Outpatient Procedure Component

Data Quality Matters!

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Learning Objectives

- By the end of this session, participants will be able to:
  - Define data quality in practical terms
  - Explain how OPC data influence facility metrics and benchmarks
  - Describe the monthly OPC data review process
  - Identify common data refinement opportunities
  - Apply structured verification steps before final reporting

Outpatient Procedure Component Overview

NHSN OUTPATIENT PROCEDURE COMPONENT

The OPC Monitors Surgical Site Infections (SSIs) and Non-Infectious Adverse Events in Ambulatory Surgical Settings

- Designed for Ambulatory Surgery Centers (ASCs)
- Tracks outpatient surgical procedures
- Monitors associated surgical site infections and non-infectious adverse outcomes
- Part of the NHSN patient safety framework

The OPC component helps facilities track infections and adverse outcomes in outpatient surgery.

PROTOCOL-BASED REPORTING

OPC Reporting is Guided by Standardized NHSN Definitions and Criteria in the NHSN OPC Protocol

- Standard case definitions
- Defined surveillance timeframes
- Required data fields
- Updated 2026 criteria

Updates made to the Superficial Incisional SSI criterion ‘c’

- **Applies to all procedures performed on or after January 1, 2026**
- Update made for all OPC SSI General, Breast Surgery (BRST), and Knee Prothesis (KPRO) Criteria
  - “**Aspiration**” has been added to deliberately opened or re-access
  - “**Antibiotic/antifungal therapy**” has been added to deliberate opening or re-access and removed culture requirement
  - “**New or worsening**” qualifiers have been added to localized pain/tenderness
  - Term “**physician**” defined to mean any of the following:
    - Surgeon
    - Infectious disease physician
    - Emergency physician
    - Other physician on the case
    - Physician’s designee (Advanced Practice Nurse [APN], or Physician’s Assistant[PA])

Aspiration and antibiotic/antifungal therapy added to “deliberate opening or re-access” and “new or worsening” qualifiers added to pain/tenderness to the Superficial Incisional criterion ‘c’

2025

OPC General – Superficial Incisional SSI
Must meet the following criteria:

Date of event for infection occurs within 30 days following the NHSN operative procedure (where day 1 = the procedure date)
AND
involves only skin and subcutaneous tissue of the incision
AND
patient has at least ***one*** of the following:

a. purulent drainage from the superficial incision.
b. organisms identified from an aseptically-obtained specimen from the superficial incision or subcutaneous tissue by a culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment (for example, not Active Surveillance Culture/Testing [ASC/AST]).
c. a superficial incision that is deliberately opened or re-accessed by a surgeon, physician or physician designee and culture or non-culture based testing of the superficial incision or subcutaneous tissue is not performed.
   And
   patient has at least one of the following signs or symptoms: localized pain or tenderness; localized swelling; erythema; or heat.
d. diagnosis of a superficial incisional SSI by a physician or physician designee.

Comments: The two specific types of superficial incisional SSIs are:

2026

OPC General – Superficial Incisional SSI
Must meet the following criteria:

The date of event for infection occurs within 30 days following the NHSN operative procedure (where day 1 = the procedure date)
AND
involves only skin and subcutaneous tissue of the incision
AND
patient has at least ***one*** of the following:

a. purulent drainage from the superficial incision.
b. organisms identified from an aseptically-obtained specimen from the superficial incision or subcutaneous tissue by a culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment (for example, not Active Surveillance Culture/Testing [ASC/AST]).
c. a superficial incision that is deliberately opened, re-accessed, or aspirated by a surgeon, physician or physician designee.
   AND
   the surgeon, physician*, or physician designee initiates or continues antibiotic or antifungal therapy **on or in the two calendar days following the date of deliberate opening, re-access, aspiration** with a duration of two calendar days or longer
   AND
   patient has at least one of the following signs or symptoms: new or worsening localized pain or tenderness; localized swelling; erythema; or heat.
d. diagnosis of a superficial incisional SSI by a physician or physician designee.

* The term physician for the purpose of application of the NHSN SSI criteria may be interpreted to mean a surgeon, infectious disease physician, emergency physician, other physician on the case, or physician’s designee (Advanced Practice Nurse [APN], or Physician’s Assistant [PA]).

Updates made to the Deep Incisional SSI criterion ‘b’

- **Applies to all procedures performed on or after January 1, 2026**

- Update made for all OPC SSI General, Breast Surgery (BRST), and Knee Prothesis (KPRO) Deep Incisional SSI criteria ‘b’
  - Added a new element “**organism(s) identified from the deep soft tissues of the incision**”

"Organisms identified" added as a separate element to the Deep Incisional criteria 'b'

2025

OPC BRST - Deep incisional SSI
Must meet the following criteria:

Date of event for infection occurs within 90 days following a BRST operative procedure; where day 1 = the procedure date

AND

involves deep soft tissues of the incision (for example, fascial and muscle layers)

AND

patient has at least one of the following:

a. purulent drainage from the deep incision.

b. a deep incision that is deliberately opened*, re-accessed, or aspirated by a surgeon, physician or physician designee.

And

organism is identified from the deep soft tissues of the incision by a culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment (for example, not Active Surveillance Culture/Testing [ASC/AST]) or culture or non-culture based microbiologic testing method is not performed. A culture or non-culture based test that has a negative finding does not meet this criterion.

And

patient has at least **one** of the following signs or symptoms: fever (>38°C); localized pain or tenderness.

c. an abscess or other evidence of infection involving the deep incision detected on gross anatomical or histopathologic exam.

2026

OPC General - Deep Incisional SSI
Must meet the following criteria:

The date of event for infection occurs within 30 or 90 days following the NHSN operative procedure (where day 1 = the procedure date) according to the list in Table 2

AND

involves deep soft tissues of the incision (for example, fascial and muscle layers)

AND

patient has at least ***one*** of the following:

a. purulent drainage from the deep incision.

b. organism(s) identified from the deep soft tissues of the incision by a culture- or nonculture-based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment (for example, not Active Surveillance Culture/Testing [ASC/AST])

c. a deep incision that spontaneously dehisces, or is deliberately opened*, re-accessed or aspirated by a surgeon, physician‡ or physician designee or spontaneously dehisces. *Spontaneous dehiscence is defined as a re-opening of a surgical incision that is not due to external factors such as direct trauma.*

AND

the surgeon, physician‡, or physician designee initiates or continues antibiotic or antifungal therapy on or in the two calendar days following the date of deliberate opening, re-access, aspiration or spontaneous dehiscence with a duration of two calendar days or longer

AND

patient has at least ***one*** of the following signs or symptoms: fever (>38°C); new or worsening localized pain or tenderness.

d. an abscess, or other evidence of infection involving the deep incision detected on gross anatomical or histopathologic exam, or imaging test.

*Excludes any known multi-part/multi-phase procedures that occur over more than one operative episode [during the same admission] that is documented in the medical record by a surgeon prior to or during the first operative procedure [for example, a plan to return to the OR that is documented in the operative narrative of the first procedure would be eligible for use.

‡The term physician for the purpose of application of the NHSN SSI criteria may be interpreted to mean a surgeon, infectious disease physician, emergency physician, other physician on the case, or physician's designee (Advanced Practice Nurse [APN], or Physician's Assistant[PA]).

Updates made to the Deep Incisional SSI criterion ‘c’

- **Applies to all procedures performed on or after January 1, 2026**
- Update made to all OPC SSI General, Breast Surgery (BRST), and Knee Prothesis (KPRO) Deep Incisional SSI criteria
  - “**Antibiotic/antifungal therapy**” has been added to deliberate opening, re-access, aspiration, and “organisms identified” was removed from this criterion.
  - “**New or worsening**” qualifiers have been added to localized pain/tenderness.
  - Term “**physician**” defined to mean any of the following:
    - Surgeon
    - Infectious disease physician
    - Emergency physician
    - Other physician on the case
    - Physician’s designee (Advanced Practice Nurse [APN], or Physician’s Assistant[PA])

Antibiotic/antifungal therapy and New/Worsening Qualifiers added to pain/tenderness to the Deep Incisional SSI criterion 'c'

2025

OPC BRST - Deep incisional SSI
Must meet the following criteria:

Date of event for infection occurs within 90 days following a BRST operative procedure; where day 1 = the procedure date

AND

involves deep soft tissues of the incision (for example, fascial and muscle layers)

AND

patient has at least one of the following:

a. purulent drainage from the deep incision.
b. a deep incision that is deliberately opened*, re-accessed, or aspirated by a surgeon, physician or physician designee.
   And
   organism is identified from the deep soft tissues of the incision by a culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment (for example, not Active Surveillance Culture/Testing [ASC/AST]) or culture or non-culture based microbiologic testing method is not performed. A culture or non-culture based test that has a negative finding does not meet this criterion.
   And
   patient has at least **one** of the following signs or symptoms: fever (>38°C); localized pain or tenderness.
c. an abscess or other evidence of infection involving the deep incision detected on gross anatomical or histopathologic exam.

Excludes any known multi-part/multi-phase procedures that occur over more than one operative episode [during the same admission] that is documented in the medical record by a surgeon prior to first phase of the procedure.

2026

OPC General - Deep Incisional SSI
Must meet the following criteria:

The date of event for infection occurs within 30 or 90 days following the NHSN operative procedure (where day 1 = the procedure date) according to the list in Table 2

AND

involves deep soft tissues of the incision (for example, fascial and muscle layers)

AND

patient has at least ***one*** of the following:

a. purulent drainage from the deep incision.
b. organism(s) identified from the deep soft tissues of the incision by a culture- or nonculture-based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment (for example, not Active Surveillance Culture/Testing [ASC/AST])
c. a deep incision that spontaneously dehisces, or is deliberately opened*, re-accessed or aspirated by a surgeon, physician‡ or physician designee or spontaneously dehisces. *Spontaneous dehiscence is defined as a re-opening of a surgical incision that is not due to external factors such as direct trauma.*
   AND
   the surgeon, physician‡, or physician designee initiates or continues antibiotic or antifungal therapy on or in the two calendar days following the date of deliberate opening, re-access, aspiration or spontaneous dehiscence with a duration of two calendar days or longer
   AND
   patient has at least ***one*** of the following signs or symptoms: fever (>38°C); new or worsening localized pain or tenderness.
d. an abscess, or other evidence of infection involving the deep incision detected on gross anatomical or histopathologic exam, or imaging test.

*Excludes any known multi-part/multi-phase procedures that occur over more than one operative episode [during the same admission] that is documented in the medical record by a surgeon prior to or during the first operative procedure [for example, a plan to return to the OR that is documented in the operative narrative of the first procedure would be eligible for use.

‡The term physician for the purpose of application of the NHSN SSI criteria may be interpreted to mean a surgeon, infectious disease physician, emergency physician, other physician on the case, or physician's designee (Advanced Practice Nurse [APN], or Physician's Assistant[PA]).

The ‘new/worsening’ pain is to capture pain that is greater than the ‘typical’ post-operative pain

- **Intent** of ‘new/worsening’ pain:
  - Capture pain that is outside of what may be ‘typical’ post-operative pain within the SSI surveillance period
- **Documentation** used to determine new or worsening pain is based on facility policy including:
  - Documentation of pain level
  - Change in type and/or character of pain
  - Frequency/dose/type of analgesic administration
  - Pain impact on mobility or other life quality indicators
  - Other healthcare provider and physician documentation
- **Examples** of new/ worsening pain include (but are not limited to):
  - New pain experienced in a patient in which ‘typical’ post-operative pain was resolved/not present/reduced and then resumes or develops
  - If pain is assessed on a pain scale, an increase in the pain scale (for example, pain that was previously documented at a level of 2 and then is documented at a level of 5)

Knowledge Check 1

What was added to the “deliberate opening, re-access, aspiration” element of the Deep Incisional SSI criteria?

A. Initiates or continues antibiotic or antifungal therapy

B. Nothing

C. New or worsening

D. Physician diagnosis

Knowledge Check 1 - Answer

What was added to the “deliberate opening, re-access, aspiration” element of the Deep Incisional SSI criteria?

A. **Initiates or continues antibiotic or antifungal therapy**

B. Nothing

C. New or worsening

D. Physician diagnosis

Rationale: The deliberate opening, re-access, aspiration element was updated to include the surgeon, physician†, or physician designee **initiates or continues antibiotic or antifungal therapy** on or in the two calendar days following the date of **deliberate opening, re-access, aspiration** or spontaneous dehiscence with a duration of two calendar days or longer. Additionally, “organisms identified” was removed from this criterion and included as a separate criterion.

‘Alpha-defensin test’ and ‘physician diagnosis’ were added to the KPRO Organ/Space SSI as minor criteria

2025

OPC KPRO - Organ/Space SSI
Must meet the following criteria:

Date of event for infection occurs within 90 days following a KPRO; where day 1 = the procedure date **AND**
involves the organ/space tissues (deeper than the fascia/muscle)
AND
patient has at least one of the following:

a. Two positive periprosthetic (joint) specimens (tissue or fluid) with at least one matching organism, identified by culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis and treatment, for example, not Active Surveillance Culture/Testing (ASC/AST).
b. Patient has organisms identified from bone by culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis and treatment, for example, not Active Surveillance Culture/Testing (ASC/AST).
c. A sinus tract* communicating with the joint identified on gross anatomic exam, abscess, or other gross anatomic evidence of infection at the level of the joint.
d. Patient has evidence of osteomyelitis* on gross anatomic or histopathologic exam.
e. Having three of the following minor criteria:
    i. elevated serum C-reactive protein (CRP; >100 mg/L (1 dL = 10 L) >10 mg/dL -check what standard reporting units for CRP) and erythrocyte sedimentation rate (ESR; >30 mm/hr.)
    ii. elevated synovial fluid white blood cell (WBC; >10,000 cells/µL) count OR “++” (or greater) change on leukocyte esterase test strip of synovial fluid.
    iii. elevated synovial fluid polymorphonuclear neutrophil percentage (PMN% >90%) positive histological analysis of periprosthetic tissue (>5 neutrophils (PMNs) per high power field).
    iv. organism(s) identified from a single positive joint specimen (tissue or fluid) by culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis and treatment, for example, not Active Surveillance Culture/Testing (ASC/AST).

2026

OPC KPRO - Organ/Space SSI
Must meet the following criteria:

The date of event for infection occurs within 90 days following a KPRO; where day 1 = the procedure date
AND
involves the organ/space tissues (deeper than the fascia/muscle)
AND
patient has at least ***one*** of the following:

a. **Two** positive periprosthetic (joint) specimens (tissue or fluid) with at least one matching organism, identified by culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis and treatment, for example, not Active Surveillance Culture/Testing (ASC/AST).
b. Patient has organisms identified from bone by culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis and treatment, for example, not Active Surveillance Culture/Testing (ASC/AST).
c. A sinus tract* communicating with the joint, purulence, identified on gross anatomic exam, abscess, or other gross anatomic evidence of infection at the level of the joint.
d. Patient has evidence of osteomyelitis† on gross anatomic or histopathologic exam.
e. Having **three** of the following minor criteria:
    i. elevated serum C-reactive protein (CRP; >100 mg/L (1 dL = 10 L) >10 mg/dL -check what standard reporting units for CRP) and erythrocyte sedimentation rate (ESR; >30 mm/hr.)
    ii. elevated synovial fluid white blood cell (WBC; >10,000 cells/µL) count OR “++” (or greater) change on leukocyte esterase test strip of synovial fluid.
    iii. elevated synovial fluid polymorphonuclear neutrophil percentage (PMN% >90%)
    iv. positive histological analysis of periprosthetic tissue (>5 neutrophils (PMNs) per high power field).
    v. organism(s) identified from a single positive joint specimen (tissue or fluid) by culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis and treatment, for example, not Active Surveillance Culture/Testing (ASC/AST).
    vi. Synovial fluid alpha-defensin positive
    vii. Physician diagnosis of periprosthetic joint infection.

Knowledge Check 2

The updates made to the 2026 OPC SSI Protocol should NOT be used for procedures that were performed in 2025?

A. True

B. False

Knowledge Check 2

The updates made to the 2026 OPC SSI Protocol should NOT be used for procedures that were performed in 2025?

A. True

B. False

Rationale: The updates made to the 2026 OPC SSI Protocol should NOT be used for procedures performed in 2025. **The 2026 updates apply to procedures performed on or after January 1, 2026**.

Why OPC Data Quality Matters

What You Will Learn: Navigating NHSN Tools to Find and Fix OPC Data Quality Checks

- Why data accuracy matters — and what happens when it isn't
- How to use the Routine Monthly Review Cycle
- Navigating Analytic Reports and the DQ Line Listings
- Recognizing the most common OPC data errors
- How to correct flagged records and confirm resolution

OPC Data Drive Facility Metrics and National Standards

- **OPC data are used to calculate:**
  - Procedure counts
  - Event counts
  - Rates and comparative metrics
- **Data contribute to:**
  - Facility infection prevention efforts
  - Standardized Infection Ratio calculations for NHSN analyses about ASCs

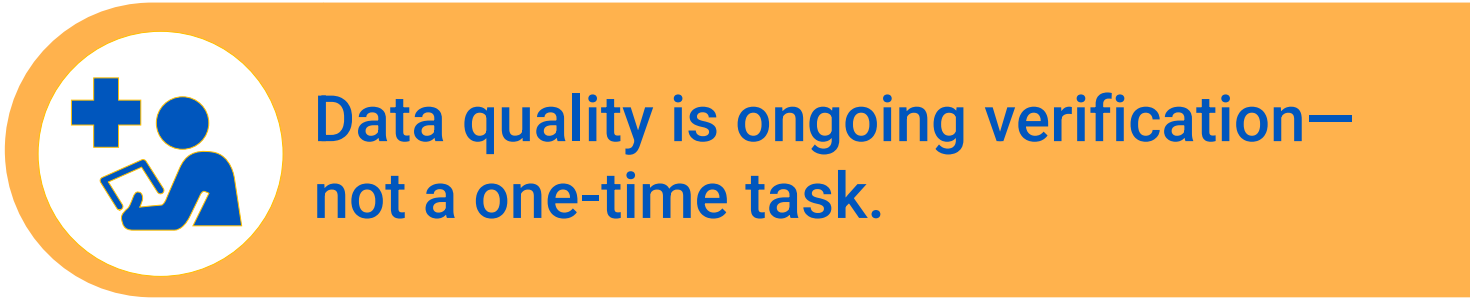
Accurate facility reporting supports meaningful comparisons.

DEFINING DATA INTEGRITY

High-Quality OPC Data Are Complete, Accurate, and Protocol-Consistent

High-quality OPC data are:

- **Complete**
  - All required fields populated
  - All eligible procedures included
- **Accurate**
  - Correct values entered (dates, BMI, duration)
- **Protocol-consistent**
  - Events meet NHSN definitions
  - Reporting aligns with Monthly Reporting Plan



How Proactive Data Review Enhances Metric Integrity

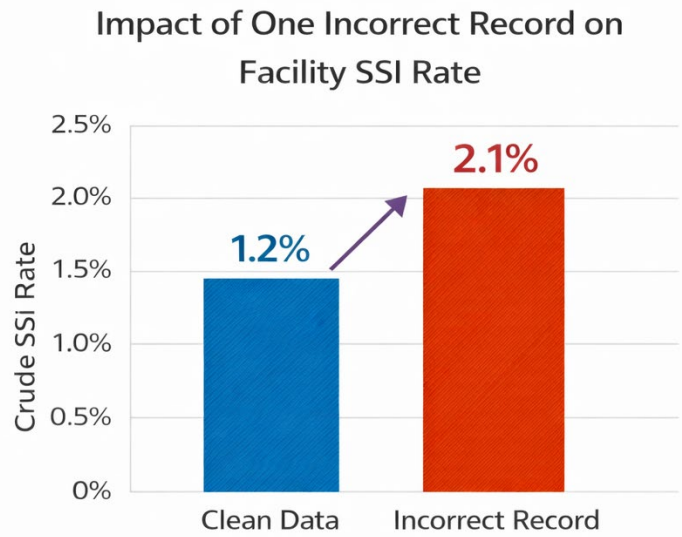
Small Data Refinements Can Improve Metric Precision

- **Single data fields can affect:**
  - Event classification
  - Denominator counts
  - Risk variable inputs

- **In lower-volume settings:**
  - One record can have meaningful impact on results.
  - Routine review prevents cumulative impact.

DETAILS MATTER

Accurate Data Can Improve Metric Precision



One incorrect BMI/procedure duration entry doubled the crude rate of SSI calculated by the facility.

OPC Metrics Depend on Accurate Entry Across Multiple Data Types

Four key reporting areas:

- **Monthly Reporting Plan**
  - Correct procedure types selected
  - Accurate surveillance months
- **Summary/Denominator Data**
  - Procedure counts complete
  - Risk variables accurate
- **Event Data**
  - Correct classification
  - Complete required fields
- **Annual Survey**
  - Facility characteristics updated annually

All four areas must align with the OPC Protocol.

A Structured Review Process Ensures Reliable OPC Results

DATA QUALITY REVIEW PROCESS

A Simple Four-Step Process Helps Facilities Identify and Resolve OPC Data Quality Checks

01

Check

Check the **Alerts Page** after data entry.

02

Generate New Datasets

New entries are not visible until regeneration.

03

Review

Review data quality and line listing reports for unusual values.

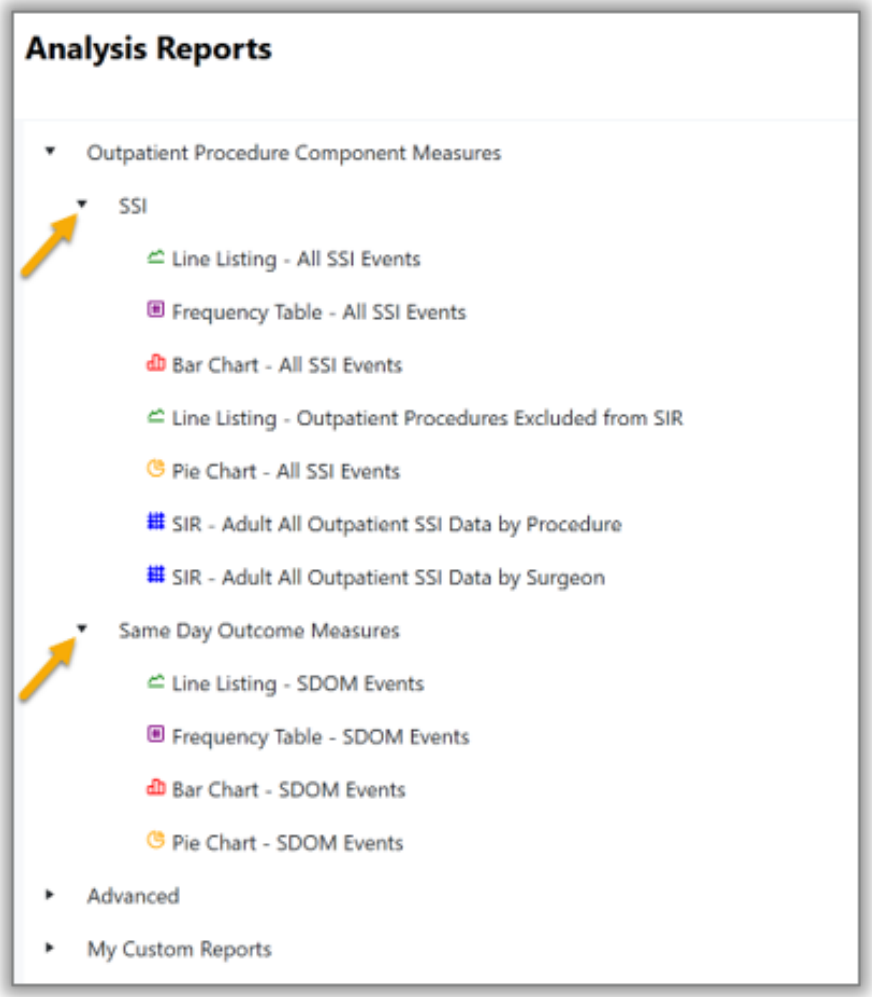
04

Fix & Confirm

Correct and update the data then regenerate analysis datasets.

USE ANALYTIC REPORTS

Line Listings and Analytic Reports Reveal Opportunities for Data Verification



Line List: Record-level review

Frequency Tables : Count verification

Charts: Visualize proportions of data categories

SIR Reports: Compares actual number of SSIs vs predicted

CHECK AGAINST PROTOCOL

Comparing Reports to Protocol Expectations Verifies Complete Event Reporting

- **Confirm:**
  - All eligible procedures included
  - All qualifying events reported
- **Compare:**
  - Counts to expected volume
  - Event types to procedure mix
- **Verify:**
  - Required fields completed
  - Definitions applied correctly

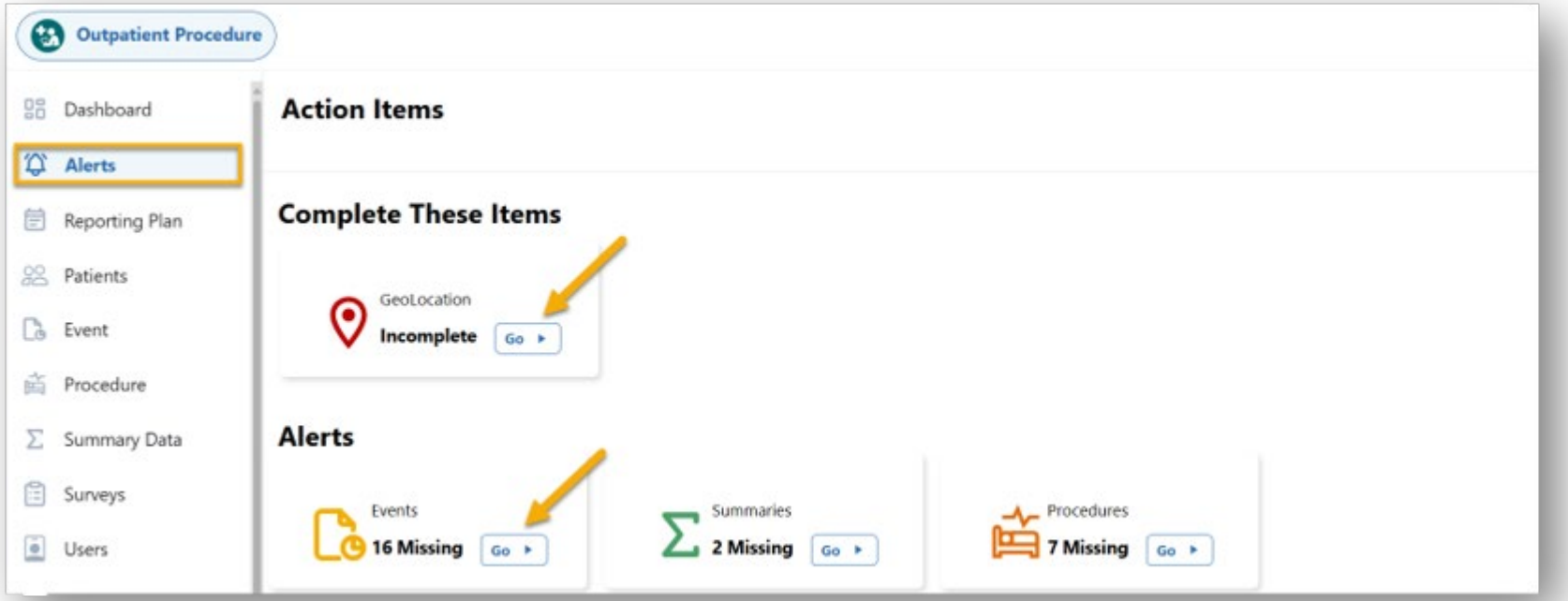
Reports should reflect what the protocol requires.

Consistent Data Verification Supports Future Benchmarking

OPC DATA QUALITY PROCESS

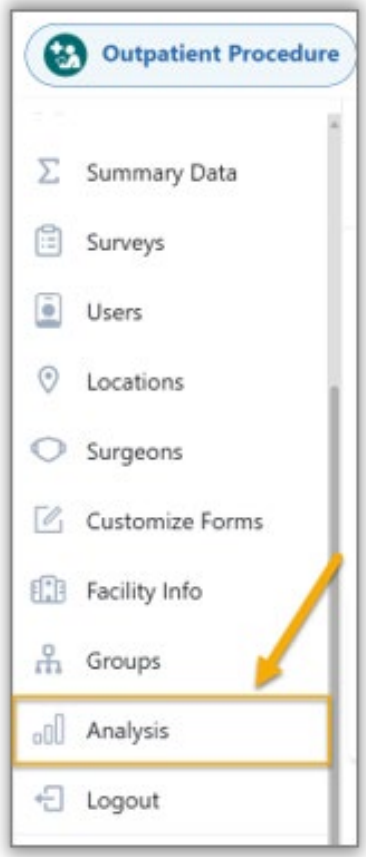
Step 1: Always Check the Alerts Page First - Before Opening Any Other Report

- Alerts highlight incomplete, missing, or unusual data entries.
- Select the **Go** icon to address incomplete items and/or missing alerts.
- Review the Missing Events, summaries, and/or procedures to identify which entries to correct
  - Notice any sudden drops, missing values, abnormal values/entries found in alerts.

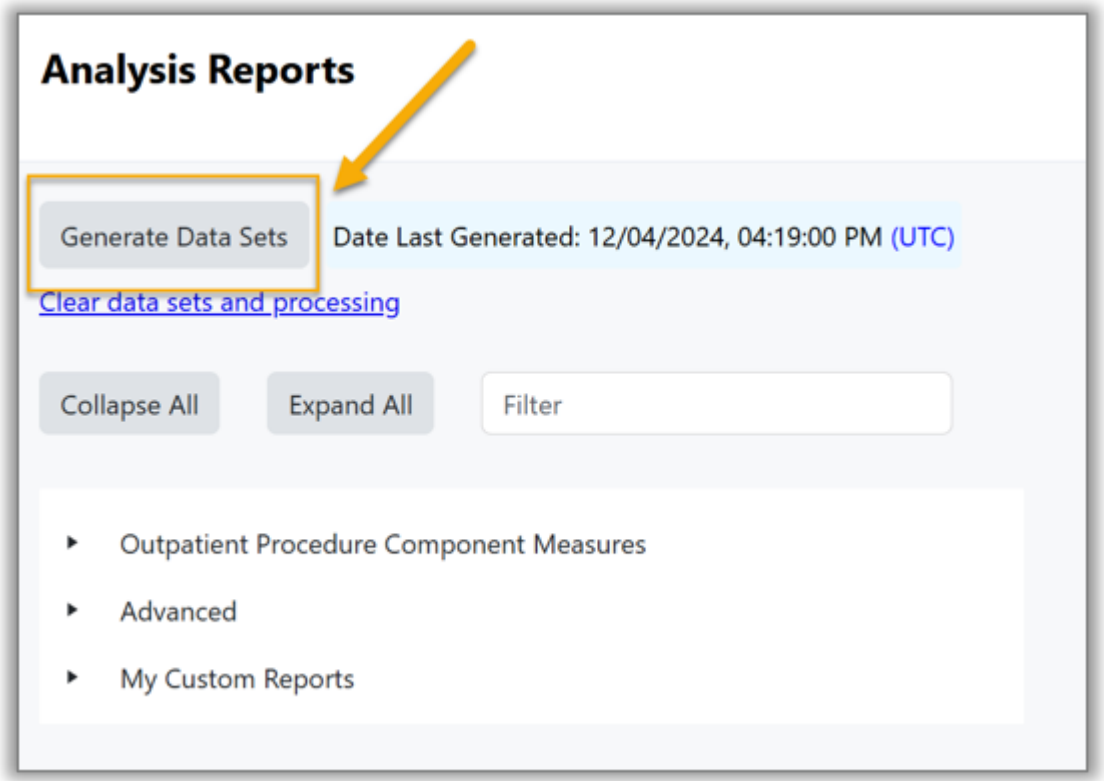


Step 2: Generate Datasets before Review

- Step 2a: From the left navigation pane, select **Analysis.**



Step 2b: In the Analysis Reports screen, select **Generate Data Sets**.



KNOWLEDGE CHECK #1 QUESTION

Your facility notices that the number of procedures reported for one month look much lower than expected. The actual number of surgeries did not change.

What is the most likely impact if this is not corrected?

- A. No impact if events were reported correctly
- B. Procedure counts are only used for internal tracking
- C. Rates and comparison metrics may be inaccurate
- D. NHSN will automatically correct missing procedure counts

KNOWLEDGE CHECK #1 ANSWER

Your facility notices that the number of procedures reported for one month look much lower than expected. The actual number of surgeries did not change.

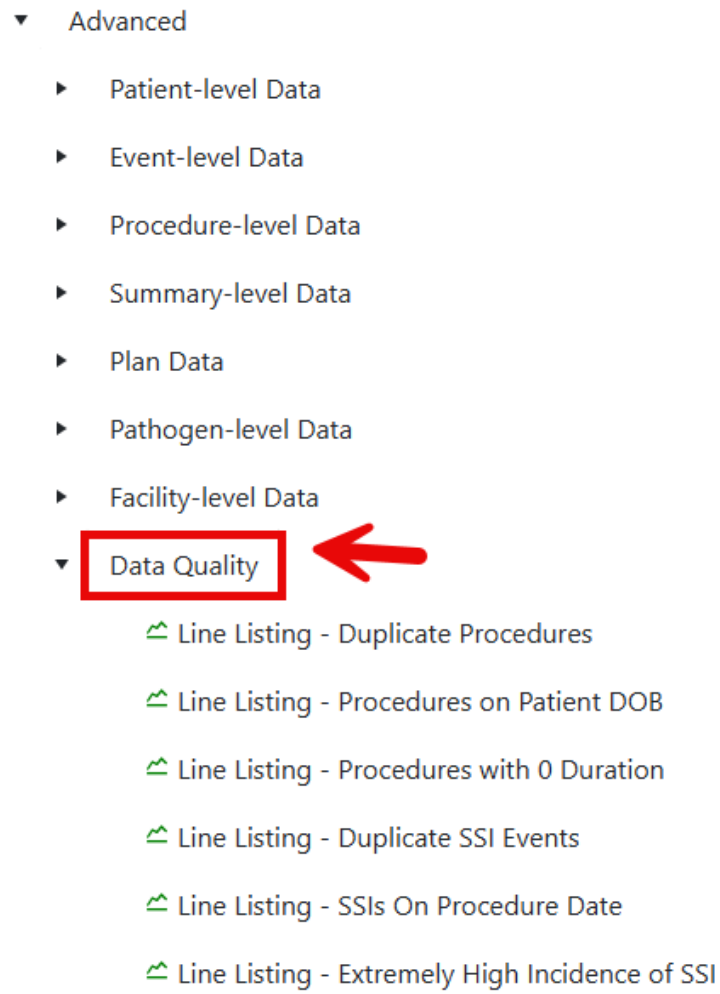
What is the most likely impact if this is not corrected?

- A. No impact if events were reported correctly
- B. Procedure counts are only used for internal tracking
- **C. Rates and comparison metrics may be inaccurate**
- D. NHSN will automatically correct missing procedure counts

Use the Data Quality Analytic Reports to Review Data Quality in NHSN

These reports show common data quality issues that facilities can review and correct in NHSN.

- Duplicate Procedures
- Procedures on Patient DOB
- Procedures with 0 duration
- Duplicate SSI Events
- SSIs on Procedure Date
- Extremely High Incidence of SSI



Check for Duplicate Procedure Records to Prevent Inflated Procedure Counts

- What it identifies:
  - Same procedure entered more than once
- Why review:
  - Duplicate entries can increase procedure counts
- Example:
  - A procedure for the same patient is entered twice on the same date

Duplicate Procedures

PatientID	ProcCode	ProcDate
1021	KPRO	05/12/2026
1021	KPRO	05/12/2026 ~ duplicate
1103	HPRO	05/12/2026

Procedures Recorded on a Patient's Birth Date May Indicate a Date Entry Error

- What it identifies:
  - Procedure date matches patient date of birth
- Why review:
  - Often caused by an incorrect date entry
- Example:
  - Procedure date and DOB both listed as 05/10/1980

Procedures on Patient DOB

PatientID	DOB	ProcDate	
2045	03/10/1980	03/10/1980	<-- matches DOB
2078	07/12/1972	04/21/2026	

Procedures with a Duration of 0 Minutes May Indicate Missing Data

- What it identifies
  - Procedure duration recorded as 0 minutes
- Why review
  - Duration is a required risk variable
- Example
  - Knee surgery reported with 0-minute duration

Procedures with 0 Duration

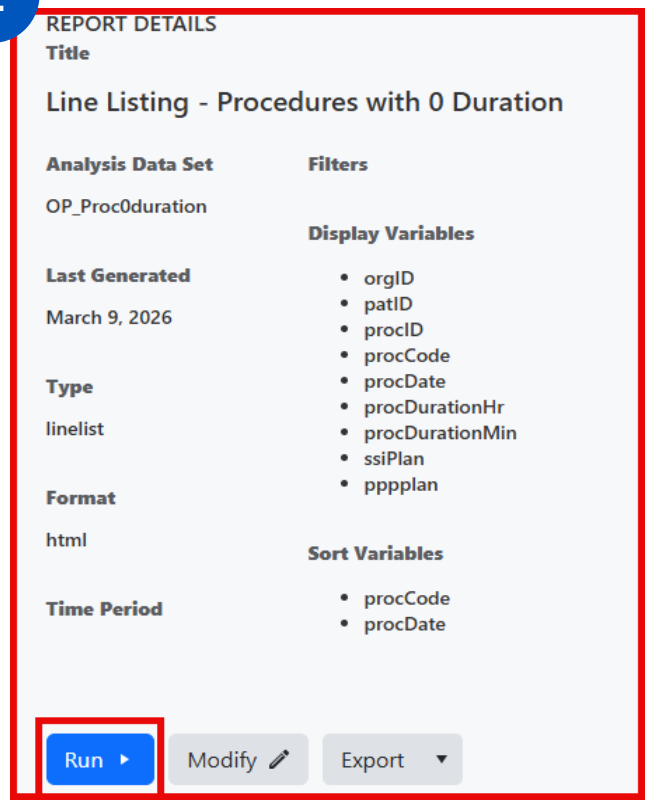
PatientID	ProcCode	ProcTime
1333	APPY	0 hr 0 min ~ zero duration
1421	COLO	0 hr 0 min ~ zero duration

Use Line Listings to Identify Procedures with 0 Duration

1. Select the Data Quality report
   - Line Listing – Procedures with 0 duration
2. Run the report
3. Review results for procedures with duration = 0

1

2



3

National Healthcare Safety Network
Line Listing of Procedures with 0 Duration
As of: March 9, 2026 at 5:24 AM UTC
Date Range: All OP_PROC0DURATION

orgID	patID	procID	procCode	procDate	procDurationHr	procDurationMin	ssiPlan	pppplan
46153	OPD-1017	72280625	BRST	01/25/2024	0	0	Y	N

Sorted by procCode procDate
Data contained in this report were last generated on March 9, 2026 at 5:21 AM UTC UTC to include data beginning May 2015 through March 2026.

Duplicate SSI Events Can Overcount Infections and Distort Metrics

- What it identifies
  - Multiple SSI events for the same procedure
- Why review
  - Duplicate events may overcount infections
- Example
  - Two SSI events reported for the same patient and procedure

Duplicate SSI Events

PatientID	ProcCode	SSI_Event_Date	
4101	HYST	06/02/2026	
4101	HYST	06/02/2026	<-- duplicate
4110	HYST	06/04/2026	

SSI Events Reported on the Same Day as the Procedure May Need Review

- What it identifies
  - SSI event date is the same as the procedure date
- Why review
  - SSIs usually occur after the procedure
- Example
  - Procedure and SSI both recorded on June 1

SSI on Procedure Date

PatientID	ProcDate	SSI_Date	
5201	04/18/2026	04/18/2026	<-- same day
5202	04/18/2026	04/21/2026	

Unusually High Numbers of SSI Events May Indicate Data Issues

- What it identifies
  - More SSI events than expected for procedures reported
- Why review
  - May indicate reporting or data entry errors
- Example
  - 3 SSI events reported but only 1 procedure

Extremely High Incidence of SSI

ProcedureType	Procedures	SSI_Events
COLO	1	3 <-- review
HYST	5	0
KPRO	12	1

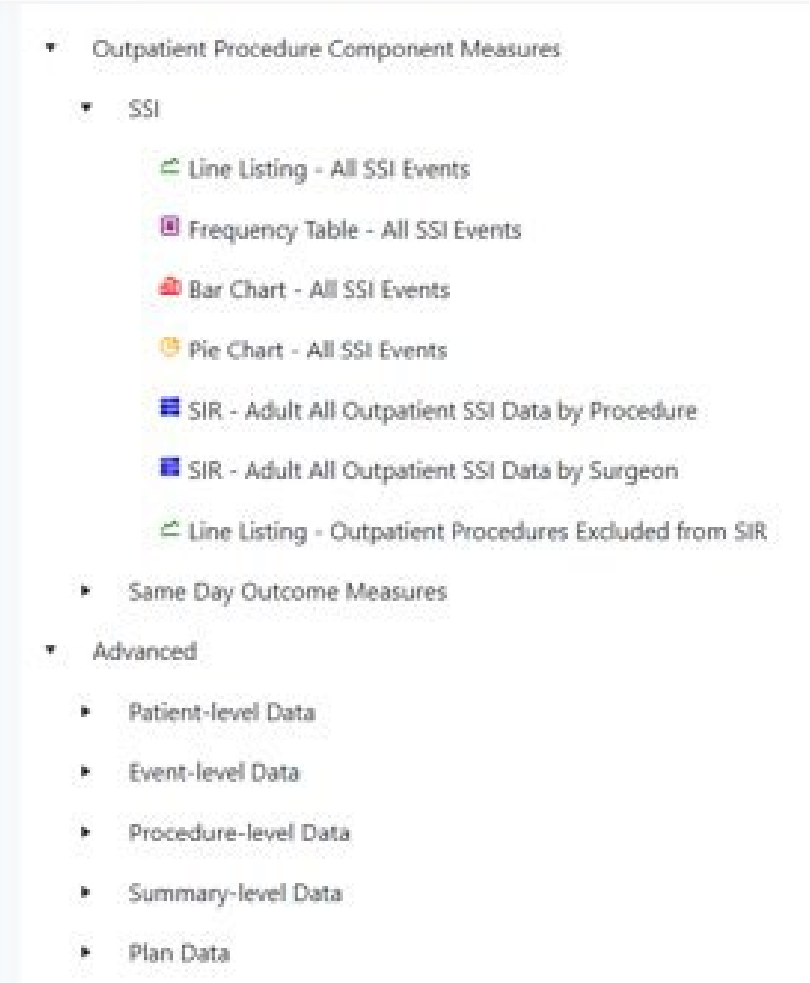
OPC DATA QUALITY PROCESS

Review and Modify Other Analytic Reports to Identify Possible Data Issues

- Review NHSN reports such as line lists, frequency tables, and charts
- Examine procedure and SSI event data for unexpected values or patterns
- Compare results against expected trends and protocol guidance

1

Analysis Reports



Review Procedure/Event Data for Unexpected or Unusual Values

- Examine procedure records for unusual values
- Look for values that fall outside expected ranges
- Compare records to protocol guidance
- Example:
  - A procedure duration recorded as 5 minutes may indicate a data entry error

2

National Healthcare Safety Network
Line Listing of All Surgical Site Infection Events
As of: March 4, 2026 at 7:29 AM UTC
Date Range: All OP_SSI_EVENTS

orgID	patID	opeventType	opspcEvent	procDate	procCode	dob	ageAtProc	sex	procDurationHr	procDurationMin
15894	CM0702-BRST-A	OPSSI	DIP-BRST	07/02/2020	BRST	05/05/1955	65	M	0	5
15894	CM0311-BRST-A	OPSSI	DIS-BRST	03/11/2021	BRST	07/07/1977	43	F	2	45
15894	CM1218-BRST-A	OPSSI	DIP-BRST	12/18/2021	BRST	05/05/1955	66	M	5	45
15894	CM1222-BRST-A	OPSSI	DIP-BRST	12/22/2021	BRST	06/06/1978	43	M	2	45
15894	CM1217-BREST-A	OPSSI	DIP-BRST	12/17/2022	BRST	09/09/1999	23	F	4	45
15894	CM0121-PROD-A	OPSSI	DIP-BRST	01/21/2023	BRST	09/09/1999	23	F	3	45

Sorted by procCode
Data contained in this report were last generated on March 4, 2026 at 7:27 AM UTC UTC to include all data.

EXAMPLE OF CHECKING AGAINST STANDARD GUIDANCE

Compare Report Results to NHSN Guidance and Protocol to Identify Potential Data Quality Issues

- Compare report results with NHSN protocol guidance.
- Identify records that fall outside expected limits.
- Review those records to confirm accuracy.
- Example:
  - A report shows more procedures for a patient in one day than allowed by NHSN guidance• Compare report results with NHSN protocol guidance

3

National Healthcare Safety Network

Line Listing for Procedures Exceeding the Max Allowed

As of January 30, 2020 at 9:33 AM

Date Range: DUPROCEDURES

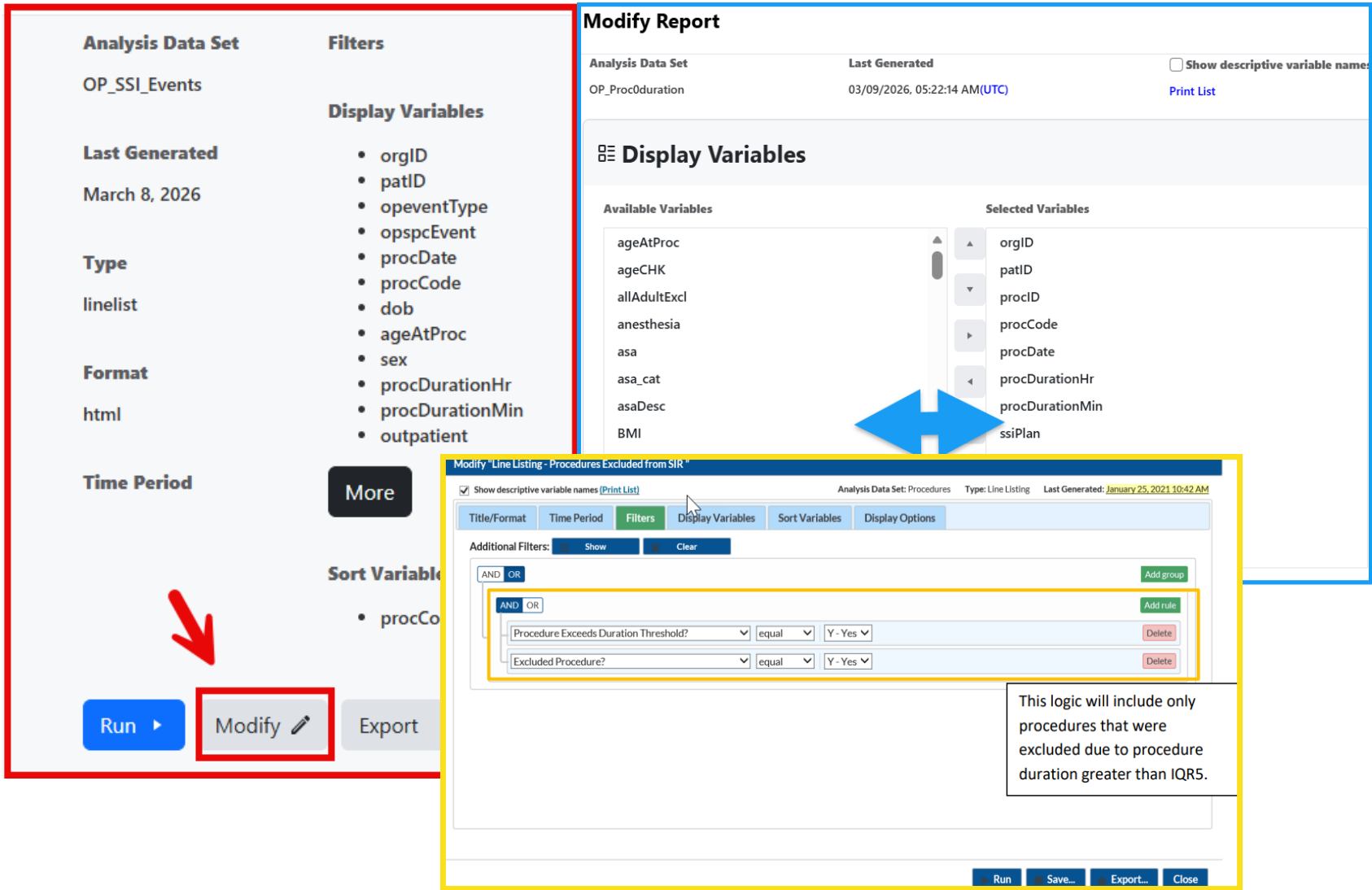
Carefully review this list, which includes those patients with more procedures of the same type than the maximum allowed for a single day. Please delete the extraneous procedure(s) from NHSN.

patID	procID	linked Event	procCode	procDate	max Allowed	asa	swClass	procDuration Hr	procDuration Min	outpatient	emergency	trauma	endoscope	anesthesia	ssiPlan
BT100	20993	Y	AAA	3/25/2019	1	1	C	5	0	N	N	N	N	Y	N
BT100	20997	N	AAA	3/26/2019	1	1	C	5	0	N	N	N	N	Y	N

Sorted by patID procCode procDate

Modify Reports to Focus on the Data You Want to Review

- Use the Modify option.
- Move Display variables in or out to add details or simplify the view.
- Apply filters to focus on specific records.
  - For example: unusual BMI or procedure duration values
- Run the updated report.



KNOWLEDGE CHECK #2

A procedure is reported with a duration of 0 minutes.

What is the most appropriate next step?

- A. Leave as entered if no SSI occurred
- B. Confirm the duration and verify units
- C. Delete the record
- D. Wait for NHSN to flag it

KNOWLEDGE CHECK #2

A procedure is reported with a duration of 0 minutes.

What is the most appropriate next step?

- A. Leave as entered if no SSI occurred
- **B. Confirm the duration and verify units**
- C. Delete the record
- D. Wait for NHSN to flag it

Step 4: Fixing Records and Generating New Datasets Ensures Accurate Facility Data

Steps to editing OPC data:

1. Identify unexpected values
2. Correct values
3. Save
4. Generate new dataset
5. Re-run report
6. Confirm data in updated report

IDENTIFY UNEXPECTED VALUES

Use NHSN Notifications and Reports to Identify Records that May Need Review

1. Review any NHSN data quality outreach emails.
2. Review line listing reports identifying unexpected values.
3. Use the report to locate records highlighted for review.

National Healthcare Safety Network
Line Listing for All Procedures
As of: January 31, 2025 at 7:31 PM UTC
Date Range: PROCEDURES procDateYM 2015M01 to 2015M01

orgID	patID	dob	procID	procDate	procCode	BMI_val	htFeet	htInches	htMetric	wtEnglish	wtMetric
10018	123456	09/24/1932	46752	01/05/2015	COLO	27.996914	5	11	1.800	200.00	90.71
10018	DHQP100201	10/03/1969	58772	01/02/2015	COLO	0.6718624	4	0	1.220	2.20	1.00
10018	DHQP100202	01/29/1964	58773	01/26/2015	COLO	41.105469	5	3	1.600	232.00	105.23
10018	DHQP100210	08/29/1945	58781	01/11/2015	COLO	45.166037	5	2	1.575	247.00	112.04
10018	DHQP100211	12/03/1945	58782	01/19/2015	COLO	29.090858	6	11	2.108	285.00	129.27
10018	DHQP100226	12/03/1982	58797	01/02/2015	COLO	54.634469	5	1	1.549	289.00	131.09

Action Required: Address BMI Data Outliers in NHSN

Summarize

Reply | Reply All | Forward

N nhsn@cdc.gov
To

Dear **(NHSN orgID**

We are reaching out because your facility reported Body Mass Index (BMI) data to NHSN that contains **outliers**.
BMI is used to determine the likelihood of infection following a procedure and to enable the appropriate risk adjustment in NHSN analyses.

BMI is considered an outlier when:
- Adult patients greater than or equal to 18 years of age have a BMI less than 12 or greater than 60
- Pediatric patients less than 18 years of age have a BMI less than 10.49 or greater than 65.79 (following confirmation of biological plausibility)

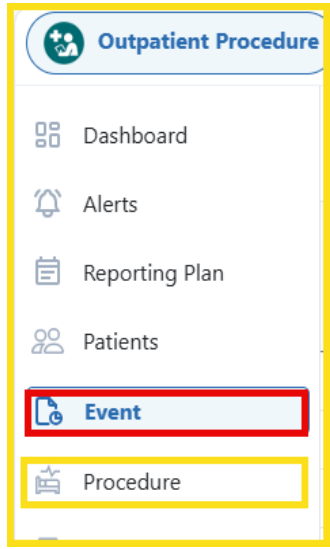
If errors are identified, please use the Quick Reference Guide: Reporting Height and Weight for Procedures for steps detailing how to report height and weight in NHSN.

Additional reference resources are also available:
- Reporting Height and Weight for Procedures in NHSN
- Outpatient Procedure Component Surgical Site Infection Protocol
- NHSN SIR Guide

Update Procedure or Event Records to Correct Identified Data issues

1. Review the ‘Events’ or ‘Procedures’ tab to modify/edit procedure and event data directly.
2. Select the procedure/event.

1

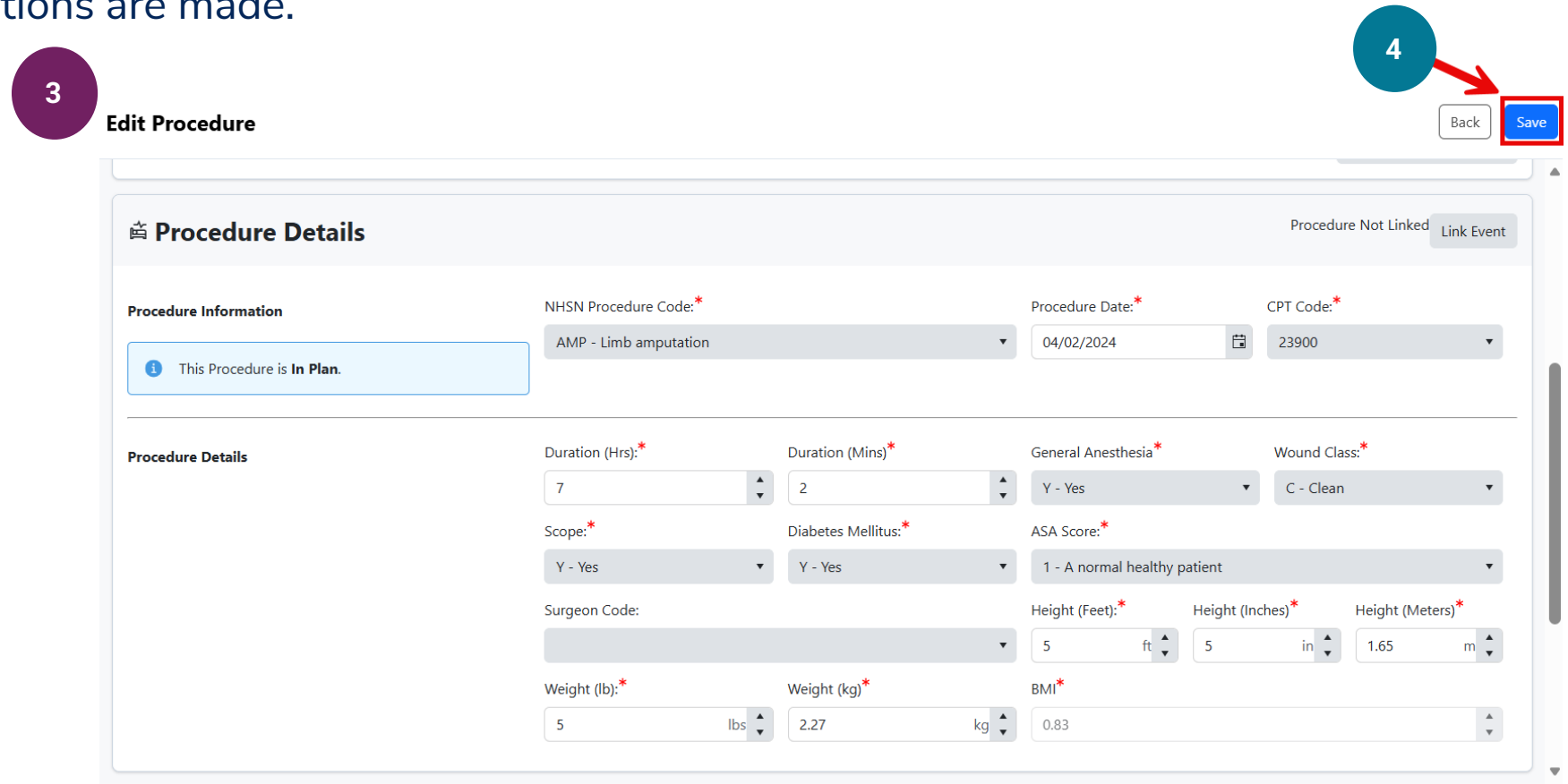


2

Procedure #	Procedure Code	CPT Code	Procedure Date	Last Nam
			Select to open	
74091456	AMP	23900	04/02/2024	
72280627	BRST	11970	01/25/2024	
72280626	Select the procedure/event you want to edit	11970	01/25/2024	
72280625		11970	01/25/2024	
72280624	BRST	11970	01/25/2024	
72280623	BRST	11970	01/25/2024	

Correct Procedure/Event Records to Ensure Accurate NHSN Reporting

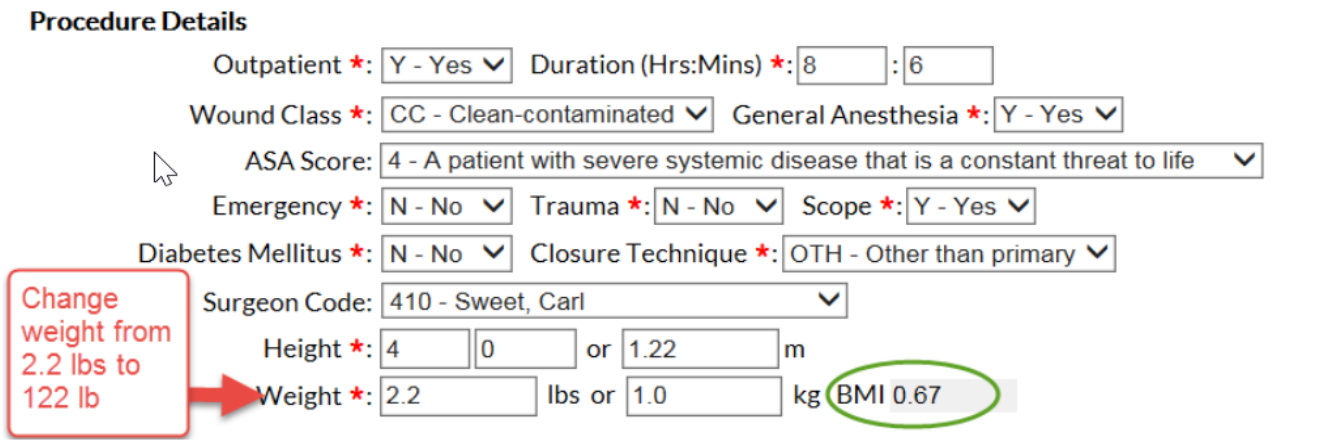
1. Enter correct values according to Protocol standards.
2. Click **Save** once modifications are made.

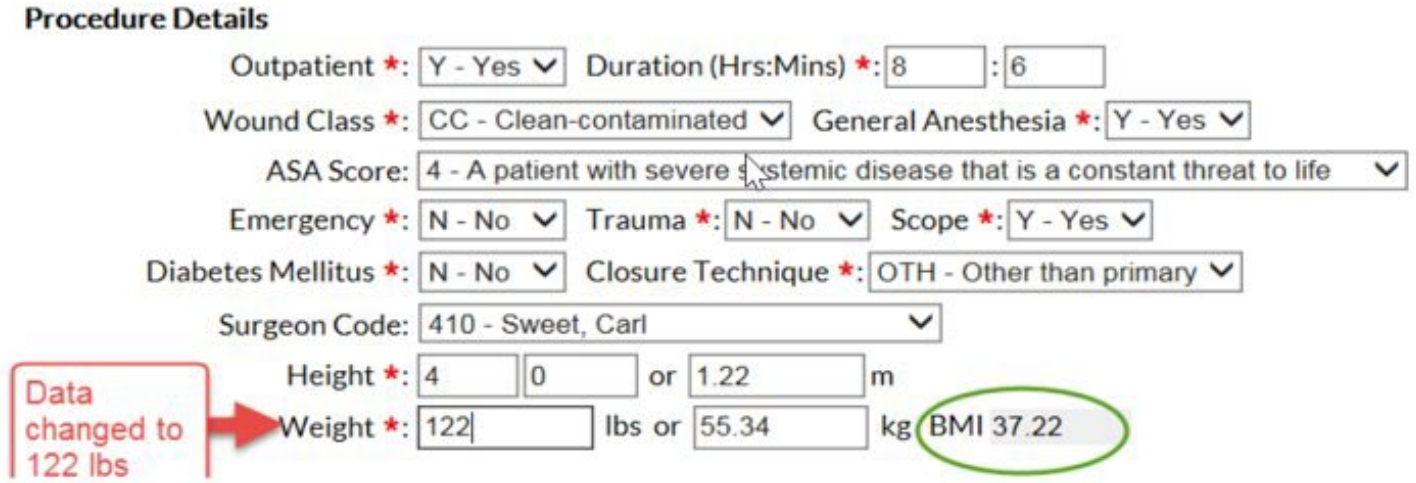


Correcting BMI Values Support Accurate OPC Data

Extreme values can impact analysis results and lead to record exclusion

- Review data for extreme BMI values:
- Confirm:
- Units are correct
- Correct
- Generate New Datasets
- Re-run the Report





KNOWLEDGE CHECK #3 QUESTION

Your facility receives a DQ notification of a very low BMI value in a procedure record during a data quality review.

What should you review first to determine if the value is correct?

- A. Confirm that height and weight values and units (lbs/kg, inches/cm) were entered correctly.
- B. Delete the procedure record.
- C. Generate a new dataset immediately.
- D. Ignore the value if the procedure was completed.

KNOWLEDGE CHECK #3 ANSWER

Your facility receives a DQ notification of a very low BMI value in a procedure record during a data quality review.

What should you review first to determine if the value is correct?

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- C. Generate a new dataset immediately.
- D. Ignore the value if the procedure was completed.

Working Together Strengthen the Quality of OPC Reporting

OPC Data Quality Is a Shared Responsibility

- **Facility Roles:**
  - Data entry staff
  - Data Analysts
  - Leadership
- **NHSN Roles:**
  - OPC Team
- **Shared goal:**
  - Accurate
  - Complete
  - Timely reporting

Data quality is a team process.

Strong Data Quality Processes Support Accurate OPC Reporting

- **Key Takeaways for OPC Data Quality:**
  - Review NHSN Alerts and analytic reports regularly.
  - Generate datasets to ensure reports reflect updated data.
  - Investigate unexpected values or patterns in reports.
  - Correct records according to NHSN protocol guidance.
  - Establish a routine data quality review process within your facility.
  - Address NHSN Data Quality notifications promptly.

TOOLS AND SUPPORT

NHSN Resources Support Ongoing OPC Data Verification and Data Quality Activities

- NHSN Help Desk: nhsn@cdc.gov
- ServiceNow portal: NHSN-ServiceNow portal
- Protocol documents: OPC SSI Surveillance
- Reporting guidance: Outpatient Procedure Component Manual
- Analysis guidance: Surgical Site Infections (SSI) | OPC | NHSN | CDC
- Training resources: Outpatient Procedure Component Training | NHSN | CDC

KEY TAKEAWAY

Accurate Data Support Meaningful Results

Thank you.

For any questions or concerns, contact the NHSN Helpdesk

- **NHSN-ServiceNow** to submit questions to the NHSN Help Desk.
- Access new portal at **https://servicedesk.cdc.gov/nhsncsp**.
- If you do not have a SAMS login, or are unable to access ServiceNow, you can still email the NHSN Help Desk at nhsn@cdc.gov.

For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 https://www.cdc.gov/
Follow us on social **@CDCgov**

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the U. S. Centers for Disease Control and Prevention.

Chat and Q & A features are limited to only 1000 participants
Please refer to email Centers for Disease Control and Prevention no-reply@emailupdates.cdc.gov with subject line, “NHSN 2026 Annual Training - Day 2”for additional instructions and links.