

**Health Services Advisory Group (HSAG)  
Hospital Quality Improvement Contract (HQIC)  
Compendium of Measures (CoM)**

*Updated: June 11, 2021*





		Version History
Date	Version Number	Update History
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## Table of Contents

Background.....	5
<b>Goal 1: Improve Behavioral Health Outcomes, Focusing on Decreased Opioid Misuse .....</b>	<b>6</b>
Opioid Stewardship .....	6
Hospital ADEs for Opioids .....	6
Opioid Prescriptions $\geq$ 90 MME .....	7
Naloxone Use for Reversal of Opioid Over Sedation .....	9
Opioid Risk Assessment.....	10
Benzodiazepine Co-Prescribing .....	11
<b>Goal 2: Increase Patient Safety .....</b>	<b>12</b>
ADEs .....	12
Hospital ADEs for Anticoagulants.....	12
INR > 5.....	13
Hospital ADEs for Hypoglycemics.....	14
Blood Glucose < 50.....	15
CLABSI.....	16
CLABSI SIR.....	16
CLABSI Rate .....	18
Central Line SUR .....	19
CAUTI.....	20
CAUTI SIR.....	20
CAUTI Rate .....	22
Catheter SUR.....	23
Antibiotic Stewardship .....	24
CDI SIR.....	24
CDI Rate.....	25
Hand Hygiene Adherence Rate .....	26
MRSA SIR .....	27
MRSA Rate .....	28
Sepsis and Septic Shock .....	29
Postoperative Sepsis Rate (PSI-13).....	29
Overall Sepsis Rate .....	31
Sepsis Bundle Compliance (SEP-1).....	32
30-Day Unplanned Sepsis Readmissions .....	34
30-Day Sepsis Mortality.....	36
Pressure Ulcers .....	37
HAPI Stage 3 or Greater (PSI-3).....	37
Pressure Ulcer Prevalence Hospital Acquired Stage 2+ .....	39

Pressure Ulcer Risk Assessment Completed Within 24 Hours of Admission .....	40
Hospital-Acquired Pressure Ulcer Rate—All Stages .....	41
SSI .....	42
Colon SSI SIR .....	42
Colon SSI Rate .....	43
Abdominal Hysterectomy SSI SIR.....	44
Abdominal Hysterectomy SSI Rate .....	45
Total Hip Replacement SSI SIR.....	46
Total Hip Replacement SSI Rate.....	47
Total Knee Replacement SSI SIR .....	48
Total Knee Replacement SSI Rate .....	49
Peri-Operative Care: Discontinuation of Prophylactic Parenteral Antibiotics (Non-Cardiac Procedures).....	50
VTE .....	51
VTE Postoperative PE or DVT Rate (PSI-12) .....	51
VTE Prophylaxis .....	53
VAE.....	54
VAC Rate .....	54
VAC SIR .....	55
ICU Liberation Bundle Compliance.....	56
Infection-Related VAC Rate .....	57
<b>Infection-Related VAC SIR</b> .....	58
PVAP Rate .....	59
Falls .....	60
Inpatient Fall-Related Injuries.....	60
Falls with Injury .....	61
Assessment of Fall Risk .....	62
Airway Safety.....	63
30-Day Unplanned Ventilator Readmissions .....	63
30-Day Ventilator Mortality.....	65
Airway Safety Checklist.....	66
Unplanned Extubation in Mechanically Ventilated Patients.....	67
Diagnostic Error Related to Timeliness .....	68
Diagnostic Error Rate.....	68
<b>Goal 4: Increase Quality Care Transitions .....</b>	<b>69</b>
Readmissions.....	69
30-Day Unplanned Hospital Readmissions.....	69
<b>Patient and Family Engagement .....</b>	<b>71</b>
Planning Checklist for Scheduled Admissions .....	71
Discharge Planning Checklist .....	72
Shift Change Huddles or Bedside Reporting .....	73

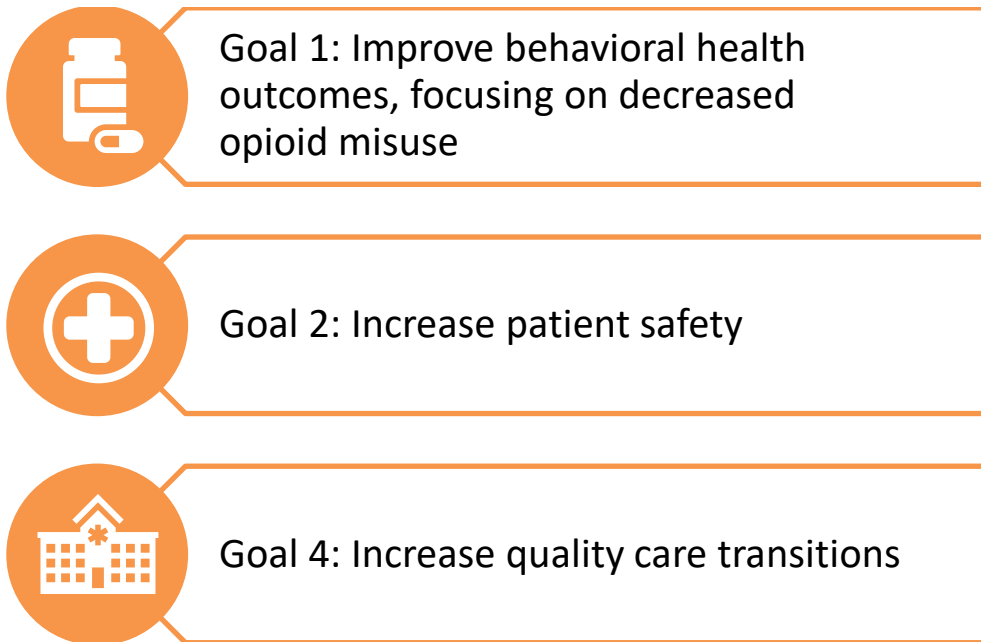


Designated PFE Leader .....	74
PFAC or Patient/Family Representatives on Hospital Committee .....	75
<b>Appendix: Definitions .....</b>	<b>76</b>
Medicare Beneficiary Information .....	76
Medicare Claims Data .....	76
Hospital—Unplanned vs. Planned Admissions.....	76
<b>Appendix: Terms.....</b>	<b>78</b>

## 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

### Opioid Stewardship

#### Hospital ADEs for Opioids

##### Claims

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

##### Definitions

Element	Definition
<b>ADE</b>	See the Opioid ADE tab in the Reference Codes excel for the codes used to identify opioid ADEs.
<b>Admission</b>	Admission records with the type of claim identified as “inpatient” that are from one of our recruited hospitals.
<b>Not POA</b>	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
<b>ADE</b>	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. <i>J Manag Care Spec Pharm</i> . 2019 Mar;25(3):402-410.
<b>CDC Opioids</b>	<a href="https://www.cdc.gov/drugoverdose/resources/data.html">https://www.cdc.gov/drugoverdose/resources/data.html</a>
<b>IHI Trigger Tool for Measuring Adverse Drug Events</b>	<a href="http://www.ihl.org/resources/Pages/Tools/TriggerToolforMeasuringAdverseDrugEvents.aspx">http://www.ihl.org/resources/Pages/Tools/TriggerToolforMeasuringAdverseDrugEvents.aspx</a>



## Opioid Prescriptions $\geq$ 90 MME

### Claims

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

### Self-Reported (Optional)

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

### Definitions

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



## Resources

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

## Naloxone Use for Reversal of Opioid Over Sedation

### Self-Reported (Optional)

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

### Definitions

Element	Definition
<b>Patient Days</b>	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
<b>CDC Opioids</b>	<a href="https://www.cdc.gov/drugoverdose/resources/data.html">https://www.cdc.gov/drugoverdose/resources/data.html</a>



## Opioid Risk Assessment

### Self-Reported (Optional)

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

### Definitions

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

### Resources

Resource	Location
<b>CDC Opioids</b>	<a href="https://www.cdc.gov/drugoverdose/resources/data.html">https://www.cdc.gov/drugoverdose/resources/data.html</a>

## Benzodiazepine Co-Prescribing

### Claims

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

### Definitions

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

### Resources

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

## ⊕ Goal 2: Increase Patient Safety

### ADEs

#### Hospital ADEs for Anticoagulants

##### Claims

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

##### Definitions

Element	Definition
<b>ADE</b>	See the Anticoag_ADE tab in the Reference Codes excel for the codes used to identify anticoagulant ADEs.
<b>Admission</b>	Admission records with the type of claim identified as “inpatient” that are from one of our recruited hospitals.
<b>Not POA</b>	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
<b>ADE</b>	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. <i>J Manag Care Spec Pharm.</i> 2019 Mar;25(3):402-410.
<b>IHI Trigger Tool for Measuring Adverse Drug Events</b>	<a href="http://www.ihl.org/resources/Pages/Tools/TriggerToolforMeasuringAdverseDrugEvents.aspx">http://www.ihl.org/resources/Pages/Tools/TriggerToolforMeasuringAdverseDrugEvents.aspx</a>

## INR > 5

### Self-Reported (Optional)

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

### Definitions

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

### Resources

Resource	Location
<b>IHI Trigger Tool for Measuring Adverse Drug Events</b>	<a href="http://www.ihl.org/resources/Pages/Tools/TriggerToolforMeasuringAdverseDrugEvents.aspx">http://www.ihl.org/resources/Pages/Tools/TriggerToolforMeasuringAdverseDrugEvents.aspx</a>



## Hospital ADEs for Hypoglycemics

### Claims

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

### Definitions

Element	Definition
<b>ADE</b>	See the Diabetic_ADE tab in the Reference Codes excel for the codes used to identify hypoglycemic related ADEs.
<b>Admission</b>	Admission records with the type of claim identified as “inpatient” that are from one of our recruited hospitals.
<b>Not POA</b>	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
<b>IHI Trigger Tool for Measuring Adverse Drug Events</b>	<a href="http://ihi.org/resources/Pages/Tools/TriggerToolforMeasuringAdverseDrugEvents.aspx">http://ihi.org/resources/Pages/Tools/TriggerToolforMeasuringAdverseDrugEvents.aspx</a>

## Blood Glucose < 50

### Self-Reported (Optional)

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

### Definitions

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

### Resources

Resource	Location
<b>IHI Trigger Tool for Measuring Adverse Drug Events</b>	<a href="http://ihi.org/resources/Pages/Tools/TriggerToolforMeasuringAdverseDrugEvents.aspx">http://ihi.org/resources/Pages/Tools/TriggerToolforMeasuringAdverseDrugEvents.aspx</a>





## CLABSI

### CLABSI SIR

#### NHSN

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

#### Definitions

Element	Definition
<b>CLABSI</b>	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.
<b>Inpatient Care Locations</b>	Included inpatient care locations refer to the following: <ol style="list-style-type: none"> <li>1. Critical care;</li> <li>2. Medical, surgical, and medical-surgical wards;</li> <li>3. All reported inpatient care locations.</li> </ol> See the NHSN_Units_CAUTI_CLABSI tab in the Reference Codes excel for NHSN location codes used to identify inpatient care locations.
<b>Observed Infection</b>	Infections that occurred after the placement of central line.
<b>Predicted Infection</b>	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.
<b>SIR</b>	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
<b>CDC Measure Definition/Specification</b>	<a href="https://www.cdc.gov/nhsn/PDFs/pscManual/4PSC_CLABScurrent.pdf">https://www.cdc.gov/nhsn/PDFs/pscManual/4PSC_CLABScurrent.pdf</a>

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



## CLABSI Rate

### NHSN

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

### Definitions

Element	Definition
<b>Central Line Days</b>	The sum of the number of patients with at least one central line in place in the facility on each day of the month.
<b>CLABSI</b>	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.
<b>Inpatient Care Locations</b>	Included inpatient care locations refer to the following: <ol style="list-style-type: none"> <li>1. Critical care;</li> <li>2. Medical, surgical, and medical-surgical wards;</li> <li>3. All reported inpatient care locations.</li> </ol> See the NHSN_Units_CAUTI_CLABSI tab in the Reference Codes excel for NHSN location codes used to identify inpatient care locations.
<b>Patient Days</b>	The sum of the number of patients in the facility on each day of the month.

### Resources

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



## Central Line SUR

### NHSN

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

### Definitions

Element	Definition
<b>Inpatient Care Locations</b>	<p>Included inpatient care locations refer to the following:</p> <ol style="list-style-type: none"> <li>1. Critical care;</li> <li>2. Medical, surgical, and medical-surgical wards;</li> <li>3. All reported inpatient care locations.</li> </ol> <p>See the NHSN_Units_CAUTI_CLABSI tab in the Reference Codes excel for NHSN location codes used to identify inpatient care locations.</p>
<b>Observed Central Line Days</b>	The sum of the number of patients with at least one central line in place in the facility on each day of the month.
<b>Predicted Central Line Days</b>	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.
<b>SUR</b>	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
<b>CDC Measure Definition/Specification</b>	<a href="https://www.cdc.gov/nhsn/PDFs/pscManual/4PSC_CLABScurrent.pdf">https://www.cdc.gov/nhsn/PDFs/pscManual/4PSC_CLABScurrent.pdf</a>
<b>CDC Surveillance for Bloodstream Infections Resources</b>	<a href="https://www.cdc.gov/nhsn/acute-care-hospital/clabsi/index.html">https://www.cdc.gov/nhsn/acute-care-hospital/clabsi/index.html</a>
<b>NHSN Guide to SURs</b>	<a href="https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/nhsn-sur-guide-508.pdf">https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/nhsn-sur-guide-508.pdf</a>



## CAUTI

### CAUTI SIR

#### NHSN

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

#### Definitions

Element	Definition
<b>CAUTI</b>	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.
<b>Inpatient Care Locations</b>	Included inpatient care locations refer to the following: <ol style="list-style-type: none"> <li>1. Critical care;</li> <li>2. Medical, surgical, and medical-surgical wards;</li> <li>3. All reported inpatient care locations.</li> </ol> See the NHSN_Units_CAUTI_CLABSI tab in the Reference Codes excel for NHSN location codes used to identify inpatient care locations.
<b>Levels III and IV Neonatal Critical Care Units</b>	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.
<b>Observed Infection</b>	Infections that occurred after placement of indwelling urinary catheter.
<b>Predicted Infection</b>	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.
<b>SIR</b>	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
<b>CDC Measure Definition/Specification</b>	<a href="https://www.cdc.gov/nhsn/PDFs/pscManual/7pscCAUTIcurrent.pdf">https://www.cdc.gov/nhsn/PDFs/pscManual/7pscCAUTIcurrent.pdf</a>
<b>CDC Surveillance for UTIs Resources</b>	<a href="https://www.cdc.gov/nhsn/acute-care-hospital/cauti/index.html">https://www.cdc.gov/nhsn/acute-care-hospital/cauti/index.html</a>
<b>NHSN SIR Guide</b>	<a href="https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/nhsn-sir-guide.pdf">https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/nhsn-sir-guide.pdf</a>

## CAUTI Rate

### NHSN

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

### Definitions

Element	Definition
<b>Indwelling Urinary Catheter Days</b>	The sum of the number of patients with an indwelling urinary catheter in the facility on each day of the month.
<b>Inpatient Care Locations</b>	Included inpatient care locations refer to the following: <ol style="list-style-type: none"> <li>1. Critical care;</li> <li>2. Medical, surgical, and medical-surgical wards;</li> <li>3. All reported inpatient care locations.</li> </ol> See the NHSN_Units_CAUTI_CLABSI tab in the Reference Codes excel for NHSN location codes used to identify inpatient care locations.
<b>Levels III and IV Neonatal Critical Care Units</b>	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.
<b>Patient Days</b>	The sum of the number of patients in the facility on each day of the month.

### Resources

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

## Catheter SUR

### NHSN

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

### Definitions

Element	Definition
<b>Inpatient Care Locations</b>	<p>Included inpatient care locations refer to the following:</p> <ol style="list-style-type: none"> <li>1. Critical care;</li> <li>2. Medical, surgical, and medical-surgical wards;</li> <li>3. All reported inpatient care locations.</li> </ol> <p>See the NHSN_Units_CAUTI_CLABSI tab in the Reference Codes excel for NHSN location codes used to identify inpatient care locations.</p>
<b>Levels III and IV Neonatal Units</b>	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.
<b>Observed Catheter Days</b>	The sum of the number of patients with an indwelling urinary catheter in the facility on each day of the month.
<b>Predicted Catheter Days</b>	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.
<b>SUR</b>	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
<b>CDC Measure Definition/Specification</b>	<a href="https://www.cdc.gov/nhsn/PDFs/pscManual/7pscCAUTIcurrent.pdf">https://www.cdc.gov/nhsn/PDFs/pscManual/7pscCAUTIcurrent.pdf</a>
<b>CDC Surveillance for UTIs Resources</b>	<a href="https://www.cdc.gov/nhsn/acute-care-hospital/cauti/index.html">https://www.cdc.gov/nhsn/acute-care-hospital/cauti/index.html</a>
<b>NHSN Guide to SURs</b>	<a href="https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/nhsn-sur-guide-508.pdf">https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/nhsn-sur-guide-508.pdf</a>





## Antibiotic Stewardship

### CDI SIR

#### NHSN

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

#### Definitions

Element	Definition
<b>CDI Event</b>	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.
<b>Neonatal Units</b>	Hospital units which specialize in care of infants requiring additional support.
<b>Observed Hospital-Onset Infection</b>	Infections that occurred after admission to the hospital.
<b>Predicted Infection</b>	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.
<b>SIR</b>	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
<b>CDC <i>C. diff</i> Guidelines and Prevention Resources</b>	<a href="http://www.cdc.gov/hai/organisms/cdiff/Cdiff_settings.html">http://www.cdc.gov/hai/organisms/cdiff/Cdiff_settings.html</a>
<b>CDC Measure Definition/Specification</b>	<a href="https://www.cdc.gov/nhsn/PDFs/pscManual/12pscMDRO_CDADcurrent.pdf">https://www.cdc.gov/nhsn/PDFs/pscManual/12pscMDRO_CDADcurrent.pdf</a>
<b>NHSN SIR Guide</b>	<a href="https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/nhsn-sir-guide.pdf">https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/nhsn-sir-guide.pdf</a>

## CDI Rate

### NHSN

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

### Definitions

Element	Definition
<b>CDI Event</b>	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.
<b>Neonatal Units</b>	Hospital units which specialize in care of infants requiring additional support.
<b>Patient Days</b>	The sum of the number of patients in the facility on each day of the month.

### Resources

Resource	Location
<b>CDC <i>C. diff</i> Guidelines and Prevention Resources</b>	<a href="http://www.cdc.gov/hai/organisms/cdiff/Cdiff_settings.html">http://www.cdc.gov/hai/organisms/cdiff/Cdiff_settings.html</a>
<b>CDC Measure Definition/Specification</b>	<a href="https://www.cdc.gov/nhsn/PDFs/pscManual/12pscMDRO_CDADcurrent.pdf">https://www.cdc.gov/nhsn/PDFs/pscManual/12pscMDRO_CDADcurrent.pdf</a>

## Hand Hygiene Adherence Rate

### Self-Reported (Optional)

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

### Definitions

Element	Definition
<b>Hand Hygiene Guidelines</b>	Hand hygiene guidelines include the following: <ol style="list-style-type: none"> <li>1. Use of gloves when entering patient rooms and during care, and</li> <li>2. Performance of hand hygiene with alcohol-based hand sanitizer or soap and water after removing gloves.</li> </ol>
<b>Hand Hygiene Observation Opportunities</b>	Total number of times a provider performs or has the opportunity to perform hand hygiene.

### Resources

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

## MRSA SIR

### NHSN

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

### Definitions

Element	Definition
<b>MRSA Infection</b>	Staphylococcus aureus infection that is resistant to certain antibiotics.
<b>Observed MRSA Event</b>	MRSA infections that occurred as a result of hospital admission.
<b>Predicted MRSA Event</b>	MRSA infections as a result of hospital admission that were predicted to occur at the facility.
<b>SIR</b>	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
<b>CDC Measure Specification</b>	<a href="https://www.cdc.gov/nhsn/PDFs/pscManual/12pscMDRO_CDADcurrent.pdf">https://www.cdc.gov/nhsn/PDFs/pscManual/12pscMDRO_CDADcurrent.pdf</a>
<b>CDC Overview of MRSA Surveillance</b>	<a href="https://www.cdc.gov/nhsn/PDFs/Overview_MRSA_Surveillance_Final12_08.pdf">https://www.cdc.gov/nhsn/PDFs/Overview_MRSA_Surveillance_Final12_08.pdf</a>
<b>NHSN SIR Guide</b>	<a href="https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/nhsn-sir-guide.pdf">https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/nhsn-sir-guide.pdf</a>

## MRSA Rate

### NHSN

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

### Definitions

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

### Resources

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



## Sepsis and Septic Shock

### Postoperative Sepsis Rate (PSI-13)

#### Claims

	Description
<b>Numerator</b>	Discharges with a secondary diagnosis codes for sepsis
<b>Denominator</b>	Elective surgical discharges for operating room procedures for patients ages 18 years and older
<b>Denominator Exclusions</b>	Exclude cases with any of the following from the denominator: <ol style="list-style-type: none"> <li>1. Principle diagnosis of sepsis (or secondary diagnosis of sepsis POA), or</li> <li>2. Principle diagnosis of infection (or secondary diagnosis of infection POA), or</li> <li>3. MDC 14 (pregnancy, childbirth, puerperium).</li> </ol>
<b>Rate Calculation</b>	(Numerator/Denominator) x 1,000
<b>Data Source(s)</b>	Medicare FFS Part A claims
<b>Baseline Period</b>	CY 2019

#### Definitions

Element	Definition
<b>Discharges</b>	Discharges are claims for inpatient stays that are from one of our recruited hospitals.
<b>Elective Surgical Discharge</b>	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.
<b>Infection Diagnosis</b>	See the Infection_Diagnosis tab in the Reference Codes excel for the codes used to identify infection.
<b>MDC 14</b>	See the MDC_14 tab in the Reference Codes excel for codes used to identify MDC 14.
<b>Operating Room Procedures</b>	See the OR_Procedures tab in the Reference Codes excel for the codes used to identify operating room procedures.
<b>POA</b>	For a diagnosis code to be considered POA, the POA flag must indicate “Yes.”
<b>Sepsis Diagnosis</b>	See the Sepsis tab in the Reference Codes excel for the codes used to identify sepsis.

#### Resources

Resource	Location
<b>AHRQ Measure Specification</b>	<a href="https://www.qualityindicators.ahrq.gov/Downloads/Modules/PSI/V2020/TechSpecs/PSI_13_Postoperative_Sepsis_Rate.pdf">https://www.qualityindicators.ahrq.gov/Downloads/Modules/PSI/V2020/TechSpecs/PSI_13_Postoperative_Sepsis_Rate.pdf</a>



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



## Overall Sepsis Rate

### Claims

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

### Definitions

Element	Definition
<b>Admission</b>	Admission records with the type of claim identified as “inpatient” that are from one of our recruited hospitals.
<b>Not POA</b>	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.
<b>Sepsis Diagnosis</b>	See the Sepsis tab in the Reference Codes excel for the codes used to identify sepsis.

### Resources

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





## Sepsis Bundle Compliance (SEP-1)

### Self-Reported (Optional)

	Description
<b>Numerator</b>	Sepsis patients who receive all elements of the bundle
<b>Denominator</b>	Adult inpatients with principal or other diagnosis code of sepsis, severe sepsis, or septic shock
<b>Denominator Exclusions</b>	Exclude any of the following from the denominator: <ol style="list-style-type: none"> <li>1. Severe sepsis is not present, or</li> <li>2. Patients transferred in from another facility, or</li> <li>3. Patients receiving IV antibiotics for more than 24 hours prior to presentation of severe sepsis, or</li> <li>4. Patients with a Directive for Comfort Care or Palliative Care within 3 hours of presentation of severe sepsis or septic shock, or</li> <li>5. Patients with an Administrative Contraindication for Care within 6 hours of presentation of severe sepsis or septic shock, or</li> <li>6. Patients with septic shock or severe sepsis who are discharged within 6 hours of presentation, or</li> <li>7. Patients with length of stay &gt; 120 days, or</li> <li>8. Patients included in a clinical trial</li> </ol>
<b>Rate Calculation</b>	Numerator/Denominator
<b>Data Source(s)</b>	Self-Reported
<b>Baseline Period</b>	CY 2019

### Definitions

Element	Definition
<b>Sepsis Bundle</b>	Components of the sepsis bundle include the following: <ol style="list-style-type: none"> <li>1. Initial lactate levels, and</li> <li>2. Blood cultures, and</li> <li>3. Antibiotics, and</li> <li>4. Fluid resuscitation, and</li> <li>5. Repeat lactate level, and</li> <li>6. Vasopressors, and</li> <li>7. Volume status and tissue perfusion reassessment.</li> </ol>

## Resources

Resource	Location
<b>CMS Sepsis and Septic: Management Bundle</b>	<a href="https://cmit.cms.gov/CMIT_public/ReportMeasure?measureRevisionId=300">https://cmit.cms.gov/CMIT_public/ReportMeasure?measureRevisionId=300</a>
<b>Surviving Sepsis Bundle</b>	<a href="https://journals.lww.com/ccmjournal/Fulltext/2017/03000/A_Users_Guide_to_the_2016_Surviving_Sepsis.1.aspx">https://journals.lww.com/ccmjournal/Fulltext/2017/03000/A_Users_Guide_to_the_2016_Surviving_Sepsis.1.aspx</a>
<b>Surviving Sepsis Campaign</b>	<a href="http://www.survivingsepsis.org/Pages/default.aspx">http://www.survivingsepsis.org/Pages/default.aspx</a>



## 30-Day Unplanned Sepsis Readmissions

### Claims

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

### Definitions

Element	Definition
<b>AMA</b>	Discharge status code = 07 (left against medical advice or discontinued care).
<b>Discharges</b>	Discharges are claims for inpatient stays that are from one of our recruited hospitals.
<b>Expired Patients</b>	Discharge status code = 20, 40, 41, or 42 (patients that expire during hospital stay).
<b>Planned Hospitalization</b>	Planned hospitalizations are excluded from this measure. There are three different criteria that will flag an admission as planned: <ol style="list-style-type: none"> <li>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</li> <li>2. Admission for maintenance chemotherapy or rehabilitation (see the PR2 codes in the Planned_Hospitalization tab in the Reference Codes excel), or</li> <li>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).</li> </ol>
<b>Readmission</b>	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).
<b>Sepsis Diagnosis</b>	See the Sepsis tab in the Reference Codes excel for the codes used to identify sepsis.

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



## 30-Day Sepsis Mortality

### Claims

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

### Definitions

Element	Definition
<b>Admission</b>	Admission records with the type of claim identified as “inpatient” that are from one of our recruited hospitals.
<b>AMA</b>	Discharge status code = 07 (left against medical advice or discontinued care).
<b>Deceased Patients</b>	Patients who died within 30 days of admission for any reason.
<b>Hospice Patients</b>	See the Hospice tab in the Reference Codes excel for the codes used to identify hospice patients.
<b>Sepsis Diagnosis</b>	See the Sepsis tab in the Reference Codes excel for the codes used to identify sepsis.
<b>Transfers</b>	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
<b>CMS Mortality Measures Methodology</b>	Adapted from: <a href="https://qualitynet.cms.gov/inpatient/measures/mortality/methodology">https://qualitynet.cms.gov/inpatient/measures/mortality/methodology</a>
<b>Sepsis Diagnosis Codes</b>	<a href="https://www.qualityindicators.ahrq.gov/Downloads/Modules/PSI/V2020/TechSpecs/PSI_13_Postoperative_Sepsis_Rate.pdf">https://www.qualityindicators.ahrq.gov/Downloads/Modules/PSI/V2020/TechSpecs/PSI_13_Postoperative_Sepsis_Rate.pdf</a>
<b>Surviving Sepsis Campaign</b>	<a href="http://www.survivingsepsis.org/Pages/default.aspx">http://www.survivingsepsis.org/Pages/default.aspx</a>

## Pressure Ulcers

### HAPI Stage 3 or Greater (PSI-3)

#### Claims

	Description
<b>Numerator</b>	Discharges with any secondary diagnosis codes for pressure ulcer stage III or IV (or unstageable)
<b>Denominator</b>	Surgical or medical discharges, for patients ages 18 years and older
<b>Exclusions</b>	Exclude cases with any of the following from the denominator: <ol style="list-style-type: none"> <li>1. LOS of less than three days, or</li> <li>2. Principle diagnosis code for pressure ulcer stage III or IV (or unstageable) or deep tissue injury, or</li> <li>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</li> <li>4. Diagnosis code for severe burns (<math>\geq 20\%</math> body surface area), or</li> <li>5. Diagnosis code for exfoliative disorders of the skin (<math>\geq 20\%</math> body surface area), or</li> <li>6. MDC 14 (pregnancy, childbirth, and puerperium)</li> </ol>
<b>Rate Calculation</b>	(Numerator/Denominator) x 1,000
<b>Data Source(s)</b>	Medicare FFS Part A claims
<b>Baseline Period</b>	CY 2019

#### Definitions

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

## Resources

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



## Pressure Ulcer Prevalence Hospital Acquired Stage 2+

### Self-Reported/NDNQI® (Optional)

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

### Definitions

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

### Resources

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



## Pressure Ulcer Risk Assessment Completed Within 24 Hours of Admission

### Self-Reported (Optional)

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

### Definitions

Element	Definition
<b>Pressure Ulcer Risk Assessment</b>	<p>Skin assessment used to identify risk of developing pressure ulcers. Standardized pressure ulcer risk assessments include the following:</p> <ol style="list-style-type: none"> <li>1. Braden Scale</li> <li>2. Norton Scale</li> <li>3. Other standardized pressure ulcer risk assessment</li> </ol>

### Resources

Resource	Location
<b>AHRQ Pressure Ulcer Risk Assessment</b>	<a href="https://www.ahrq.gov/patient-safety/settings/hospital/resource/pressureulcer/tool/pu7b.html#Tool3A">https://www.ahrq.gov/patient-safety/settings/hospital/resource/pressureulcer/tool/pu7b.html#Tool3A</a>



## Hospital-Acquired Pressure Ulcer Rate—All Stages

### Claims

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

### Definitions

Element	Definition
<b>Discharges</b>	Discharges are claims for inpatient stays that are from one of our recruited hospitals.
<b>Not POA</b>	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.
<b>Pressure Ulcers</b>	See the HAPU_Rate tab in the Reference Codes excel for the codes used to identify pressure ulcers.

### Resources

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

## SSI

### Colon SSI SIR

#### NHSN

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

#### Definitions

Element	Definition
<b>Observed Infection</b>	Infections that occurred after surgical procedure of the colon.
<b>Predicted Infection</b>	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.
<b>SIR</b>	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
<b>CDC Measure Specification</b>	<a href="https://www.cdc.gov/nhsn/pdfs/pscmanual/9pscscssicurrent.pdf">https://www.cdc.gov/nhsn/pdfs/pscmanual/9pscscssicurrent.pdf</a>
<b>CDC Surveillance for SSI Events</b>	<a href="https://www.cdc.gov/nhsn/acute-care-hospital/SSI/index.html">https://www.cdc.gov/nhsn/acute-care-hospital/SSI/index.html</a>
<b>CDC—Using the “SIR-Complex 30-Day SSI Data for Hospital IQR” Output Option</b>	<a href="https://www.cdc.gov/nhsn/pdfs/cms/ssi/cms-ipps-ssi-sir.pdf">https://www.cdc.gov/nhsn/pdfs/cms/ssi/cms-ipps-ssi-sir.pdf</a>
<b>NHSN SIR Guide</b>	<a href="https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/nhsn-sir-guide.pdf">https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/nhsn-sir-guide.pdf</a>
<b>NQF SSI Measure</b>	<a href="http://www.qualityforum.org/QPS/MeasureDetails.aspx?standardID=218&amp;print=1&amp;entityTypeID=1">http://www.qualityforum.org/QPS/MeasureDetails.aspx?standardID=218&amp;print=1&amp;entityTypeID=1</a>

## Colon SSI Rate

### NHSN

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

### Definitions

Element	Definition
<b>Colon SSI</b>	Infection incurred after surgical procedure of the colon.
<b>Operative Colon Procedure</b>	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
<b>CDC Measure Specification</b>	<a href="https://www.cdc.gov/nhsn/pdfs/pscmanual/9pscscscurrent.pdf">https://www.cdc.gov/nhsn/pdfs/pscmanual/9pscscscurrent.pdf</a>
<b>CDC Surveillance for SSI Events</b>	<a href="https://www.cdc.gov/nhsn/acute-care-hospital/SSI/index.html">https://www.cdc.gov/nhsn/acute-care-hospital/SSI/index.html</a>

## Abdominal Hysterectomy SSI SIR

### NHSN

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

### Definitions

Element	Definition
<b>Observed Infection</b>	Infections that occurred after abdominal hysterectomy procedure.
<b>Predicted Infection</b>	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.
<b>SIR</b>	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
<b>CDC Measure Specification</b>	<a href="https://www.cdc.gov/nhsn/pdfs/pscmanual/9pscscscurrent.pdf">https://www.cdc.gov/nhsn/pdfs/pscmanual/9pscscscurrent.pdf</a>
<b>CDC Surveillance for SSI Events</b>	<a href="https://www.cdc.gov/nhsn/acute-care-hospital/SSI/index.html">https://www.cdc.gov/nhsn/acute-care-hospital/SSI/index.html</a>
<b>NHSN SIR Guide</b>	<a href="https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/nhsn-sir-guide.pdf">https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/nhsn-sir-guide.pdf</a>

## Abdominal Hysterectomy SSI Rate

### NHSN

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

### Definitions

Element	Definition
<b>Abdominal Hysterectomy SSI</b>	Infections incurred during abdominal hysterectomy.
<b>Operative Hysterectomy Procedure</b>	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
<b>CDC Measure Specification</b>	<a href="https://www.cdc.gov/nhsn/pdfs/pscmanual/9pscscsscurrent.pdf">https://www.cdc.gov/nhsn/pdfs/pscmanual/9pscscsscurrent.pdf</a>
<b>CDC Surveillance for SSI Events</b>	<a href="https://www.cdc.gov/nhsn/acute-care-hospital/SSI/index.html">https://www.cdc.gov/nhsn/acute-care-hospital/SSI/index.html</a>

## Total Hip Replacement SSI SIR

### NHSN

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

### Definitions

Element	Definition
<b>Observed Infection</b>	Infections that occurred after total hip replacement procedure.
<b>Predicted Infection</b>	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.
<b>SIR</b>	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.
<b>SSI Model</b>	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
<b>CDC Measure Specification</b>	<a href="https://www.cdc.gov/nhsn/pdfs/pscmanual/9pscscscurrent.pdf">https://www.cdc.gov/nhsn/pdfs/pscmanual/9pscscscurrent.pdf</a>
<b>CDC Surveillance for SSI Events</b>	<a href="https://www.cdc.gov/nhsn/acute-care-hospital/SSI/index.html">https://www.cdc.gov/nhsn/acute-care-hospital/SSI/index.html</a>
<b>NHSN SIR Guide</b>	<a href="https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/nhsn-sir-guide.pdf">https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/nhsn-sir-guide.pdf</a>



## Total Hip Replacement SSI Rate

### NHSN

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

### Definitions

Element	Definition
<b>Operative Total Hip Replacement Procedure</b>	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.
<b>SSI Model</b>	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.
<b>Total Hip Replacement SSI</b>	Infections incurred during hip replacement surgery.

### Resources

Resource	Location
<b>CDC Measure Specification</b>	<a href="https://www.cdc.gov/nhsn/pdfs/pscmanual/9pscscscurrent.pdf">https://www.cdc.gov/nhsn/pdfs/pscmanual/9pscscscurrent.pdf</a>
<b>CDC Surveillance for SSI Events</b>	<a href="https://www.cdc.gov/nhsn/acute-care-hospital/SSI/index.html">https://www.cdc.gov/nhsn/acute-care-hospital/SSI/index.html</a>



## Total Knee Replacement SSI SIR

### NHSN

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

### Definitions

Element	Definition
<b>Observed Infection</b>	Infections that occurred after total knee replacement procedure.
<b>Predicted Infections</b>	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.
<b>SIR</b>	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.
<b>SSI Model</b>	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
<b>CDC Measure Specification</b>	<a href="https://www.cdc.gov/nhsn/pdfs/pscmanual/9pscscscurrent.pdf">https://www.cdc.gov/nhsn/pdfs/pscmanual/9pscscscurrent.pdf</a>
<b>CDC Surveillance for SSI Events</b>	<a href="https://www.cdc.gov/nhsn/acute-care-hospital/SSI/index.html">https://www.cdc.gov/nhsn/acute-care-hospital/SSI/index.html</a>
<b>NHSN SIR Guide</b>	<a href="https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/nhsn-sir-guide.pdf">https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/nhsn-sir-guide.pdf</a>



## Total Knee Replacement SSI Rate

### NHSN

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

### Definitions

Element	Definition
<b>Operative Total Knee Replacement Procedure</b>	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.
<b>SSI Model</b>	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.
<b>Total Knee Replacement SSI</b>	Infections incurred during knee replacement surgery.

### Resources

Resource	Location
<b>CDC Measure Specification</b>	<a href="https://www.cdc.gov/nhsn/pdfs/pscmanual/9pscscscurrent.pdf">https://www.cdc.gov/nhsn/pdfs/pscmanual/9pscscscurrent.pdf</a>
<b>CDC Surveillance for SSI Events</b>	<a href="https://www.cdc.gov/nhsn/acute-care-hospital/SSI/index.html">https://www.cdc.gov/nhsn/acute-care-hospital/SSI/index.html</a>



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

Self-Reported (Optional)

	Description
<b>Numerator</b>	Non-cardiac surgical patients who have an order for discontinuation of prophylactic parenteral antibiotics within 24 hours of surgical end time
<b>Denominator</b>	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
<b>Rate Calculation</b>	Numerator/Denominator
<b>Data Source(s)</b>	Self-Reported
<b>Baseline Period</b>	CY 2019

**Definitions**

Element	Definition
<b>Prophylactic Parenteral Antibiotics</b>	Antibiotics initiated prior to surgery that are intended to prevent SSIs.

**Resources**

Resource	Location
<b>CMS Measure Guidelines</b>	<a href="https://cmit.cms.gov/CMIT_public/ReportMeasure?measureRevisionId=82">https://cmit.cms.gov/CMIT_public/ReportMeasure?measureRevisionId=82</a>



## VTE

### VTE Postoperative PE or DVT Rate (PSI-12)

#### Claims

	Description
<b>Numerator</b>	Surgical patients with secondary diagnosis of postoperative PE or DVT
<b>Denominator</b>	Surgical discharges for patients ages 18 and older with an operating room procedure code
<b>Exclusions</b>	Exclude cases with any of the following from the denominator: <ol style="list-style-type: none"> <li>1. Principle diagnosis code or secondary diagnosis POA for proximal DVT, or</li> <li>2. Principle diagnosis code or secondary diagnosis POA for PE, or</li> <li>3. Procedure for interruption of vena cava occurs before or on the same day as the first operating room procedure, or</li> <li>4. Only operating room procedure was for interruption of vena cava,</li> <li>5. Any diagnosis code POA for acute brain or spinal injury, or</li> <li>6. Any procedure code for ECMO, or</li> <li>7. Procedure for pulmonary arterial thrombectomy occurs before or on the same day as the first operating room procedure, or</li> <li>8. Only operating room procedure was pulmonary arterial thrombectomy, or</li> <li>9. MDC 14 (pregnancy, childbirth, and puerperium)</li> </ol>
<b>Rate Calculation</b>	$(\text{Numerator}/\text{Denominator}) \times 1,000$
<b>Data Source(s)</b>	Medicare FFS Part A claims
<b>Baseline Period</b>	CY 2019

#### Definitions

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



Element	Definition
<b>Pulmonary Arterial Thrombectomy</b>	See the Thrombectomy tab in the Reference Codes excel for codes used to identify pulmonary arterial thrombectomy.
<b>Surgical Discharge</b>	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.
<b>Vena Cava</b>	See the Vena_Cava tab in the Reference Codes excel for the codes used to identify interruption of vena cava.

### Resources

Resource	Location
<b>AHRQ Measure Specification</b>	<a href="https://www.qualityindicators.ahrq.gov/Downloads/Modules/PSI/V2020/TechSpecs/PSI_12_Periooperative_Pulmonary_Embolism_or_Deep_Vein_Thrombosis_Rate.pdf">https://www.qualityindicators.ahrq.gov/Downloads/Modules/PSI/V2020/TechSpecs/PSI_12_Periooperative_Pulmonary_Embolism_or_Deep_Vein_Thrombosis_Rate.pdf</a>

## VTE Prophylaxis

### Self-Reported (Optional)

	Description
<b>Numerator</b>	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.
<b>Denominator</b>	All patients
<b>Rate Calculation</b>	Numerator/Denominator
<b>Data Source(s)</b>	Self-Reported
<b>Baseline Period</b>	CY 2019

### Definitions

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

### Resources

Resource	Location
<b>AHRQ Preventing Hospital-Associated Venous Thromboembolism</b>	<a href="https://www.ahrq.gov/sites/default/files/publications/files/vteguide.pdf">https://www.ahrq.gov/sites/default/files/publications/files/vteguide.pdf</a>

## VAE

### VAC Rate

#### NHSN

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

#### Definitions

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

#### Resources

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

## VAC SIR

### NHSN

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

### Definitions

Element	Definition
<b>IVAC</b>	Complications that are a result of infectious process caused by ventilator use.
<b>Locations Under Surveillance</b>	See the NHSN_Units_VAE tab in the Reference Codes excel for NHSN location codes used to identify locations under surveillance.
<b>Observed Events</b>	Events that occurred after ventilator placement.
<b>Predicted Events</b>	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.
<b>PVAP</b>	Possible pneumonia infection which occurs after patient has been placed on ventilator.
<b>SIR</b>	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.
<b>VAC</b>	Baseline period of stability or improvement on the ventilator followed by immediate indication of worsening oxygenation.

### Resources

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



## ICU Liberation Bundle Compliance

### Self-Reported (Optional)

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

### Definitions

Element	Definition
<b>ICU Liberation Bundle</b>	<p>Guidelines used to care for critically ill patients. Elements of the bundle include the following:</p> <ol style="list-style-type: none"> <li>1. Assess, prevent, and manage pain</li> <li>2. Both SAT and SBT</li> <li>3. Choice of analgesia and sedation</li> <li>4. Delirium: Assess, prevent, and manage</li> <li>5. Early mobility and exercise</li> <li>6. Family engagement and empowerment</li> </ol>

### Resources

Resource	Location
<b>Society of Critical Care Medicine ABCDEF Bundle</b>	<a href="https://www.sccm.org/ICULiberation/ABCDEF-Bundles">https://www.sccm.org/ICULiberation/ABCDEF-Bundles</a>



## Infection-Related VAC Rate

### NHSN

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

### Definitions

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

### Resources

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



## Infection-Related VAC SIR

### NHSN

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

### Definitions

Element	Definition
<b>IVAC</b>	Complications including pneumonia, aspiration, VTE events, and sepsis which occur after a patient has been placed on a ventilator caused by infectious process.
<b>Locations Under Surveillance</b>	See the NHSN_Units_VAE tab in the Reference Codes excel for NHSN location codes used to identify locations under surveillance.
<b>Observed Events</b>	Events that occurred after ventilator placement.
<b>Predicted Events</b>	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.
<b>SIR</b>	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.
<b>VAP</b>	Pneumonia infection which occurs after patient has been placed on ventilator.

### Resources

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

## PVAP Rate

### NHSN

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

### Definitions

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

### Resources

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

## Falls

### Inpatient Fall-Related Injuries

#### Claims

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

#### Definitions

Element	Definition
<b>Admission</b>	Admission records with the type of claim identified as “inpatient” that are from one of our recruited hospitals.
<b>Falls</b>	See the Falls Related Injuries tab in the Reference Codes excel for codes used to identify falls and fall-related injuries.
<b>Not POA</b>	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
<b>AHRQ—Preventing Falls in Hospitals</b>	<a href="https://www.ahrq.gov/patient-safety/settings/hospital/fall-prevention/toolkit/measure-fall-rates.html">https://www.ahrq.gov/patient-safety/settings/hospital/fall-prevention/toolkit/measure-fall-rates.html</a>
<b>Fall-Related Injury Codes</b>	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
<b>Numerator</b>	Patient falls of injury level minor or greater (whether or not assisted by staff member)
<b>Denominator</b>	Inpatient days
<b>Rate Calculation</b>	(Numerator/Denominator) x 1,000
<b>Data Source(s)</b>	Self-reported
<b>Baseline Period</b>	CY 2019

### Definitions

Element	Definition
<b>Fall-Related Injuries</b>	<p>Falls with injury are categorized by the following:</p> <ol style="list-style-type: none"> <li>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.</li> <li>2. Minor: Resulted in application of a dressing, ice, cleaning of a wound, limb elevation, topical medication, bruise or abrasion.</li> <li>3. Moderate: Resulted in suturing, application of steri-strips/skin glue, splinting or muscle/joint strain.</li> <li>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.</li> <li>5. Death: Patient died as a result of injuries sustained from the fall (not from physiologic events causing the fall).</li> </ol>
<b>Patient Days</b>	The sum of the number of patients in the facility on each day of the month.

### Resources

Resource	Location
<b>NQF Falls with Injury Measure</b>	<a href="http://www.qualityforum.org/Qps/MeasureDetails.aspx?standardID=1119&amp;print=1&amp;entityTypeID=1">http://www.qualityforum.org/Qps/MeasureDetails.aspx?standardID=1119&amp;print=1&amp;entityTypeID=1</a>



## Assessment of Fall Risk

### Self-Reported (Optional)

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

### Definitions

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

### Resources

Resource	Location
<b>AHRQ Preventing Falls in Hospitals</b>	<a href="https://www.ahrq.gov/patient-safety/settings/hospital/fall-prevention/toolkit/index.html">https://www.ahrq.gov/patient-safety/settings/hospital/fall-prevention/toolkit/index.html</a>

## Airway Safety

### 30-Day Unplanned Ventilator Readmissions

#### Claims

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

#### Definitions

Element	Definition
<b>AMA</b>	Discharge status code = 07 (left against medical advice or discontinued care).
<b>Discharges</b>	Discharges are claims for inpatient stays that are from one of our recruited hospitals.
<b>Expired Patients</b>	Discharge status code = 20, 40, 41, or 42 (patients that expire during hospital stay).
<b>Planned Hospitalization</b>	<p>Planned hospitalizations are excluded from this measure. There are three different criteria that will flag an admission as planned:</p> <ol style="list-style-type: none"> <li>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</li> <li>2. Admission for maintenance chemotherapy or rehabilitation (see the PR2 codes in the Planned_Hospitalization tab in the Reference Codes excel), or</li> <li>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).</li> </ol>
<b>Readmission</b>	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
<b>Respiratory Ventilation</b>	See the Resp_Ventilation tab in the Reference Codes excel for the codes used to identify respiratory ventilation.
<b>Transfers</b>	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
<b>2020 All-Cause Hospital Readmission Specifications</b>	<a href="https://www.qualitynet.org/inpatient/measures/readmission/methodology">https://www.qualitynet.org/inpatient/measures/readmission/methodology</a>
<b>CMS CCN Guide</b>	<a href="https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/SurveyCertificationGenInfo/Downloads/Survey-and-Cert-Letter-16-09.pdf">https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/SurveyCertificationGenInfo/Downloads/Survey-and-Cert-Letter-16-09.pdf</a>
<b>Discharge Status Codes</b>	<a href="https://www.resdac.org/cms-data/variables/patient-discharge-status-code-ffs">https://www.resdac.org/cms-data/variables/patient-discharge-status-code-ffs</a>

## 30-Day Ventilator Mortality

### Claims

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

### Definitions

Element	Definition
<b>Admission</b>	Admission records with the type of claim identified as “inpatient” that are from one of our recruited hospitals.
<b>AMA</b>	Discharge status code = 07 (left against medical advice or discontinued care).
<b>Deceased Patients</b>	Patients who died within 30 days of admission for any reason.
<b>Hospice Patients</b>	See the Hospice tab in the Reference Codes excel for the codes used to identify hospice patients.
<b>Respiratory Ventilation</b>	See the Resp_Ventilation tab in the Reference Codes excel for the codes used to identify respiratory ventilation.
<b>Transfers</b>	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
<b>CMS Mortality Measures Methodology</b>	Adapted from: <a href="https://qualitynet.cms.gov/inpatient/measures/mortality/methodology">https://qualitynet.cms.gov/inpatient/measures/mortality/methodology</a>

## Airway Safety Checklist

### Self-Reported (Optional)

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

### Definitions

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

### Resources

Resource	Location
<b>Patient Safety Movement Airway Safety Guidelines</b>	<a href="https://patientsafetymovement.org/clinical/airway-safety/">https://patientsafetymovement.org/clinical/airway-safety/</a>



## Unplanned Extubation in Mechanically Ventilated Patients

### Self-Reported (Optional)

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

### Definitions

Element	Definition
<b>Mechanical Ventilation Days</b>	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
<b>Patient Safety Movement Unplanned Extubation Guidelines</b>	<a href="https://patientsafetymovement.org/clinical/airway-safety/unplanned-extubation/">https://patientsafetymovement.org/clinical/airway-safety/unplanned-extubation/</a>



## Diagnostic Error Related to Timeliness

### *Diagnostic Error Rate*

#### Self-Reported (Optional)

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

## Goal 4: Increase Quality Care Transitions

### Readmissions

#### 30-Day Unplanned Hospital Readmissions

##### Claims

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

##### Definitions

Element	Definition
<b>AMA</b>	Discharge status code = 07 (left against medical advice or discontinued care).
<b>Discharges</b>	Discharge records with the type of claim identified as “inpatient” that are from one of our recruited hospitals.
<b>Expired Patients</b>	Discharge status code = 20, 40, 41, or 42 (patients that expire during hospital stay).
<b>Planned Hospitalization</b>	<p>Planned hospitalizations are excluded from this measure. There are three different criteria that will flag an admission as planned:</p> <ol style="list-style-type: none"> <li>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</li> <li>2. Admission for maintenance chemotherapy or rehabilitation (see the PR2 codes in the Planned_Hospitalization tab in the Reference Codes excel), or</li> <li>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).</li> </ol>

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



## Patient and Family Engagement

### Planning Checklist for Scheduled Admissions

#### Self-Attestation

	Description
<b>Numerator</b>	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
<b>Denominator</b>	Recruited hospitals
<b>Rate Calculation</b>	Numerator/Denominator
<b>Data Source(s)</b>	Self-Attestation

#### Definitions

Element	Definition
<b>Measure Intent</b>	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
<b>HQIC Contract</b>	<a href="https://hsagonline.sharepoint.com/sites/HQIC/12SOW%20Resource%20Library/Attachment%20%231%20-%20Statement%20of%20Work%2009.18.2020.pdf.pdf">https://hsagonline.sharepoint.com/sites/HQIC/12SOW%20Resource%20Library/Attachment%20%231%20-%20Statement%20of%20Work%2009.18.2020.pdf.pdf</a>





## Discharge Planning Checklist

### Self-Attestation

	Description
<b>Numerator</b>	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]
<b>Denominator</b>	Recruited hospitals
<b>Rate Calculation</b>	Numerator/Denominator
<b>Data Source(s)</b>	Self-attestation

### Definitions

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

### Resources

Resource	Location
<b>HQIC Contract</b>	<a href="https://hsagonline.sharepoint.com/sites/HQIC/12SOW%20Resource%20Library/Attachment%20%231%20-%20Statement%20of%20Work%2009.18.2020.pdf.pdf">https://hsagonline.sharepoint.com/sites/HQIC/12SOW%20Resource%20Library/Attachment%20%231%20-%20Statement%20of%20Work%2009.18.2020.pdf.pdf</a>



## Shift Change Huddles or Bedside Reporting

### Self-Attestation

	Description
<b>Numerator</b>	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
<b>Denominator</b>	Recruited hospitals
<b>Rate Calculation</b>	Numerator/Denominator
<b>Data Source(s)</b>	Self-attestation

### Definitions

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

### Resources

Resource	Location
<b>HQIC Contract</b>	<a href="https://hsagonline.sharepoint.com/sites/HQIC/12SOW%20Resource%20Library/Attachment%20%231%20-%20Statement%20of%20Work%2009.18.2020.pdf.pdf">https://hsagonline.sharepoint.com/sites/HQIC/12SOW%20Resource%20Library/Attachment%20%231%20-%20Statement%20of%20Work%2009.18.2020.pdf.pdf</a>

## Designated PFE Leader

### Self-Attestation

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

### Definitions

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

### Resources

Resource	Location
<b>HQIC Contract</b>	<a href="https://hsagonline.sharepoint.com/sites/HQIC/12SOW%20Resource%20Library/Attachment%20%231%20-%20Statement%20of%20Work%2009.18.2020.pdf.pdf">https://hsagonline.sharepoint.com/sites/HQIC/12SOW%20Resource%20Library/Attachment%20%231%20-%20Statement%20of%20Work%2009.18.2020.pdf.pdf</a>



## PFAC or Patient/Family Representatives on Hospital Committee

### Self-Reported

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

### Definitions

Element	Definition
<b>Measure Intent</b>	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
<b>HQIC Contract</b>	<a href="https://hsagonline.sharepoint.com/sites/HQIC/12SOW%20Resource%20Library/Attachment%20%231%20-%20Statement%20of%20Work%2009.18.2020.pdf.pdf">https://hsagonline.sharepoint.com/sites/HQIC/12SOW%20Resource%20Library/Attachment%20%231%20-%20Statement%20of%20Work%2009.18.2020.pdf.pdf</a>

## 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*

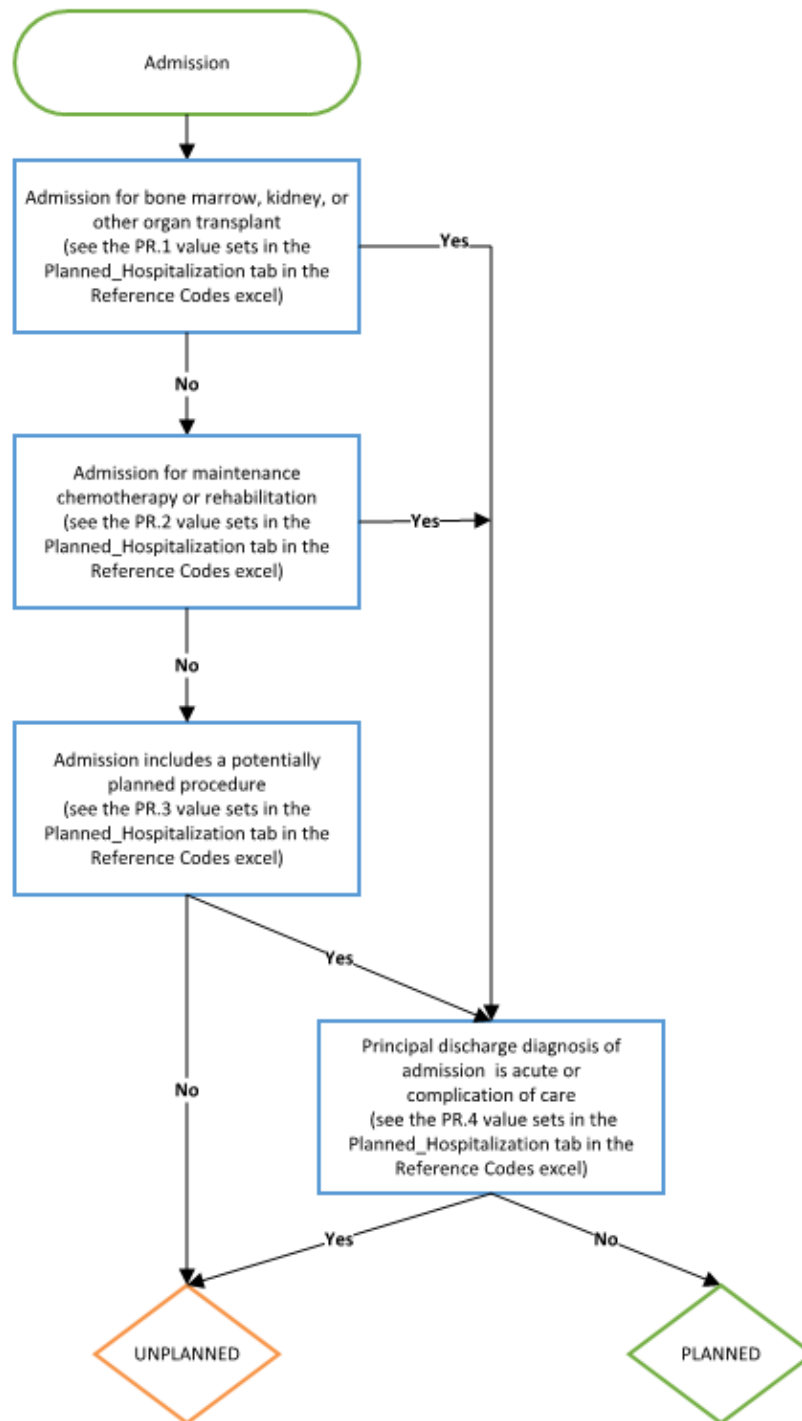
Part A claims are administrative claims from institutional providers and/or settings which are covered by the Medicare Part A benefit (e.g., hospital inpatient) as well as claims for institutional-based serviced covered by the Medicare Part B benefit (e.g., home health, hospital outpatient, etc.). The 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.



Source: 2020 All-Cause Hospital-Wide Measure Updates and Specifications Report: Hospital-Wide Readmission. 03/2020. Available at: <https://www.qualitynet.org/inpatient/measures/readmission/methodology>. Accessed April 16, 2020.

## 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	<i>Clostridioides difficile</i> 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