any diagnosis
Rate Calculation	(Numerator/Denominator) x 1,000
Data Source(s)	Medicare FFS Part A claims
Baseline Period	CY 2019

Definitions

Element	Definition
Admission	Admission records with the type of claim identified as "inpatient" that are from one of our recruited hospitals.
Falls	See the Falls_Related_Injuries tab in the Reference Codes excel for codes used to identify falls and fall-related injuries.
Not POA	For an ICD-10-CM diagnosis code to be considered not POA, the POA flag must indicate "No" or "Unknown" (often notated as "N" or "U")—qualifying a patient for the measure numerator.

Resources

Resource	Location
AHRQ—Preventing Falls in Hospitals	https://www.ahrq.gov/patient-safety/settings/hospital/fall-prevention/toolkit/measure-fall-rates.html
Fall-Related Injury Codes	Adapted from: Waters T, et al. Use of ICD-9-CM Codes to Identify Inpatient Fall-Related Injuries. J Am Geriatr Soc. 2013 Dec;61(12).

Falls with Injury

Self-Reported (Optional)

	Description
Numerator	Patient falls of injury level minor or greater (whether or not assisted by staff member)
Denominator	Inpatient days
Rate Calculation	(Numerator/Denominator) x 1,000
Data Source(s)	Self-reported
Baseline Period	CY 2019

Definitions

Element	Definition
Fall-Related Injuries	Falls with injury are categorized by the following: 1. None: Patient had no injuries (no signs or symptoms) resulting from the fall, if an x-ray, CT scan or other post fall evaluation results in a finding of no injury. 2. Minor: Resulted in application of a dressing, ice, cleaning of a wound, limb elevation, topical medication, bruise or abrasion. 3. Moderate: Resulted in suturing, application of steri-strips/skin glue, splinting or muscle/joint strain. 4. Major: Resulted in surgery, casting, traction, required consultation for neurological (basilar skull fracture, small subdural hematoma) or internal injury (rib fracture, small liver laceration) or patients with coagulopathy who receive blood products as a result of the fall. 5. Death: Patient died as a result of injuries sustained from the fall (not from physiologic events causing the fall.
Patient Days	The sum of the number of patients in the facility on each day of the month.

Resources

Resource	Location
NQF Falls with Injury Measure	http://www.qualityforum.org/Qps/MeasureDetails.aspx?standardID=1119&print=1&entityTypeID=1

Assessment of Fall Risk

Self-Reported (Optional)

	Description
Numerator	Patients that were assessed using the Algorithm for Fall Risk Assessment & Interventions within 24 hours of admission
Denominator	Inpatient adults
Rate Calculation	Numerator/Denominator
Data Source(s)	Self-Reported
Baseline Period	CY 2019

Definitions

Element	Definition
Inpatient Adults	The sum of the number of patients in the facility on each day of the month.

Resources

Resource	Location
AHRQ Preventing Falls in Hospitals	https://www.ahrq.gov/patient-safety/settings/hospital/fall-prevention/toolkit/index.html

Airway Safety

30-Day Unplanned Ventilator Readmissions

Claims

	Description
Numerator	Patients that are readmitted to an acute care hospital or CAH within 30 days of discharge
Denominator	Inpatient discharges for beneficiaries with a procedure code for respiratory ventilation during hospital stay
Numerator Exclusions	Exclude planned admissions
Denominator Exclusions	Exclude expired patients, AMA, and transfers during hospital stay
Rate Calculation	Numerator/Denominator
Data Source(s)	Medicare FFS Part A claims
Baseline Period	CY 2019

Definitions

Element	Definition
AMA	Discharge status code = 07 (left against medical advice or discontinued care).
Discharges	Discharges are claims for inpatient stays that are from one of our recruited hospitals.
Expired Patients	Discharge status code = 20, 40, 41, or 42 (patients that expire during hospital stay).
Planned Hospitalization	Planned hospitalizations are excluded from this measure. There are three different criteria that will flag an admission as planned: 1. Admission for bone marrow, kidney, or other organ transplant (see the PR1 codes in the Planned_Hospitalization tab in the Reference Codes excel), or 2. Admission for maintenance chemotherapy or rehabilitation (see the PR2 codes in the Planned_Hospitalization tab in the Reference Codes excel), or 3. Admission includes a potentially planned procedure (see the PR3 codes in the Planned_Hospitalization tab in the Reference Codes excel), excluding those that are acute or a complication of care (see the PR4 codes in the Planned_Hospitalization tab in the Reference Codes excel).
Readmission	An admission to a short term (general or specialty) hospital (0001 to 0899 for the last four digits of CCN) or CAH (1300 to 1399 for the last four digits of CCN) that occurred within 30 days of an index discharge. Each hospital admission within 30 days following an index discharge is considered a readmission (e.g., a beneficiary with four readmissions in the measurement period counts as four separate readmissions).

Element	Definition
Respiratory Ventilation	See the Resp_Ventilation tab in the Reference Codes excel for the codes used to identify respiratory ventilation.
Transfers	Admissions to a short term (general or specialty) hospital (0001 to 0899 for the last four digits of CCN) or CAH (1300 to 1399 for the last four digits of CCN) within one day of discharge from another hospital are considered transfers. For patients transferred from one to another, only the last admission in the transfer chain is included. For example, if a patient is admitted to Hospital A, transferred to Hospital B within one day, and then discharged from Hospital B, only the Hospital B discharge would count toward the denominator.

Resources

Resource	Location
2020 All-Cause Hospital Readmission Specifications	https://www.qualitynet.org/inpatient/measures/readmission/methodology
CMS CCN Guide	https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/SurveyCertificationGenInfo/Downloads/Survey-and-Cert-Letter-16-09.pdf
Discharge Status Codes	https://www.resdac.org/cms-data/variables/patient-discharge-status-code-ffs

30-Day Ventilator Mortality

Claims

	Description
Numerator	All-cause deaths within 30 days of the start of the index admission
Denominator	Index admissions with a procedure code for respiratory ventilation
Exclusions	Exclude AMA, hospice patients, and transfers during hospital stay
Rate Calculation	Numerator/Denominator
Data Source(s)	Medicare FFS Part A claims; BIC
Baseline Period	CY 2019

Definitions

Element	Definition
Admission	Admission records with the type of claim identified as "inpatient" that are from one of our recruited hospitals.
AMA	Discharge status code = 07 (left against medical advice or discontinued care).
Deceased Patients	Patients who died within 30 days of admission for any reason.
Hospice Patients	See the Hospice tab in the Reference Codes excel for the codes used to identify hospice patients.
Respiratory Ventilation	See the Resp_Ventilation tab in the Reference Codes excel for the codes used to identify respiratory ventilation.
Transfers	Admissions to a short term (general or specialty) hospital (0001 to 0899 for the last four digits of CCN) or CAH (1300 to 1399 for the last four digits of CCN) within one day of discharge from another hospital are considered transfers. For patients transferred from one hospital to another, only the first admission in the transfer chain is included. For example, if a patient is admitted to Hospital A, transferred to Hospital B within one day, and then discharged from Hospital B, only the Hospital A admission would count toward the denominator.

Resources

Resource	Location
CMS Mortality Measures Methodology	Adapted from: https://qualitynet.cms.gov/inpatient/measures/mortality/methodology

Airway Safety Checklist

Self-Reported (Optional)

	Description
Numerator	Hospitals reporting the use of an airway safety checklist
Denominator	Recruited hospitals
Rate Calculation	Numerator/Denominator
Data Source(s)	Self-Reported
Baseline Period	CY 2019

Definitions

Element	Definition
Airway Safety Checklist	Checklist used for airway management that is intended to prevent airway related harms.

Resources

Resource	Location
Patient Safety Movement Airway Safety Guidelines	https://patientsafetymovement.org/clinical/airway-safety/

Unplanned Extubation in Mechanically Ventilated Patients

Self-Reported (Optional)

	Description
Numerator	Unplanned extubations in patients mechanically ventilated via an endotracheal tube
Denominator	Mechanical ventilation days
Rate Calculation	Numerator/Denominator
Data Source(s)	Self-Reported
Baseline Period	CY 2019

Definitions

Element	Definition
Mechanical Ventilation Days	The sum of the number of patients that are mechanically ventilated via an endotracheal tube in the facility on each day of the month.

Resources

Resource	Location
Patient Safety Movement Unplanned Extubation Guidelines	https://patientsafetymovement.org/clinical/airway-safety/unplanned-extubation/

Diagnostic Error Related to Timeliness

Diagnostic Error Rate

Self-Reported (Optional)

	Description
Numerator	TBD
Denominator	TBD
Exclusions	TBD
Rate Calculation	TBD
Data Source(s)	Self-reported
Baseline Period	CY 2019

Goal 4: Increase Quality Care Transitions

Readmissions

30-Day Unplanned Hospital Readmissions

Claims

	Description
Numerator	Patients that are readmitted to an acute care hospital or CAH within 30 days of discharge
Denominator	Total inpatient discharges
Numerator Exclusions	Exclude planned admissions
Denominator Exclusions	Exclude expired patients, AMA, and transfers during hospital stay
Rate Calculation	Numerator/Denominator
Data Source(s)	Medicare FFS Part A claims
Baseline Period	CY 2019

Definitions

Element	Definition
AMA	Discharge status code = 07 (left against medical advice or discontinued care).
Discharges	Discharge records with the type of claim identified as "inpatient" that are from one of our recruited hospitals.
Expired Patients	Discharge status code = 20, 40, 41, or 42 (patients that expire during hospital stay).
Planned Hospitalization	Planned hospitalizations are excluded from this measure. There are three different criteria that will flag an admission as planned: 1. Admission for bone marrow, kidney, or other organ transplant (see the PR1 codes in the Planned_Hospitalization tab in the Reference Codes excel), or 2. Admission for maintenance chemotherapy or rehabilitation (see the PR2 codes in the Planned_Hospitalization tab in the Reference Codes excel), or 3. Admission includes a potentially planned procedure (see the PR3 codes in the Planned_Hospitalization tab in the Reference Codes excel), excluding those that are acute or a complication of care (see the PR4 codes in the Planned_Hospitalization tab in the Reference Codes excel).

Element	Definition
Readmission	An admission to a short term (general or specialty) hospital (0001 to 0899 for the last four digits of CCN) or CAH (1300 to 1399 for the last four digits of CCN) that occurred within 30 days of an index discharge. Each hospital admission within 30 days following an index discharge is considered a readmission (e.g., a beneficiary with four readmissions in the measurement period counts as four separate readmissions).

Resources

Resource	Location
2020 All-Cause Hospital Readmission Specifications	https://www.qualitynet.org/inpatient/measures/readmission/methodology
CMS CCN Guide	https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/SurveyCertificationGenInfo/Downloads/Survey-and-Cert-Letter-16-09.pdf
Discharge Status Codes	https://www.resdac.org/cms-data/variables/patient-discharge-status-code-ffs
Planned Hospitalization	https://www.qualitynet.org/inpatient/measures/readmission/methodology

♟♿ Patient and Family Engagement

Planning Checklist for Scheduled Admissions

Self-Attestation

	Description
Numerator	Facility has and utilizes a planning checklist for all scheduled admissions (e.g., elective surgeries) to prepare patients and families for the hospital stay and invite them to be an active partner in care
Denominator	Recruited hospitals
Rate Calculation	Numerator/Denominator
Data Source(s)	Self-Attestation

Definitions

Element	Definition
Measure Intent	For all scheduled admissions, hospital staff discuss a checklist of items to prepare patients and families for the hospital stay and invite them to be active partners in care.

Resources

Resource	Location
HQIC Contract	https://hsagonline.sharepoint.com/sites/HQIC/12SOW%20Resource%20Library/Attachment%20%231%20-%20Statement%20of%20Work%2009.18.2020.pdf.pdf

Discharge Planning Checklist

Self-Attestation

	Description
Numerator	Facility has and utilizes a discharge planning checklist that meets the CMS Conditions of Participation as per 42 CFR Parts 482, 484, and 485 [CMS-3317-F and CMS-3295-F]
Denominator	Recruited hospitals
Rate Calculation	Numerator/Denominator
Data Source(s)	Self-attestation

Definitions

Element	Definition
Measure Intent	Ensure that the patient and family are provided with the necessary information and demonstrated understanding prior to discharge.

Resources

Resource	Location
HQIC Contract	https://hsagonline.sharepoint.com/sites/HQIC/12SOW%20Resource%20Library/Attachment%20%231%20-%20Statement%20of%20Work%2009.18.2020.pdf.pdf

Shift Change Huddles or Bedside Reporting

Self-Attestation

	Description
Numerator	Facility holds shift huddles and bedside reporting on at least one unit that occurs at the bedside and includes the patient and/or family caregiver for all feasible cases
Denominator	Recruited hospitals
Rate Calculation	Numerator/Denominator
Data Source(s)	Self-attestation

Definitions

Element	Definition
Measure Intent	Include the patient and/or family caregiver in as many conversations about their care as possible throughout the hospital stay.

Resources

Resource	Location
HQIC Contract	https://hsagonline.sharepoint.com/sites/HQIC/12SOW%20Resource%20Library/Attachment%20%231%20-%20Statement%20of%20Work%2009.18.2020.pdf.pdf

Designated PFE Leader

Self-Attestation

	Description
Numerator	Facility has a designated individual(s) with leadership responsibility and accountability for PFE
Denominator	Recruited hospitals
Rate Calculation	Numerator/Denominator
Data Source(s)	Self-attestation

Definitions

Element	Definition
Measure Intent	Hospital has a designated individual (or individuals) with leadership responsibility and accountability for PFE.

Resources

Resource	Location
HQIC Contract	https://hsagonline.sharepoint.com/sites/HQIC/12SOW%20Resource%20Library/Attachment%20%231%20-%20Statement%20of%20Work%2009.18.2020.pdf.pdf

PFAC or Patient/Family Representatives on Hospital Committee

Self-Reported

	Description
Numerator	Facility has an active PFE Committee or other committees where patients are represented and report to the Board
Denominator	Recruited hospitals
Rate Calculation	Numerator/Denominator
Data Source(s)	Self-attestation

Definitions

Element	Definition
Measure Intent	Ensure that a hospital has a formal relationship with PFAs from the local community who provide input and guidance from the patient perspective on hospital operations, policies, procedures, and quality improvement efforts.

Resources

Resource	Location
HQIC Contract	https://hsagonline.sharepoint.com/sites/HQIC/12SOW%20Resource%20Library/Attachment%20%231%20-%20Statement%20of%20Work%2009.18.2020.pdf.pdf

Appendix: Definitions

Medicare Beneficiary Information

Medicare entitlement, enrollment, demographic information, and address information is obtained from the BIC. This replaces the denominator file provided in previous scopes of work. This information is utilized to determine FFS, Medicare Advantage (MA), dual, and Part D enrollment. Additional information on the BIC data can be found here: https://qnetconfluence.cms.gov/display/DATA/Data+Catalog under the Beneficiary and Provider Data table.

Medicare Claims Data

Part A claims are administrative claims from institutional providers and/or settings which are covered by the Medicare Part A benefit (e.g., hospital inpatient) as well as claims for institutional-based serviced covered by the Medicare Part B benefit (e.g., home health, hospital outpatient, etc.). The base file contains claim header information such as claim ID, beneficiary ID, claim type, from and through dates, facility ID, institutional provider, attending physician, operating physician, charge amounts, diagnoses, procedure codes, and DRGs. The revenue center file contains the line-level procedures for the claim such as claim line number, HCPCS, CPT, and revenue codes.

Part D claims are prescription drug events, with one record that represents a single prescription drug fill. The file contains specific information regarding the drug such as NDC, days' supply, service provider, pharmacy provider, and prescribing provider.

The data dictionary for Part A and Part D can be found here: https://www2.ccwdata.org/web/guest/data-dictionaries

Hospital—Unplanned vs. Planned Admissions

The following figure provides the logic flow of the classification of hospital admissions as "planned" or "unplanned." If an admission is classified as "planned," the admission is not counted in the outcome measure. If an admission is classified as "unplanned," the admission is counted in the outcome measure.
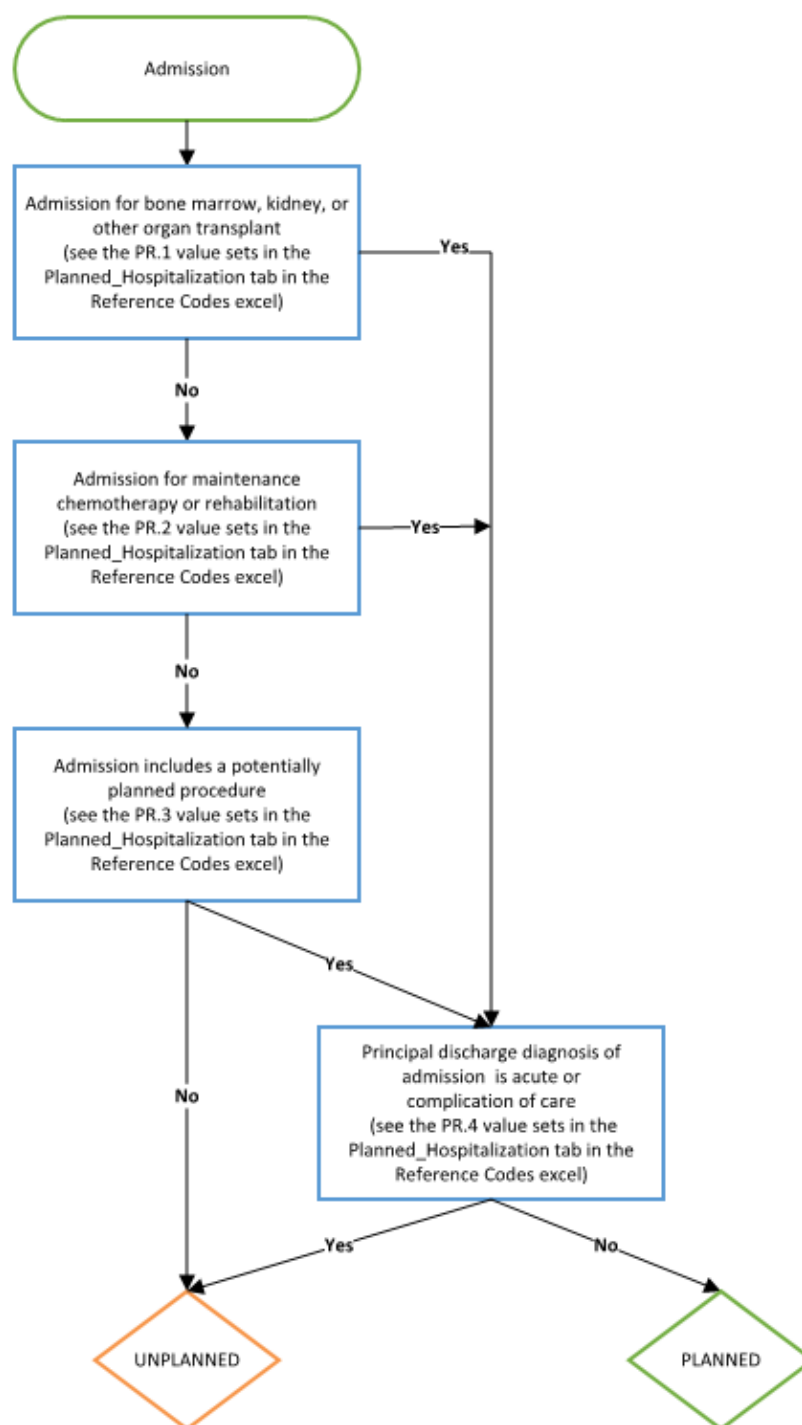
Appendix: Terms

The following is a list of terms and their definitions used in the document.

Definition of Terms

Term	Definition
ADE	Adverse Drug Event
AHRQ	Agency for Health Research and Quality
AMA	Against Medical Advice
A/R	Admission/Readmission
BIC	Beneficiary Information on the Cloud
CAH	Critical Access Hospital
CAUTI	Catheter-Associated Urinary Tract Infection
CCN	CMS Certification Number
CDC	The Centers for Disease Control and Prevention
CDI	*Clostridioides difficile* Infection
CLABSI	Central Line-Associated Blood Stream Infection
CMS	Centers for Medicare & Medicaid Services
CPT	Current Procedure Terminology
CY	Calendar Year
DVT	Deep Vein Thrombosis
DRG	Diagnosis-Related Group
ECMO	Extracorporeal Membrane Oxygenation
ED	Emergency Department
FFS	Fee-For-Service
HAI	Healthcare-Associated Infection
HAPI	Hospital-Acquired Pressure Injury
HCPCS	Healthcare Common Procedure Coding System
HQIC	Hospital Quality Improvement Contractor
HSAG	Health Services Advisory Group
ICD-10-CM	International Classification of Diseases, 10th Revision, Clinical Modification
IHI	Institute for Healthcare Improvement
INR	International Normalized Ratio
IVAC	Infection-Related Ventilator-Associated Condition
LOS	Length of Stay

Term	Definition
MDC	Major Diagnostic Categories
mg/dL	Milligrams per Deciliter
MME	Morphine Milligram Equivalent
MRSA	Methicillin-Resistant Staphylococcus Aureus
MS-DRG	Medicare Severity-Diagnosis Related Group
NDC	National Drug Code
NDNQI	National Database of Nursing Quality Indicators
NHSN	National Healthcare Safety Network
NICU	Neonatal Intensive Care Unit
NPIAP	National Pressure Injury Advisory Panel
NQF	National Quality Forum
OHD	Opioids at High Dosage
OR	Operating Room
PE	Pulmonary Embolism
PFA	Patient and Family Advisor
PFAC	Patient and Family Advisory Council
PFE	Patient and Family Engagement
POA	Present On Admission
PSI	Patient Safety Indicator
PVAP	Possible Ventilator-Associated Pneumonia
RIR	Relative Improvement Rate
SAT	Spontaneous Awakening Test
SBT	Spontaneous Breathing Trials
SIR	Standardized Infection Ratio
SSI	Surgical Site Infection
TBD	To Be Determined
UTI	Urinary Tract Infection
VAC	Ventilator-Associated Condition
VAE	Ventilator-Associated Event
VTE	Venous Thromboembolism