



Outpatient Procedure Component using a Case Scenario

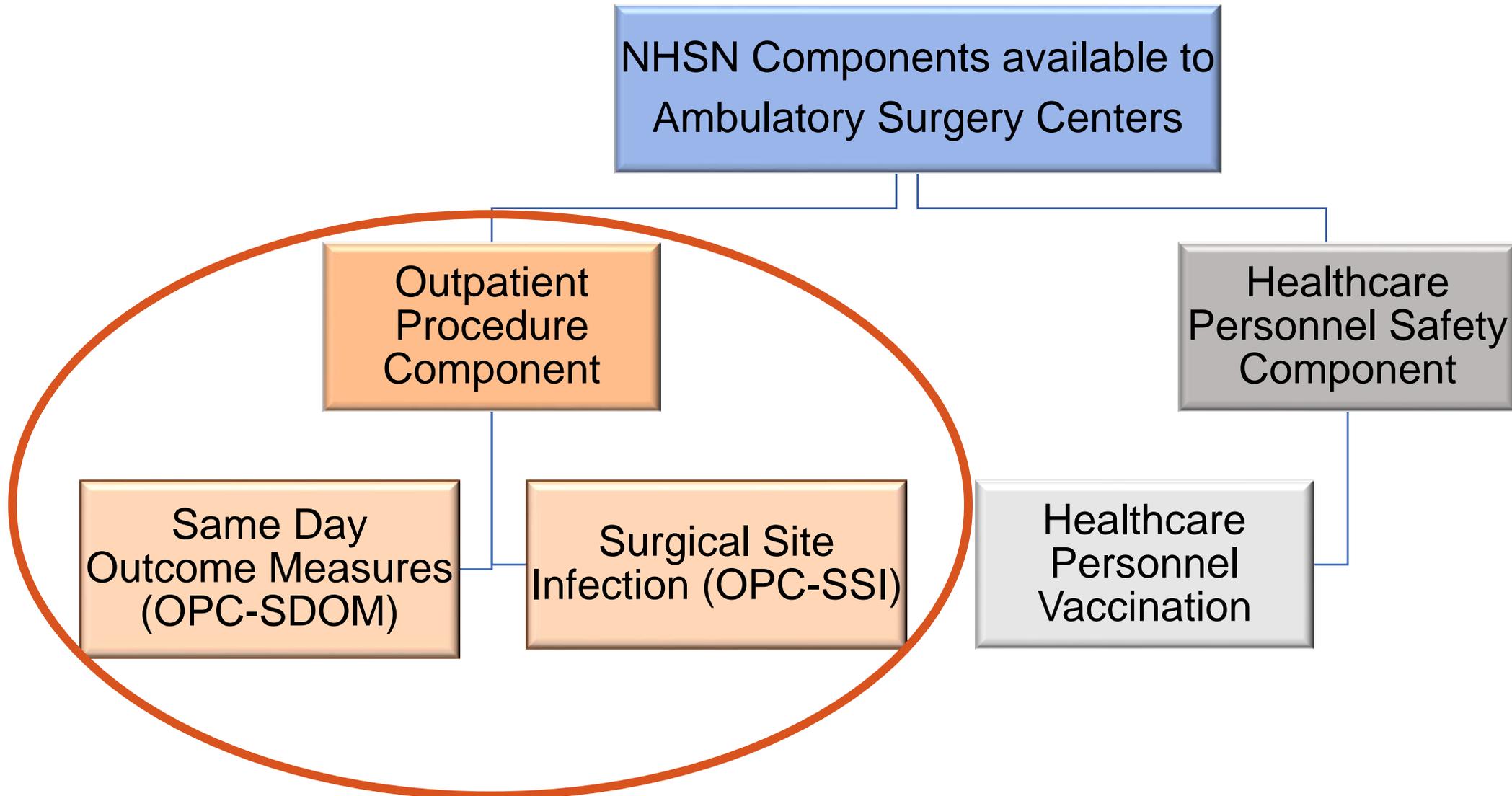
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Training Notes

- As there were no significant updates to the Outpatient Procedure Component (OPC) Protocols, the information presented during the 2019 NHSN Annual Training is still accurate. The 2019 training should be considered basic training and can be viewed at <https://www.youtube.com/watch?v=1DPwtvLnZi0>.
- The 2020 training has been created to compliment the 2019 training and to expand OPC participant's knowledge of the criteria through a detailed case scenario.
- All data in this presentation has been **created in a test environment** and is for training purposes only. Information seen on images during this presentation **do not represent any actual data** submitted to NHSN by participating facilities.

Outpatient Procedure Component



Learner Objectives

By the end of this case scenario, the learner will be able to:

- *Identify when and how to apply the SDOM criteria*
- *Perform analysis of SDOM data and generate a Bar Chart*
- *Evaluate an SSI event using the OPC-SSI criteria*
- *Perform analysis of SSI data and review the analysis output*
- *Describe how OPC can assist ASCs with monitoring outcome measures*

Case Scenario, page 1

Downtown ASC started performing unicondylar knee arthroplasty (KPRO) procedures in October 2019.

In an effort to monitor outcomes for the new KPRO procedures, the ASC has decided to perform surveillance using OPC for the following:

- Falls post-KPRO
- Transfers or admissions to a hospital upon discharge from the ASC post-KPRO
- SSIs attributed to KPRO

Monthly Reporting Plan (MRP)

Monthly Reporting Plan (MRP)

“In-plan” & “Off-plan”

- MRP - informs NHSN which OPC modules will be used during a given month.
- If a module is included in the MRP, this is an agreement to follow the details of the module in its entirety.

In-plan

- ✓ Module included in the MPR.
- ✓ NHSN surveillance protocol(s) will be used, in its entirety.
- ✓ Data included in NHSN annual reports or other NHSN publications.

Off-plan

- ✓ Module NOT included in the MPR.
- ✓ NHSN surveillance protocol(s) is NOT required to be used, in its entirety.
- ✓ Data NOT included in NHSN annual reports or other NHSN publications.

NHSN - National Healthcare Safety Network

NHSN Home

- Alerts
- Reporting Plan** 1
- Patient ▶
- Event ▶
- Procedure ▶
- Summary Data ▶
- Import/Export
- Surveys ▶
- Analysis ▶
- Users ▶
- Facility ▶
- Group ▶
- Logout

Add Monthly Reporting Plan

marked with *

Facility ID *: DownTown ASC (ID12345) ▼

Month *: October ▼ 3

Year *: 2019 ▼ 4

No NHSN Outpatient Reporting this month

Same Day Quality Measures

5 Same Day Outcome Measures

Surgical Site Infection (SSI) Surveillance

Targeted SSI surveillance for specific NHSN Operative Procedure Categories

Actions	Specify which procedure category(ies) is (are) being monitored (list all that apply):	SSI
	KPRO - Knee prosthesis ▼ 6	OUT: <input checked="" type="checkbox"/>

7

Data Analysis Preparation

Data Entry Sources

■ Patient

- Where patients at facility are recorded

■ Event

- All infection events: SSI and SDOM

■ Procedure

- Place to add all procedures, with covariates

■ Summary Data

- Summary data forms for SDOM

■ Surveys

- Facility level data collected once a year for previous calendar year

NHSN Home	
Alerts	
Reporting Plan	▶
Patient	▶
Event	▶
Procedure	▶
Summary Data	▶
Import/Export	
Surveys	▶
Analysis	▶
Users	▶
Facility	▶
Group	▶
Tools	▶
Logout	

Accessing Data Entry Screens

3 Options: Add, Find, Incomplete

- Click 'Add' to enter data
- 'Find' is used to look for previously entered data forms.
- 'Incomplete' lists the forms that have been started, but all the required fields have not been completed.

NHSN Home

- Alerts
- Reporting Plan ▶
- Patient ▶
- Event ▶
- Procedure ▶**
 - Add
 - Find**
 - Incomplete
- Summary Data ▶
- Import/Export
- Surveys ▶
- Analysis ▶
- Users ▶
- Facility ▶
- Group ▶
- Logout

Find Procedure

- Enter search criteria and click Find
- Fewer criteria will return a broader result set
- More criteria will return a narrower result set

Procedure Information

Facility ID: ASC Test Facility for OPC Users (ID 57258) ▼

Procedure #:

NHSN Procedure Code:

CPT Code:

Procedure Date: To:

Patient Information

Patient ID:

Last Name:

First Name:

Social Security #:

Secondary ID:

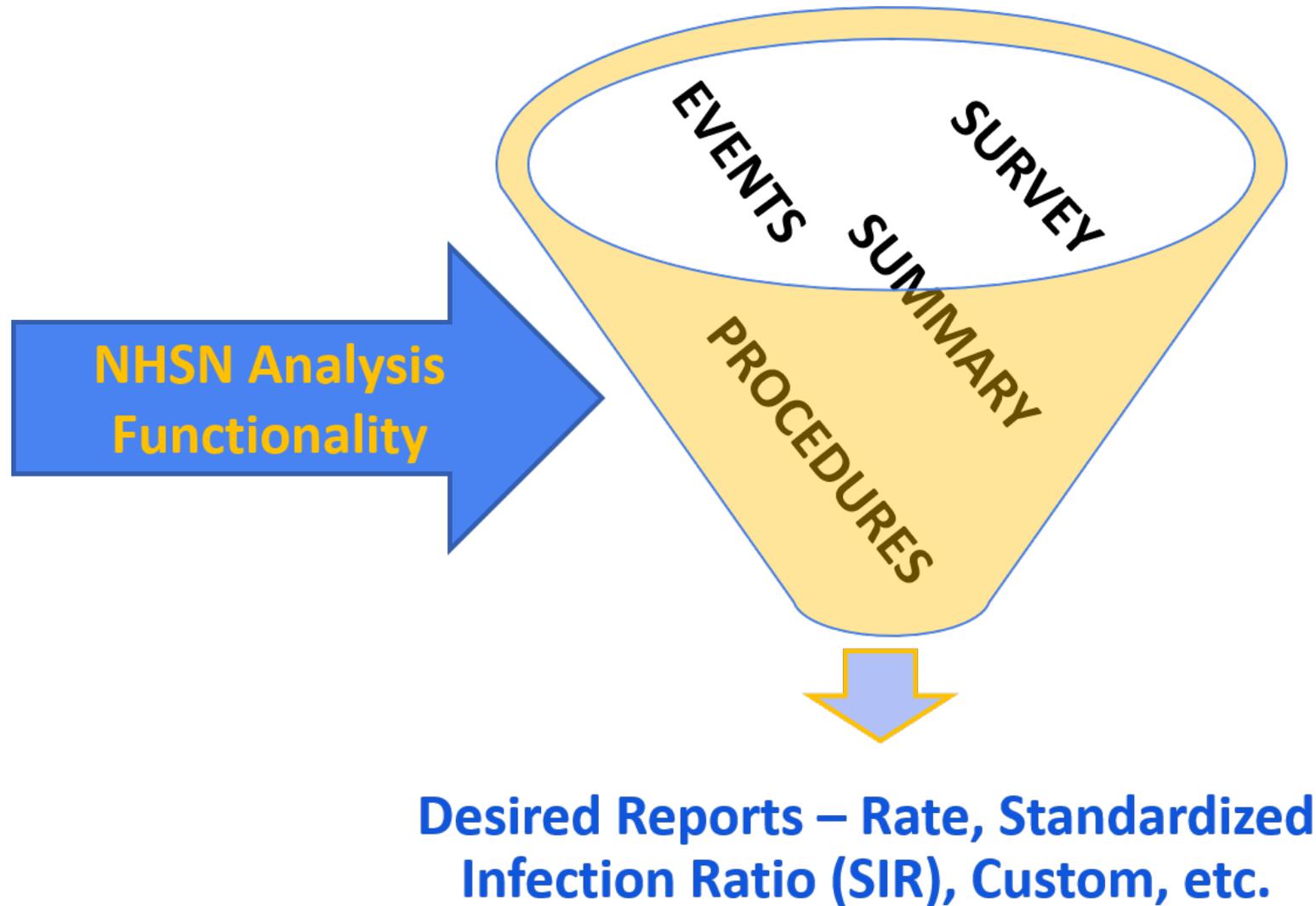
General Information

Completion Status:

Find **Clear** **Back**

The 'Find' and 'Incomplete' options are very useful for investigating data quality issues.

NHSN User Data Entry



Final step: Generating Datasets

- After data entry is complete, the data must be first compiled into your user specific NHSN dataset
- After anything is changed in NHSN, generate datasets so that the change will be reflected in Analysis reports
- This is often the first thing we recommend when troubleshooting Analysis problems

Generate Data Sets (Outpatient Procedure)

Reporting Data Sets

Include data for the following time period:

Beginning: 01/2017 | Ending: 01/2020 | **Clear Time Period**

Generate Reporting Data Sets

Last Generated:
November 7, 2019 8:34 AM
to include all data

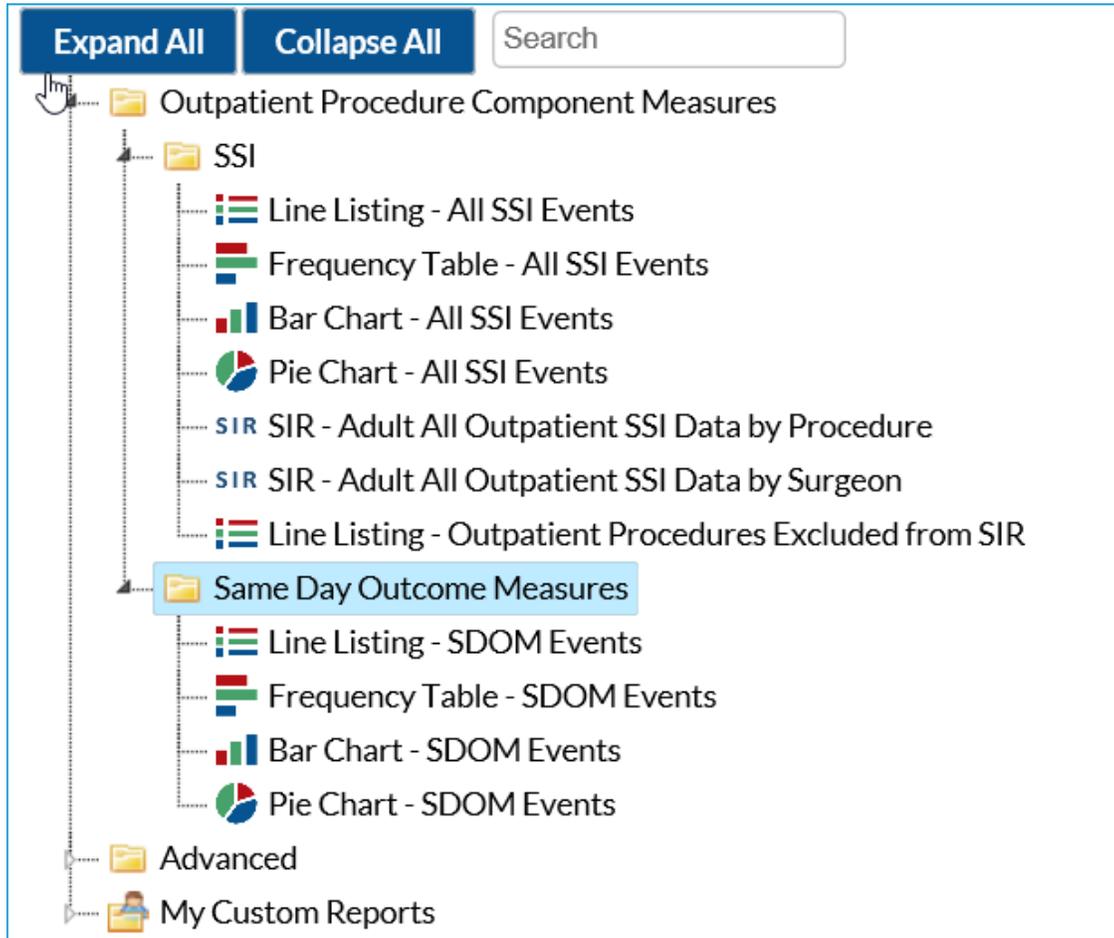
NOTE: Unresolved alerts will prevent data from showing up in SIR reports, even if new datasets are generated

NHSN Analysis Reports

- Once datasets are generated, analysis with the most up-to-date data can be conducted
- Click on 'Reports' under the Analysis tab to see all available reports in NHSN

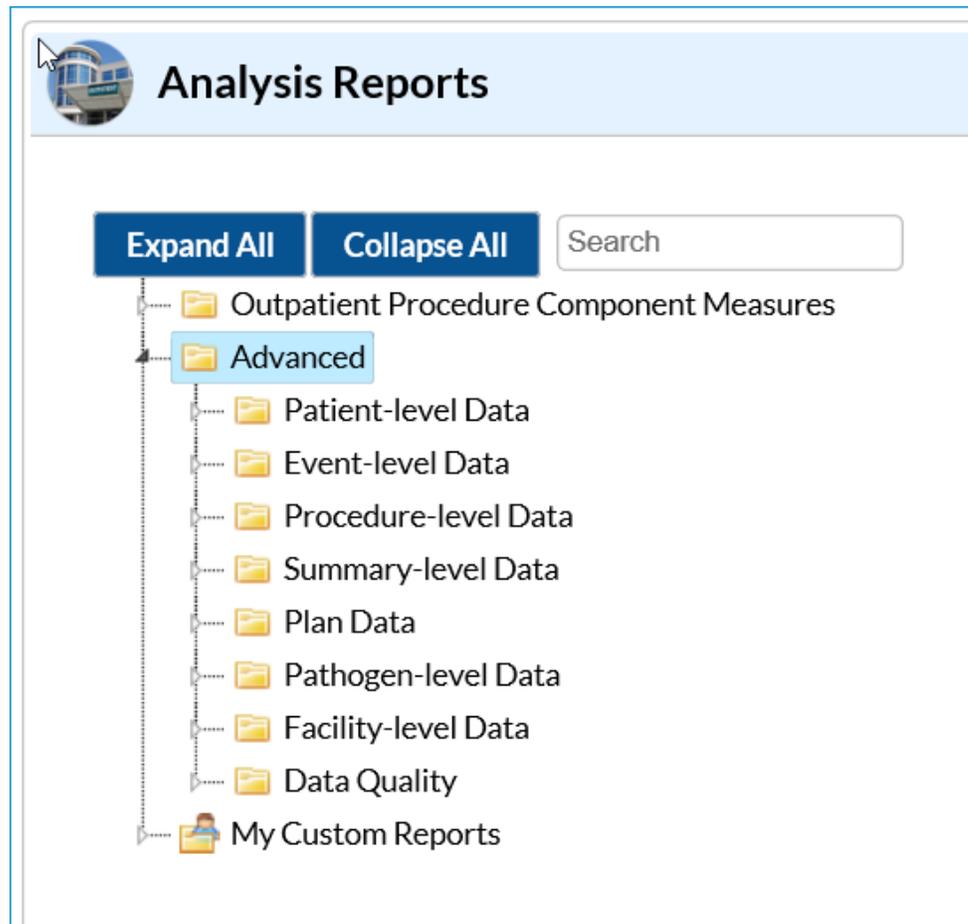
The screenshot displays the NHSN Analysis Reports interface. On the left, a vertical navigation menu includes items such as Alerts, Reporting Plan, Patient, Event, Procedure, Summary Data, Import/Export, Surveys, Analysis (highlighted), and Users. A 'Generate Data Sets' button is positioned above the 'Reports' link in this menu. The main content area, titled 'Analysis Reports', features 'Expand All' and 'Collapse All' buttons, a search box, and a tree view containing folders for 'Outpatient Procedure Component Measures', 'Advanced', and 'My Custom Reports'.

NHSN Analysis Reports: OPC Measures



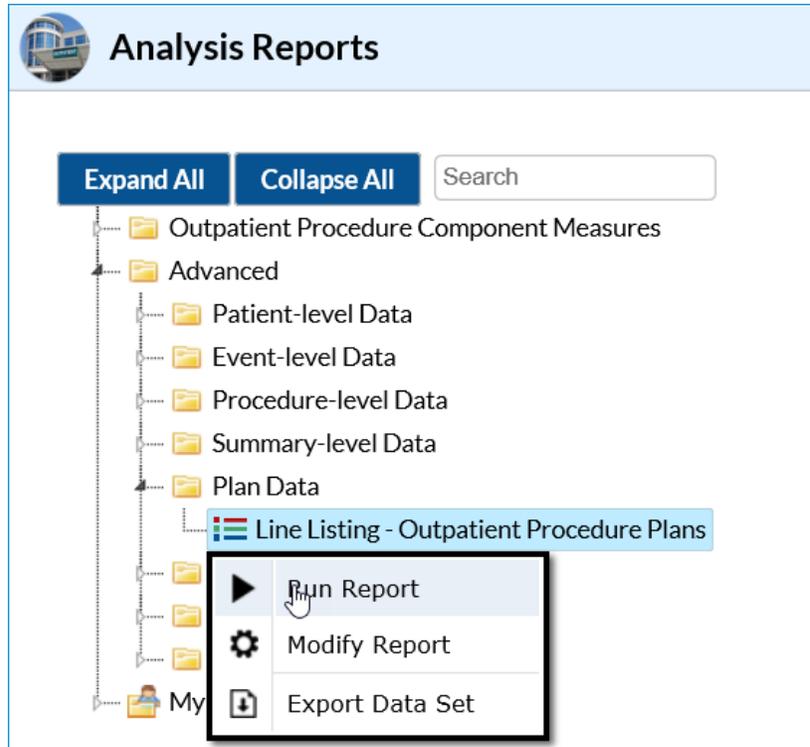
- Analysis for either SSI or SDOM can be found here. Analysis include:
 - Line List
 - Frequency Table
 - Bar/Pie Chart
 - SIR Report (Only for SSI)

NHSN Analysis Reports: Advanced Folder



- Advanced Folder include several reports that can be modified more to analyze specific data for your facility
- Each folder can collapse to provide you several report options to run analysis (example: line lists, pie charts, etc.)

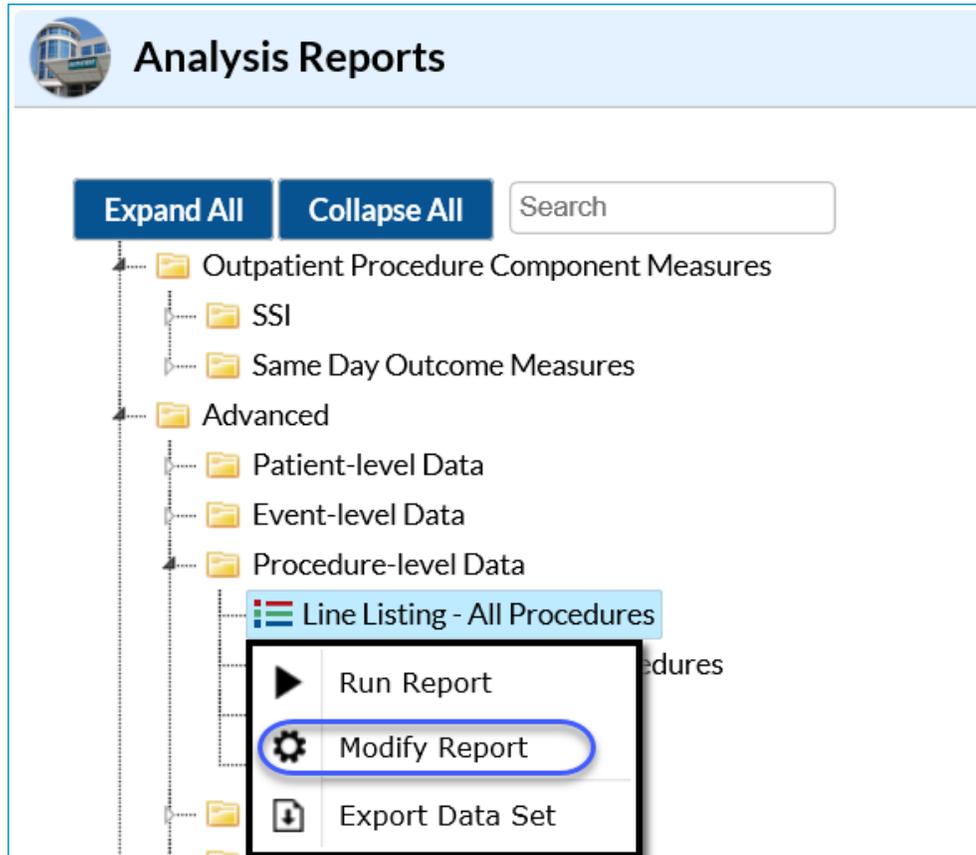
NHSN Analysis Reports: Run a Report



“Run Report” will provide output for all available data for this HAI with default variables displayed



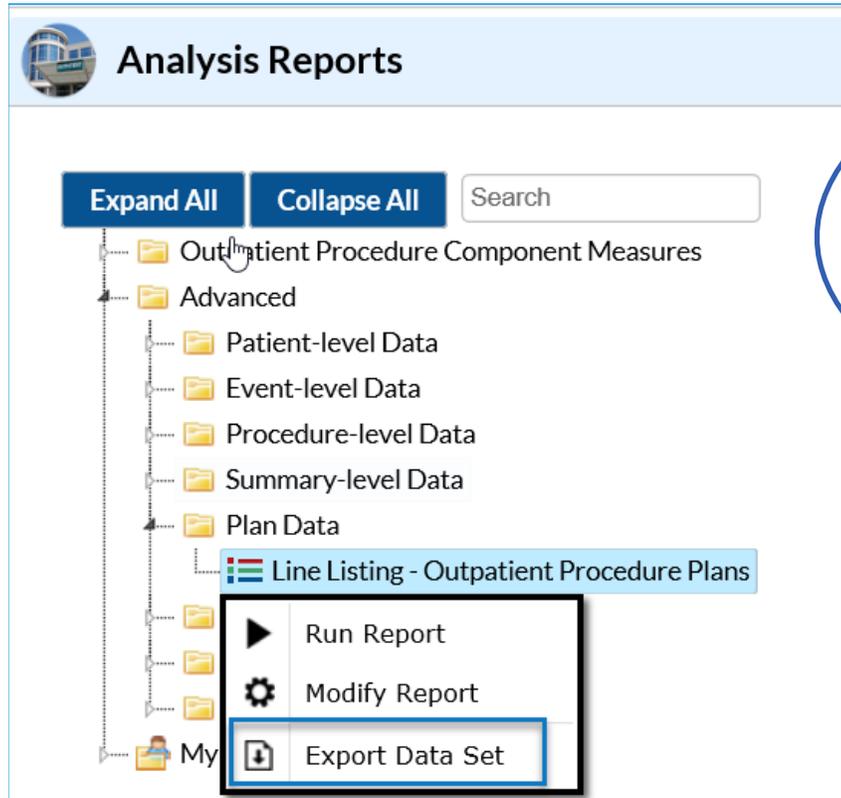
NHSN Analysis Reports: Modify Report



“Modify Report” will allow you to set specific time frame, select variables, and sort data you’re interested in looking at



NHSN Analysis Reports: Export Data



“Export Data Set” allows you to transfer your data to several different file types (.xls, .txt, .sas7bdat, etc.)



Key Takeaways for Preparing Data in NHSN

- Complete all required fields for each data record before you proceed to analysis
- Selecting “Run Report” in NHSN Analysis will generate a default report with select variables and all entered data from the facility
- Generate Datasets after you enter new data in your NHSN facility before you begin running analysis

Same Day Outcome Measure (SDOM)

Case Scenario, page 2

- On November 14, 2019, Mr. Sam Clarke a 53 year old tri-athlete completes registration at Downtown ASC for a Right lateral unicondylar knee arthroplasty (KPRO).
- The procedure was performed and his recovery was without incident. As Mr. Clarke was being prepared for discharge, while being transferred to a wheelchair he became lightheaded and lost his balance. Mr. Clarke fell to the floor and bumped his Right knee against the bedframe.

Case Scenario, page 3

- Mr. Clarke was assisted back to the bed and assessed. He was found to be hypotensive with a scant amount of bleeding from the Right knee surgical wound. The bleeding was controlled with a compression bandage.
- The patient was transported to the Metro-Health Hospital emergency room for further evaluation and x-rays of the Right knee. Mr. Clarke's blood pressure was found to be normal and the Right knee device was intact by x-ray. Follow-up instructions were provided and the patient was discharged to home.

Applying SDOM criteria



Outpatient Procedure Component Same Day Outcome Measures Protocol

Same Day Outcome Measures (SDOM)

Topic	Page
Introduction	1
Key Terms for SDOM	2
SDOM Reporting Requirements	2
SDOM Specifications	3
Reporting Instructions	6
Data Analysis	7
References	8

All patient encounters are included in surveillance

Surveillance for SDOM

Monitor all patient encounters for the following events:

- Burn prior to discharge from the ASC
- Fall within the ASC
- Wrong site, side, patient, procedure or implant while admitted to the ASC (Wrong)
- Transfer or admission to a hospital upon discharge from the ASC

Encounter

Any patient visit to an ASC where the patient completes the registration process upon entry into the facility. Some ASCs may refer to this as an admission into the facility.

Applying SDOM criteria:

- The procedure was performed and his recovery was without incident. As Mr. Clarke was being prepared for discharge, while being transferred to a wheelchair he became lightheaded and lost his balance. **Mr. Clarke fell to the floor** and bumped his Right knee against the bedframe.

Fall criteria is met:

Fall	A sudden, uncontrolled, unintentional, downward displacement of the body to the ground or other object, excluding falls resulting from violent blows or other purposeful actions. (National Center for Patient Safety).
-------------	---

Applying SDOM criteria:

- The patient was transported to the Metro-Health Hospital emergency room further evaluation and x-rays of the Right knee. Mr. Clarke's blood pressure was found to be normal and the Right knee device was intact by x-ray. Follow-up instructions were provided and the patient was discharged to home.

All-Cause Hospital Transfer/Admission criteria is met:

Hospital transfer/admission	Any transfer/admission from an ASC directly to an acute care hospital including hospital emergency room.
------------------------------------	--

SDOM Reporting Instructions

2. For each patient that experiences a SDOM event during an ASC encounter, complete an *Outpatient Procedure Component Same Day Outcome Measures Event* form ([CDC 57.402](#)) and select the appropriate event by checking the corresponding box.
 - a. If the same patient experiences more than one event of a **different measure** during the same encounter all events should be recorded on the same event form. Example: a patient experiences a fall and a burn during the same encounter.
 - b. If a patient experiences more than one event of the **same measure** during the same encounter record only one event of that measure type for the encounter. Example: a patient has multiple wrong site procedures or multiple falls.
 - c. If no events occur during an encounter no Outpatient Procedure Component Same Day Outcome Measures Event form ([CDC 57.402](#)) should be completed

SDOM event

CDC Centers for Disease Control and Prevention
CDC 24/7: Saving Lives, Protecting People™

NHSN - National Healthcare Safety Network

NHSN Home

- Alerts
- Reporting Plan ▶
- Patient ▶
- Event ▶**
 - Add**
 - Find
 - Incomplete
- Procedure ▶
- Summary Data ▶
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- Analysis ▶
- Users ▶
- Facility ▶
- Group ▶
- Logout

Add Event

Mandatory fields marked with *

Fields required for record completion marked with **

Events in Plan marked with >

Facility

Facility ID *: DownTown ASC (ID12345) ▼

Patient ID *: Find Find Event for Patient

Secondary ID:

Last Name:

Middle Name:

Gender *: ▼

Ethnicity: ▼

Race: American Indian/Alaska Native Asian
 Black or African American Native
 White

Event Information

SDOM event

NHSN Home

Alerts

Reporting Plan ▶

Patient ▶

Event ▶

Procedure ▶

Summary Data ▶

Import/Export

Surveys ▶

Analysis ▶

Users

Facility

Group

Logout

Add Event

Mandatory fields marked with * ←

Fields required for record completion marked with **

Fields required when in Plan marked with >

8 Successfully added OPSDOM record. [Print record\(ID 36666666\)](#)

1 Facility ID *: DownTown ASC (ID12345) ▼

Patient ID *: T123456 Find Find Event for Patient

Secondary ID: _____

Last Name: Clarke

Middle Name: _____

Event #: _____

Social Security #: _____

Medicare #: _____

First Name: Sam

a. If the same patient experiences more than one event of a **different measure** during the same encounter all events should be recorded on the same event form. Example: a patient experiences a fall and a burn during the same encounter.

4 Event Type *: OPSDOM - Same Day Outcome Measures ▼

5 Date of Event *: 11/14/2019 **7**

6 Same Day Outcome Measures

Specify Event * (check all that apply)

Patient burn

Patient fall

Hospital transfer/admission

Wrong Event: (check any that apply)

Wrong side

Wrong patient

Wrong procedure

Wrong site

Wrong implant

Custom Fields

Comments

7 Save Back

SDOM Summary Data

CDC Centers for Disease Control and Prevention
CDC 24/7: Saving Lives, Protecting People™

NHSN - National Healthcare Safety Network

Add Outpatient Procedure Component Summary Data

Summary Data Type: Same Day Outcome Measures ▾

Continue Back

Summary Data

Add

Find

SDOM Summary Data



Denominators for Same Day Outcome Measures

Mandatory fields marked with *

Facility ID *:

Month *:

Year *:

Total number of encounters (admissions) for the month *

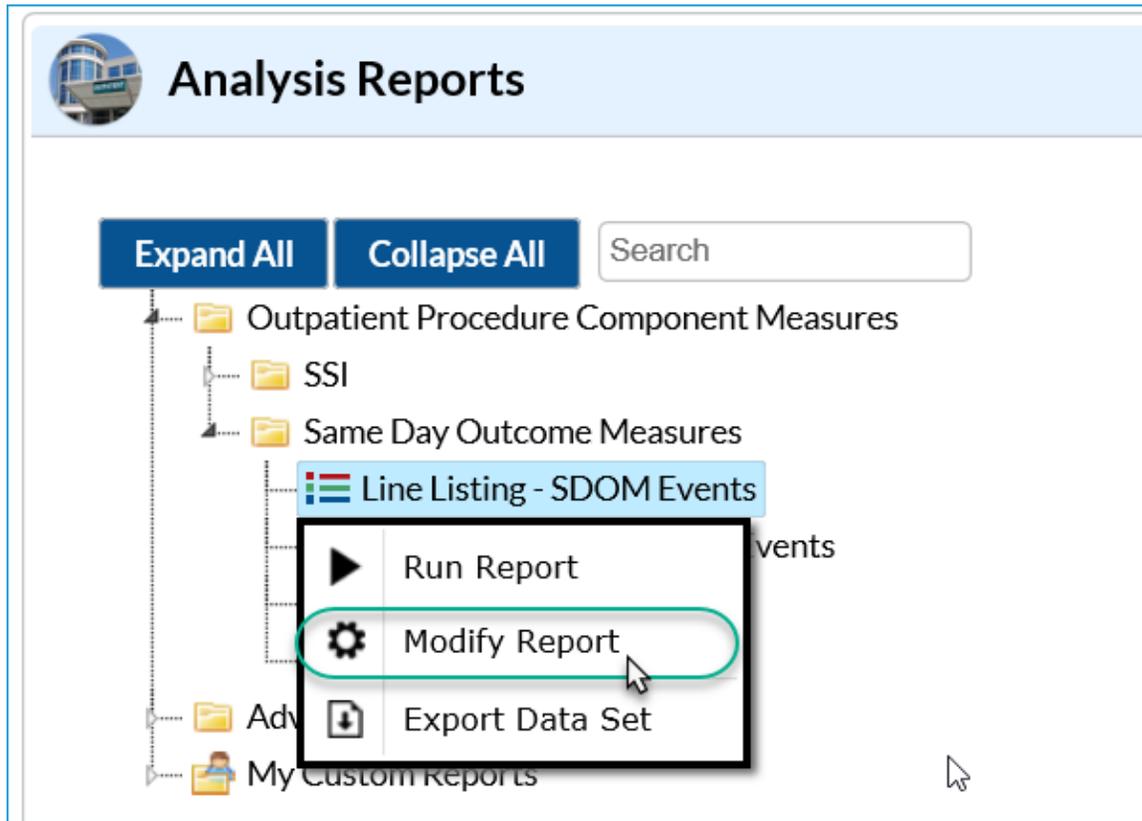
No Same Day Outcome Measures (events) reported this month

Custom Fields

SDOM Data Analysis

- Descriptive analysis options such as line listings, frequency tables, and bar and pie charts are available for SDOM events and monthly summary records.
- Guides on using the NHSN OPC analysis features are available in the Analysis Resources section found at <https://www.cdc.gov/nhsn/ambulatory-surgery/ssi/index.html>.

SDOM Analysis



- Modify the report to only include specific procedure types and timeframes

SDOM Analysis

The screenshot shows a web interface for SDOM Analysis. At the top, there are six tabs: 'Title/Format', 'Time Period' (which is highlighted in green), 'Filters', 'Display Variables', 'Sort Variables', and 'Display Options'. Below the tabs, the 'Time Period' section is visible. It contains a 'Date Variable' dropdown menu set to 'Event~Yr/Qtr', a 'Beginning' text input field containing '2019Q4', and an 'Ending' text input field also containing '2019Q4'. To the right of these fields is a blue button labeled 'Clear Time Period'. Below the input fields, there is a checkbox labeled 'Enter Date variable/Time period at the time you click the Run button' which is currently unchecked.

- Select the time period for when the event of interest occurred
 - Enter a time period for data to be restricted to
 - We are only interested in Quarter 4 (October, November, December) 2019 for this example
- *These selection can make your line list more manageable and easier to read**

SDOM Data Analysis

The screenshot shows the 'Filters' tab in the SDOM Data Analysis interface. The 'Additional Filters' section is active, displaying a filter rule for 'Patient ID' with the operator 'equal' and the value 'T123456'. Blue arrows point to the 'Patient ID' dropdown and the 'equal' operator dropdown. The interface includes tabs for Title/Format, Time Period, Filters, Display Variables, Sort Variables, and Display Options. There are also buttons for 'Show', 'Clear', 'Add group', 'Add rule', and 'Delete'.

- Filter by Patient ID if you're only interested in a specific patient
- Select Operator "equal" to limit variable to only Patients with a specific ID number
- Enter Patient ID number in blank field to limit to only one patient

SDOM Analysis Output

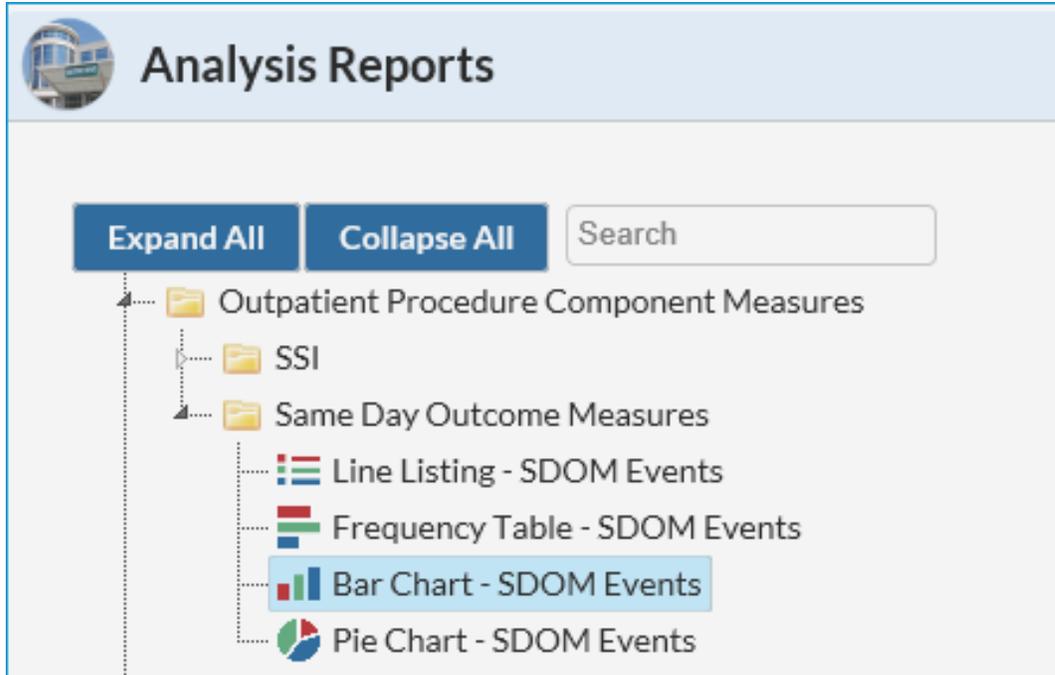
National Healthcare Safety Network
Line Listing of Same Day Outcome Measure Events
As of: January 7, 2020 at 9:53 AM
Date Range: All OP_SDOM_EVENTS

Facility Org ID	Event ID	Event Date	Location	Patient ID	Medicare ID	Same Day Outcome Measure - Patient Burn?	Same Day Outcome Measure - Patient Fall?	Same Day Outcome Measure - Hospital Admission?	Same Day Outcome Measure - Wrong Side?	Same Day Outcome Measure - Wrong Patient?	Same Day Outcome Measure - Wrong Procedure?	Same Day Outcome Measure - Wrong Site?	Same Day Outcome Measure - Wrong Implant?
57258	39999656	11/14/2019		T123456		N	Y	Y	N	N	N	N	N

Sorted by orgID eventID
Data contained in this report were last generated on January 6, 2020 at 4:16 PM to include data beginning January 2017 through January 2020.

1. Correct patient and event details
2. SDOM for Patient Fall = “Y” indicates that this patient fell after the procedure
3. SDOM for Hospital Admission = “Y” indicates that this patient was admitted to the hospital after their procedure

Additional SDOM Analysis: Bar Chart



- Using a bar chart is a good way to visually show trends over a period of time
- Consider running different reports for SDOM that incorporate visualizations
- Visualizations can bolster data presentations or reports to hospital staff and other stakeholders

Additional SDOM Analysis: Bar Chart

The screenshot shows the 'Time Period' configuration panel. It includes a 'Date Variable' dropdown set to 'evntDateYQ', a 'Beginning' text input field with '2019Q1', and an 'Ending' text input field with '2019Q4'. A 'Clear Time Period' button is located to the right of the 'Ending' field. Below these fields is an unchecked checkbox with the text 'Enter Date variable/Time period at the time you click the Run button'. Blue arrows point from the 'Beginning' and 'Ending' labels to their respective input fields.

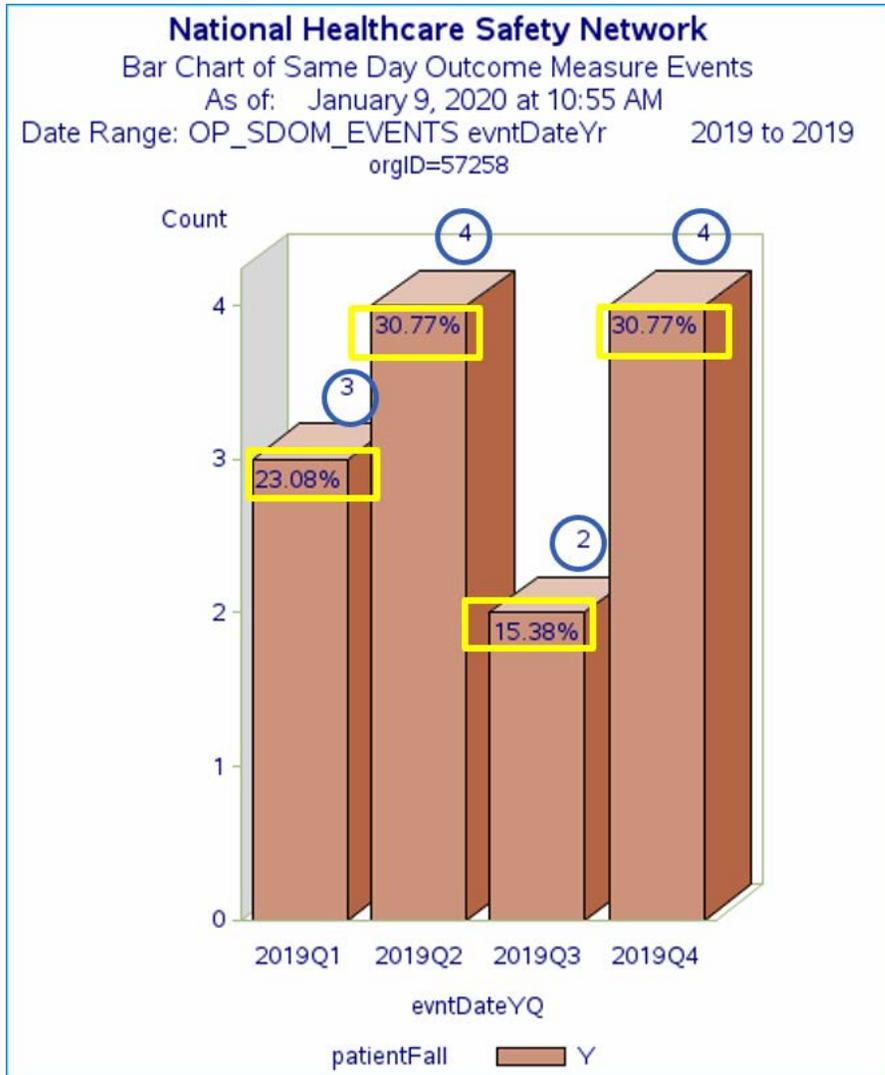
- Select the date variable you're interested in (Year and Quarter)
- In this example we're going to look at the entire 2019 Calendar year
- To include the entire year we want to begin our data in Q1 and end in Q4

Additional SDOM Analysis: Bar Chart

The screenshot shows the 'Display Options' tab of a software interface. Under the 'Bar Chart Options' section, the 'Chart Variable' dropdown is set to 'evntDateYQ' and is highlighted with a green box and a blue arrow. The 'Stratification Variable' dropdown is set to 'patientFall' and is also highlighted with a blue arrow. A green text box with a green arrow pointing to the 'patientFall' dropdown contains the text 'Select variable you want to show over time'. Other options include 'Orientation of Bars' set to '3D Vertical', 'Placement of the Percent' set to 'Inside', and 'Placement of the Value' set to 'Outside'. A 'Page by' dropdown is also visible.

- Chart Variable selection allows you to set the time period you want to establish for each bar
- We want to set this to “eventdateYQ” to sum all the events by quarter
- The Stratification Variable selection is set to “patientFall” to include only patient falls in our chart

What can we learn from the SDOM data?



- Total number of patient falls will appear above each bar
- Within each bar, a percentage of patient falls for the quarter is displayed
- The bar chart shows that patient falls have occurred at a relatively consistent pace during each quarter of 2019

Key Takeaways for SDOM

- SDOM is a means to track and trend adverse events such as Fall, Burn, Wrong events, All-cause Hospital Transfer/Admission
- Each patient encounter is monitored for all of the SDOM events that occur during the stay in the ASC
- There is no post-discharge surveillance
- Modifying reports by using filters and specific time periods can help make SDOM reports more concise and manageable.
- Using data visualization options such bar charts and pie graphs can help with making your data tell a story

Surgical Site Infection (SSI)

Case Scenario, page 6

The following note was documented in Mr. Clarke's medical record at the surgeon's office.

11/15/19

Call from the patient to report "increased tightness in his knee". Patient did not have any other symptoms. Patient is advised to continue to elevate his knee and apply cold packs intermittently.

This is likely increased swelling secondary to trauma at the operative site due to post-op fall.

The patient was instructed to follow-up if no improvement.

Should consideration be given to the fall as a reason to exclude an SSI if one subsequently develops?

SSI Event Reporting Instruction #9

Should consideration be given to the fall as a reason to exclude an SSI if one subsequently develops? **NO**

Topic	Reporting Instruction
9. SSI following specific post-operative infection scenarios:	<p data-bbox="927 491 2173 772">An SSI that otherwise meets the NHSN definitions should be reported to NHSN without regard to post-operative accidents, falls, inappropriate showering or bathing practices, or other occurrences that may or may not be attributable to patients' intentional or unintentional postoperative actions.</p> <p data-bbox="927 839 2173 1296">SSI should also be reported regardless of the presence of certain skin conditions (for example, dermatitis, blister, impetigo) that occur near an incision, and regardless of the possible occurrence of a “seeding” event from an unrelated procedure (for example, dental work). These instruction concerning various postoperative circumstances is necessary to reduce subjectivity and data collection burden associated with the previously exempted scenarios.</p>

Case Scenario, page 4

- On 12/3/19, the infection preventionist from Metro-Health Hospital contacted Downtown ASC and provided the following information:

From: Metro-Health Hospital Infection Prevention Department

Patient: Mr. Sam Clarke **DOB:** 8/10/1966

Date of Admission: 11/25/2019 **Procedure:** I&D Right knee

Patient admitted from surgeon's office with severe Right knee pain, fever and blood-tinged drainage from the incision. I&D of Right knee was performed - hematoma was observed in the joint space. There was no obvious pus. The prosthesis appeared in-tact and the hematoma was evacuated

Cultures were taken from both the joint space and the surface of the KPRO device. Both cultures subsequently grew Staphylococcus aureus. The patient was treated with IV antibiotics for 3 days and eventually discharged to home with orders for home health and IV antibiotics.

Case Scenario, page 5

- On 12/30, Downtown ASC received the following information:

Jacob Orthopedics

Patient: Mr. Sam Clarke **DOB:** 8/10/1966

Date: 11/21/2019

Reason for visit: Post right lateral unicondylar knee arthroplasty follow-up

Mr. Clarke was seen with complaints of pain and swelling of the Right knee. Slight separation of the incision with a small amount of serous drainage noted. Steri-Strips were applied after wound is cleaned and a swab of the incision drainage is collected. Prescription for antibiotics provided and a follow-up appointment was scheduled.

The culture subsequently grew Staphylococcus aureus.

Applying OPC-SSI criteria

2 sets of SSI criteria

- *General SSI Criteria*
- *Breast Surgery SSI Criteria*

Since the procedures that are being monitored are KPROs, the General OPC-SSI Criteria should be used to assess SSI events.



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Surveillance Period

Table 2. Surveillance Periods for SSIs Following Selected NHSN Operative Procedure Categories. Day 1 = the date of the procedure.

30-day Surveillance			
Category	Operative Procedure	Category	Operative Procedure
AMP	Limb amputation	NECK	Neck surgery
APPY	Appendix surgery	NEPH	Kidney surgery
AVSD	Shunt for dialysis	OVRY	Ovarian surgery
BILI	Bile duct, liver or pancreatic surgery	PRST	Prostate surgery
CEA	Carotid endarterectomy	REC	Rectal surgery
CHOL	Gallbladder surgery	SB	Small bowel surgery
COLO	Colon surgery	SPLE	Spleen surgery
GAST	Gastric surgery	THOR	Thoracic surgery
HYST	Abdominal hysterectomy	THYR	Thyroid and/or parathyroid surgery
LAM	Laminectomy	VHYS	Vaginal hysterectomy
		XLAP	Exploratory Laparotomy
90-day Surveillance			
Category	Operative Procedure		
BRST	Breast surgery		
FUSN	Spinal fusion		
FX	Open reduction of fracture		
HER	Herniorrhaphy		
HPRO	Hip prosthesis		
KPRO	Knee prosthesis		
PACE	Pacemaker surgery		
PVBY	Peripheral vascular bypass surgery		
VSHN	Ventricular shunt		

NOTES:

- Superficial incisional SSIs are only followed for a 30-day period for all procedure types.
- Secondary incisional SSIs are only followed for a 30-day period regardless of the surveillance period for the primary site.



Procedure Data

- Patient Information
- Procedure Information

NHSN - National Procedure Information

NHSN Home

- Alerts
- Reporting Plan ▶
- Patient ▶
- Event ▶
- Procedure ▶**
- Summary Data ▶
- Import/Export
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- Group ▶
- Logout

NHSN Procedure Code *:
CPT Code *:
Procedure Date *:

- AMP - Limb amputation
- APPY - Appendix surgery
- AVSD - AV shunt for dialysis
- BILI - Bile duct, liver or pancreatic surgery
- BRST - Breast surgery
- CEA - Carotid endarterectomy
- CHOL - Gallbladder surgery
- COLO - Colon surgery
- FUSN - Spinal fusion
- FX - Open reduction of fracture
- GAST - Gastric surgery
- HER - Herniorrhaphy
- HPRO - Hip prosthesis
- HYST - Abdominal hysterectomy
- KPRO - Knee prosthesis**
- LAM - Laminectomy
- NECK - Neck surgery
- NEPH - Kidney surgery
- OVRY - Ovarian surgery
- PACE - Pacemaker surgery
- PRST - Prostate surgery
- PVBY - Peripheral vascular bypass surgery
- REC - Rectal surgery
- SB - Small bowel surgery
- SPLE - Spleen surgery
- THOR - Thoracic surgery
- THYR - Thyroid and/or parathyroid surgery
- VHYS - Vaginal hysterectomy
- VSHN - Ventricular shunt

Procedure #:

Social Security #:

Medicare #:

First Name:

3 Date of Birth *:

er Pacific Islander

Procedure Data

- Procedure Details

The screenshot shows a web application interface for 'Procedure Details'. The form is divided into several sections: 'Procedure Details', 'Custom Fields', and 'Comments'. The 'Procedure Details' section contains several fields, some of which are highlighted with a purple box and labeled 'Required fields' with a callout '1'. These fields include: Duration *: 2, Wound Class *: C -, ASA Score *: 1 - A, Scope *: N - M, Diabetes Mellitus *: N - M, Surgeon Code: 001, Height *: 5, and Weight *: 178. A navigation menu is open, showing options like Alerts, Reporting Plan, Patient, Event, Procedure, Summary Data, Import/Export, Surveys, Analysis, Users, Facility, Group, Logout, and Surgeons. The 'Surgeons' option is highlighted with a purple box and a callout '2'. The 'Save' button is also highlighted with a purple box and a callout '2'. The 'Comments' section is empty.

Procedure Details

1 Required fields

Duration *: 2
Wound Class *: C -
ASA Score *: 1 - A
Scope *: N - M
Diabetes Mellitus *: N - M
Surgeon Code: 001
Height *: 5
Weight *: 178

NHSN Home
Alerts
Reporting Plan ▶
Patient ▶
Event ▶
Procedure ▶
Summary Data ▶
Import/Export
Surveys ▶
Analysis ▶
Users ▶
Facility ▶
Group ▶
Logout
Surgeons

2 Save Back

Procedure Data

- Confirmation of record

NHSN - National Healthcare Safety Network

Add Procedure

Successfully added Procedure record. [Print record\(ID 415\)](#)

Mandatory fields marked with *
Fields required when in Plan marked with >

Patient Information

Facility ID *: Downtown ASC (ID12345) ▾
Patient ID *: T123456 Find Find Procedures for Patient
Secondary ID:
Last Name: Clarke
Middle Name:
Gender *: M - Male ▾
Ethnicity: ▾
Race: American Indian/Alaska Native Asian
 Black or African American Native Hawaiian/Other Pacific Islander
 White

Procedure #:
Social Security #:
Medicare #:
First Name: Sam x
Date of Birth *: 08/10/1966 7

Procedure Information

NHSN Procedure Code *: KPRO - Knee prosthesis ▾
CPT Code *: 27446
Procedure Date *: 11/14/2019 7 Link/Unlink to Event Procedure is not Linked

SSI Event Data

 Add Event

Mandatory fields marked with *

Fields required for record completion marked with **

Fields required when in Plan marked with >

Patient Information

Facility ID: * ASC Test Facility for OPC Users (ID 57258) v

Event #:

Security #:

Medicare #:

First Name:

Date of Birth: *

Black or African American Native Hawaiian/Other Pacific Islander

White

Date of event (DOE) - is the date when the first element used to meet the OPC-SSI infection criterion occurs for the first time during the SSI surveillance period. The date of event must fall within the SSI surveillance period to meet SSI criteria. The type of SSI (superficial incisional, deep incisional, or organ/space) reported should reflect the deepest tissue layer involved in the infection during the surveillance period. Synonym: infection date.

Event Information

Event Type *: v

NHSN Procedure Code *: v

CPT Code *:

Procedure Date *:

Location:

Date of Encounter >:

Date of Event *:

SSI Event Data

OPC General – Superficial Incisional SSI

Must meet the following criteria:

Date of event for infection occurs within 30 days after any NHSN operative procedure (where day 1 = the procedure date)

AND

involves 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. superficial incision that is deliberately opened 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.

Jacob Orthopedics

Patient: Mr. Sam Clarke

DOB: 8/10/1966

Date: 11/21/2019

Reason for visit: Post right lateral unicondylar knee arthroplasty follow-up

Mr. Clarke was seen with complaints of pain and swelling of the Right knee. Slight separation of the incision with a small amount of serous drainage noted. Steri-Strips were applied after wound is cleaned and a swab of the incision drainage is collected. Prescription for antibiotics provided and a follow-up appointment was scheduled.

The culture subsequently grew Staphylococcus aureus.

SSI Event Reporting Instruction #3

3. **Multiple tissue levels** are involved in the infection:

The type of SSI (superficial incisional, deep incisional, or organ/space) reported must reflect the deepest tissue level where SSI criteria are met during the surveillance period. The date of event should be the date that the patient met criteria for the deepest level of infection.

For example:

- Report infection that involves the organ/space as an organ/space SSI, whether or not it also involves the superficial or deep incision levels.
- Report infection that involves the superficial and deep incisional levels as a deep incisional SSI.
- If an SSI started as a deep incisional SSI on day 10 of the SSI surveillance period and then a week later, (day 17 of the SSI surveillance period) meets criteria for an organ space SSI the date of event would be the date of the organ space SSI.

SSI Event Data

Add Event

Mandatory fields marked with *

Fields required for record completion marked with >

Fields required when in Plan marked with >

Patient Information

Facility ID *:
Patient ID *:
Secondary ID:
Last Name:
Middle Name:
Gender *:
Ethnicity:
Race:
 Black or African American
 Native Hawaiian/Other Pacific Islander
 White

Event #:
Security #:
Licare #:
Patient Name: Sam
Birth * : 08/10/1966

Link to Procedure

	Procedure #	NHSN Procedure Code	CPT Code	Procedure Date	Linked Events
<input checked="" type="checkbox"/>	39999654	KPRO	27446	11/14/2019	

[Link](#) [Cancel](#)

Event Information

Event Type * : OPSSI - Surgical Site Infection

NHSN Procedure Code * : KPRO - Knee prosthesis

CPT Code * : 27446

Procedure Date * : 11 [Link to Procedure](#)

Location :

Date of Encounter > : 11

Date of Event * : 11/25/2019

SSI Event Data



Add Event

Mandatory fields marked with *

Fields required for record completion marked with **

Fields required when in Plan marked with >

Patient Information

Facility ID *: ASC Test Facility for OPC Users (ID 57258) v

Patient ID *: T123456 Find Find Event for Patient

Secondary ID:

Last Name: Clarke

Middle Name:

Gender *: M - Male v

Ethnicity: v

- Race: American Indian/Alaska Native Asian
 Black or African American Native Hawaiian/Other Pacific Islander
 White

Event Information

Event Type *: OPSSI - Surgical Site Infection v

NHSN Procedure Code *: KPRO - Knee prosthesis

CPT Code *: 27446

Procedure Date *: 11/14/2019

Location: v

Date of Encounter *: 11/14/2019

link Procedure Event Linked

Event #:

Social Security #:

Medicare #:

First Name: Sam

Date of Birth *: 08/10/1966 11

Date of Event *: 11/25/2019 11

SSI Event Reporting Instruction #3

3. **Multiple tissue levels** are involved in the infection:

The **type of SSI** (superficial incisional, deep incisional, or organ/space) reported **must reflect the deepest tissue level** where SSI criteria are met during the surveillance period. The date of event should be the date that the patient met criteria for the deepest level of infection.

For example:

- Report infection that involves the organ/space as an organ/space SSI, whether or not it also involves the superficial or deep incision levels.
- Report infection that involves the superficial and deep incisional levels as a deep incisional SSI.
- If an SSI started as a deep incisional SSI on day 10 of the SSI surveillance period and then a week later, (day 17 of the SSI surveillance period) meets criteria for an organ space SSI the date of event would be the date of the organ space SSI.

OPC General - Organ/Space SSI

Must meet the following criteria:

Date of event for infection occurs within 30 or 90 days after the NHSN operative procedure (where day 1 = the procedure date) according to the list in [Table 2](#)

AND
infection involves any part of the body deeper than the fascial/muscle layers, that is opened or manipulated during the operative procedure.

AND
patient has at least one of the following:

- a. purulent drainage from a drain that is placed into the organ/space (for example, closed suction drainage system, open drain, T-tube drain, and CT guided drainage).
-  b. organisms are identified from an aseptically-obtained fluid or tissue in the organ/space 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. an abscess or other evidence of infection involving the organ/space that is detected on gross anatomical or histopathologic exam, or imaging test consistent with infection.

NOTE:

Meeting additional infection criteria found in [Chapter 17, CDC/NHSN Surveillance Definitions for Specific Types of Infections](#) is **NOT** required when reporting OPC General - Organ/Space SSIs.

From: [Metro-Health Hospital Infection Prevention Department](#)

Patient: [Mr. Sam Clarke](#) **DOB:** [8/10/1966](#)

Date of Admission: [11/25/2019](#)

Procedure: [I&D Right knee](#)

Patient admitted from surgeon's office with severe Right knee pain, fever and blood-tinged drainage from the incision. I&D of Right knee performed - hematoma was observed in the joint space. There was no obvious pus. The prosthesis appeared intact and the hematoma was evacuated

Cultures were taken from both the joint space and the surface of the KPRO device. Both cultures subsequently grew Staphylococcus aureus. The patient was treated with IV antibiotics for 3 days and eventually discharged to home with orders for home health and IV antibiotics.

SSI Event Data

Event Information

Event Type *: OPSSI - Surgical Site Infection

Date of Event *: 11/25/2019

11

Note: Additional monitoring of the KPRO performed on 11/14 is not required, as the infection is documented at the deepest level and only one such infection can be attributed to a procedure.

Only if the patient returns to the operating room for another NHSN operative procedure a new surveillance period will start.

Wound spontaneously dehisces

Other evidence of infection found on invasive procedure, gross anatomic exam, or histopathologic exam

SSI Event Data

Jacob Orthopedics

Patient: Mr. Sam Clarke

DOB: 8/10/1966

Date: 11/21/2019

Reason for visit: Post right lateral unicondylar knee arthroplasty follow-up

Mr. Clarke was seen with complaints of pain and swelling of the Right knee. Slight separation of the incision with a small amount of serous drainage noted. Steri-Strips were applied after wound is cleaned and a swab of the incision drainage is collected. Prescription for antibiotics provided and a follow-up appointment was scheduled.

The culture subsequently grew Staphylococcus aureus.

Specify Criteria Used * (check all that apply)

Signs & Symptoms (check all that apply)

Any patient

- Abscess
- Erythema or redness
- Fever
- Heat
- Incision deliberately opened/drained
- Localized swelling
- Pain or tenderness
- Purulent drainage or material
- Wound spontaneously dehisces
- Other evidence of infection found on invasive procedure, gross anatomic exam, or histopathologic exam

- SSI Event Detected *: Active surveillance - SSI was identified through the facility
 Passive surveillance - The facility became aware of the SSI

(check all that apply)

- Patient/Caregiver contacts facility to report
- Patient returns to outpatient facility for follow-up
- Surgeon contacts facility to report
- Report from another facility

Died **: N - No

Pathogens Identified >: Y - Yes

The report that was provided from Dr. Jacob's office reported only a superficial infection.

Active vs Passive Surveillance

Active Surveillance

- Patient-based
- Intentional
- Systematic
- Formal
- Routine
- Focused

Passive Surveillance

- Random
- Dependent
- Hit-or-miss
- Unstructured
- Incidental
- Scattered

Note:

An SSI event is attributed to the facility in which the NHSN operative procedure was originally performed.

Facilities that have identified potential SSI events that are attributable to procedures performed at a different facility should provide details of the potential events to the facility where the procedure was originally performed.

SSI Event Data

Pathogen 1:

Pathogen 2:

Pathogen 3:

	Code	Description
	SS	Staphylococcus - SS
	STAARL	Staphylococcus arlettae - STAARL
	SA	Staphylococcus aureus - SA
Custom Fields	STAAR	Staphylococcus auricularis - STAAR
	STACS	Staphylococcus capitis - STACS
	STACC	Staphylococcus capitis capitis - STACC
Comments	STACU	Staphylococcus capitis urealyticus - STACU
	STACAP	Staphylococcus caprae - STACAP
	STACAR	Staphylococcus carnosus - STACAR
	STACRC	Staphylococcus carnosus carnosus - STACRC

Page 1 of 7 View 1 - 10 of 62

SSI Event Data



Add Event

Mandatory fields marked with *

Fields required for record completion marked with **

Fields required when in Plan marked with >



Successfully added OPSSI record. Record is complete. [Print record\(ID 30000005\)](#)

Patient Information

Facility ID *: ASC Test Facility for OPC Users (ID 57258) v

Patient ID *: T123456 Find Find Event for Patient

Secondary ID:

Last Name: Clarke

Middle Name:

Gender *: M - Male v

Ethnicity: v

- Race: American Indian/Alaska Native Asian
 Black or African American Native Hawaiian/Other Pacific Islander
 White

Event #:

Social Security #:

Medicare #:

First Name: Sam

Date of Birth *: 08/10/1966 11

Event Information

Event Type *: OPSSI - Surgical Site Infection v

NHSN Procedure Code *: KPRO - Knee prosthesis

CPT Code *: 27446

Procedure Date *: 11/14/2019

link Procedure

Location: v

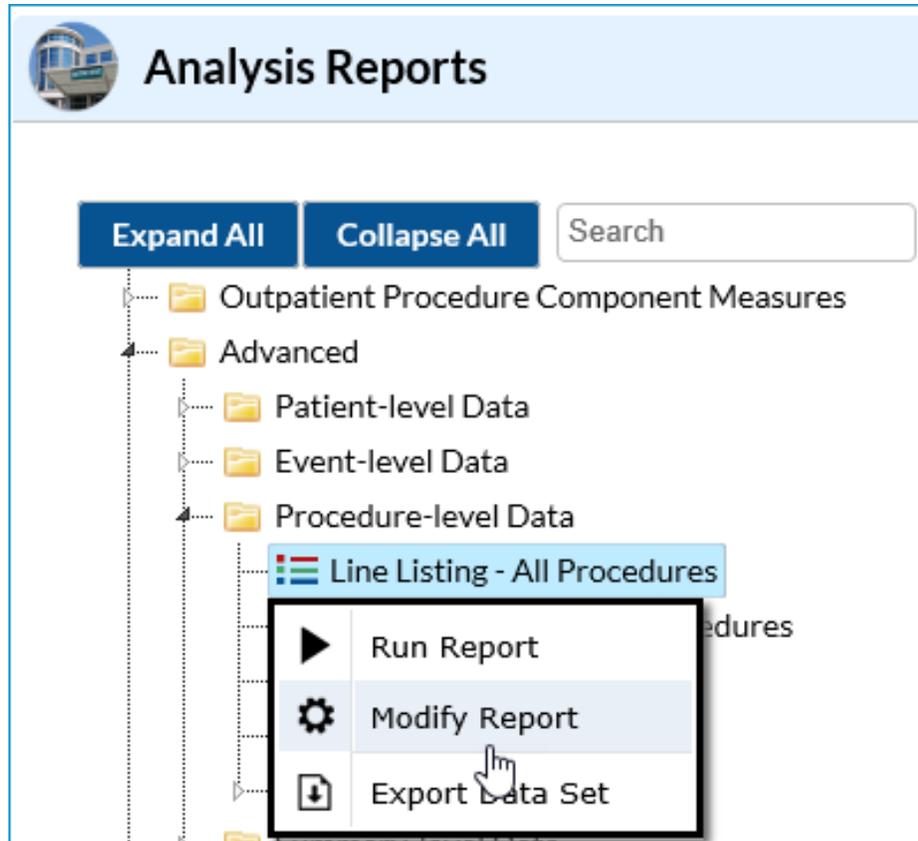
Date of Encounter *: 11/14/2019

Date of Event *: 11/25/2019 11

SSI Data Analysis

- In SSI surveillance the procedure carries the risk of infection meaning risk factors for each procedure category may differ.
- NHSN analysis reports allows you to view these risk factor variables for each procedure to ensure good data quality and to help inform infection prevention priorities and practices.

NHSN Analysis Reports: Modify Report

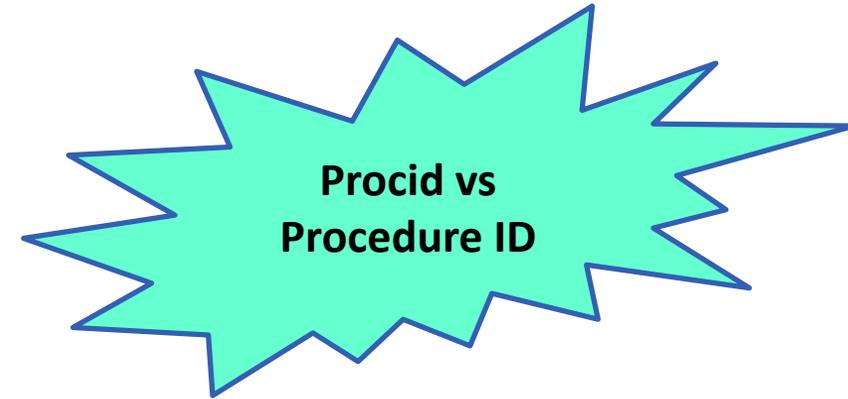


A reminder, we will return to the Advanced folder to find the procedure line list.



Modifying Analysis Reports: Procedure Line List

- Show Descriptive Variable Names
- Analysis Data Set Source
- Type of Report
- When Data Set was Generated



Modify "Line Listing - All Procedures"

Show descriptive variable names ([Print List](#)) Analysis Data Set: OP_Procedures Type: Line Listing Last Generated: [January 6, 2020 9:41 AM](#)

Title/Format Time Period Filters Display Variables Sort Variables Display Options

Title:
Line Listing of KPRO Procedures for November 2019

Title displays at the top of the set.

html pdf xls rtf

Modifying Analysis Reports: Change Title

Modify "Line Listing - All Procedures"

Show descriptive variable names ([Print List](#)) Analysis Data Set: OP_Procedures Type: Line Listing Last Generated: **January 6, 2020 9:41 AM**

Title/Format Time Period Filters Display Variables Sort Variables Display Options

Title:

Format:

 html  pdf  xls  rtf

If you want to save a customized report, consider re-naming the title



Modifying Analysis Reports: Select Format

- Title/Format
 - You may choose the format in which the report is displayed, such as HTML, Excel, or PDF.
 - Default is HTML

Modify "Line Listing - All Procedures"

Show descriptive variable names ([Print List](#)) Analysis Data Set: OP_Procedures Type: Line Listing Last Generated: **January 6, 2020 9:41 AM**

Title/Format Time Period Filters Display Variables Sort Variables Display Options

Title:
Line Listing of KPRO Procedures for November 2019

Format:

Quick Word on Format Options



- Default setting; easy to read and view data quickly



- Useful if you want to print/save a report or send electronically as an attachment



- Helpful if you want to filter data or analyze a dataset in excel



- Rich Text Format: Information can be opened by this file type in several different programs and software

Modifying Analysis Reports: Time Period

- Allows for selection of a specific time period for your report
- Select a date variable from the “Date Variable” drop down menu and specify the beginning and ending date for the desired time period
- If the “Ending” date is left blank, the results will include all data from the beginning time period and forward

The screenshot displays the 'Modify "Line Listing - Outpatient Procedure Plans"' interface. At the top, there is a blue header bar with the title. Below the header, a navigation bar contains several tabs: 'Title/Format', 'Time Period' (which is highlighted in green), 'Filters', 'Display Variables', 'Sort Variables', and 'Display Options'. To the right of the navigation bar, there is a status bar showing 'Analysis Data Set: OP_Plan', 'Type: Line Listing', and 'Last Generated: January 2, 2020 1:32 PM'. Below the navigation bar, the 'Time Period' section is visible. It includes a 'Date Variable' dropdown menu, 'Beginning' and 'Ending' date input fields, and a 'Clear Time Period' button. A checkbox at the bottom of the section is labeled 'Enter Date variable/Time period at the time you click the Run button'.

Modifying Analysis Reports: Time Period

Modify "Line Listing - All Procedures"

Show descriptive variable names [\(Print List\)](#) Analysis Data Set: OP_Procedu

Title/Format **Time Period** Filters Display Variables Sort Variables Display Options

Time Period:

Date Variable	Beginning	Ending	
procDateYM ▾	11/2019	11/2019 ×	<input type="button" value="Clear Time Period"/>

Enter Date variable/Time period at the time you click the Run button

For this example, we are looking only at November 2019 data.



Modifying Analysis Reports: Filters

- Filters are organized by “group” and “rule”
 - Each will allow you to specify values to include in your report
- Add Group vs. Add Rule
 - Group = Will generate a table in your report with a select number of rules (conditions) set
 - Rules = Conditions that will restrict what type of data is populated within a group (table)

Modify "Line Listing - All Procedures"

Show descriptive variable names ([Print List](#)) Analysis Data Set: OP_Procedures Type: Line Listing Last Generated: January 6, 2020 9:41 AM

Title/Format Time Period **Filters** Display Variables Sort Variables Display Options

Additional Filters: Show Clear

AND OR

AND OR

▼

Add group

Add rule

Delete

Modifying Analysis Reports: Filters

- We select the Procedure Code as the “rule” we want in our “group”
- Next, click in the empty box with the drop down arrow to select the operator (“equal”)
- Then specify desired values of that variable that should be included in the Our line list
 - We only want to view KPRO procedures, so we enter that code in the blank field
- Our selections are all made within one group

The screenshot shows the 'Filters' tab selected in a software interface. The interface includes several tabs: 'Title/Format', 'Time Period', 'Filters' (highlighted in green), 'Display Variables', 'Sort Variables', and 'Display Options'. Below the tabs, there are 'Additional Filters:' buttons for 'Show' and 'Clear'. A filter rule is displayed with a dropdown menu set to 'Procedure Code', an operator dropdown set to 'equal', and a text input field containing 'KPRO'. A callout bubble points to the 'KPRO' field with the text 'Have to manually enter'.

Modifying Analysis Reports: Display Variables

- All available variables are listed in the left column
- Variables that you want to see in your analysis, must be selected and brought to the right column

Modify "Line Listing - All Procedures"

Show descriptive variable names ([Print List](#)) Analysis Data Set: OP_Procedures Type: Line Listing Last Generated: [January 6, 2020 9:41 AM](#)

Display Variables:

Available Variables:

- Age on Proc Date
- allAdultExcl
- ASA Class**
- ASA Class Description
- asa_cat
- Bedsize
- bmi_val**
- CMS Certification Number
- Comment
- Complete?
- Create Date
- Created in NHSN Version
- Custom 1
- Custom 10
- Custom 11

Selected Variables:

- Facility Org ID
- Patient ID
- Date of Birth
- Gender
- Procedure ID
- Procedure Date
- Procedure Code

Buttons: All, Selected, Selected, All, Up, Down, Undo

Modifying Analysis Reports: Display Variables

Modify "Line Listing - All Procedures"

Show descriptive variable names ([Print List](#)) Analysis Data Set: OP_Procedures Type: Line Listing Last Generated: January 6, 2020 9:41 AM

Title/Format Time Period Filters **Display Variables** Sort Variables Display Options

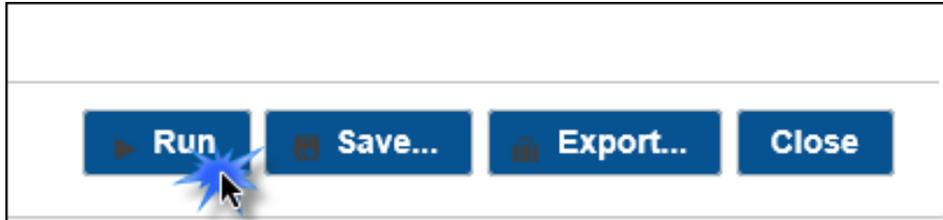
Display Variables:

Available Variables:		Selected Variables:	
Age on Proc Date	All	Facility Org ID	Up
allAdultExcl	Selected	Patient ID	Down
ASA Class Description	Selected	Date of Birth	
asa_cat		Gender	
Bedsizes	All	Procedure ID	
CMS Certification Number		Procedure Date	
Comment		Procedure Code	Undo
Complete?		duration	
Create Date		ASA Class	
Created in NHSN Version		bmi_val	
Custom 1			
Custom 10			
Custom 11			
Custom 12			
Custom 13			

In this example the variables for duration, ASA Class, and bmi_val were added



Modifying Analysis Reports: Run Report



To generate the report you modified, select "Run"



Modifying Analysis Reports: Output

National Healthcare Safety Network Line Listing of All Procedures

As of: January 10, 2020 at 2:48 PM

Date Range: OP PROCEDURES procDateYM 2019M11 to 2019M11

Facility Org ID	Patient ID	Date of Birth	Gender	Procedure ID	Procedure Date	Procedure Code	duration	ASA Class	bmi_val
57258	TEST11364	12/02/1968	F	40023590	11/03/2019	KPRO	185	2	25.049988
57258	TEST11362	11/12/1969	M	40023588	11/01/2019	KPRO	185	2	27.429993
57258	TEST11366	12/02/1968	F	40023592	11/25/2019	KPRO	185	2	31.089996
57258	TEST11365	03/11/1978	F	40023591	11/04/2019	KPRO	125	1	25.419998
57258	TEST11367	07/14/1972	M	40023593	11/11/2019	KPRO	125	2	7.6299973
57258	TEST11369	11/12/1982	F	40023595	11/08/2019	KPRO	4	1	33.829987
57258	T123456	08/10/1966	M	39999654	11/14/2019	KPRO	145	1	23.429993
57258	TEST11368	08/10/1962	M	40023594	11/07/2019	KPRO	185	2	32.919988

Modified Analysis Reports can assist with your facilities data quality efforts

Modifying Analysis Report: Saving Your Report



To save a modified report, select "Save"



Modifying Analysis Report: Saving Your Report

Specify a name for your Analysis Report:

Analysis Report Name:

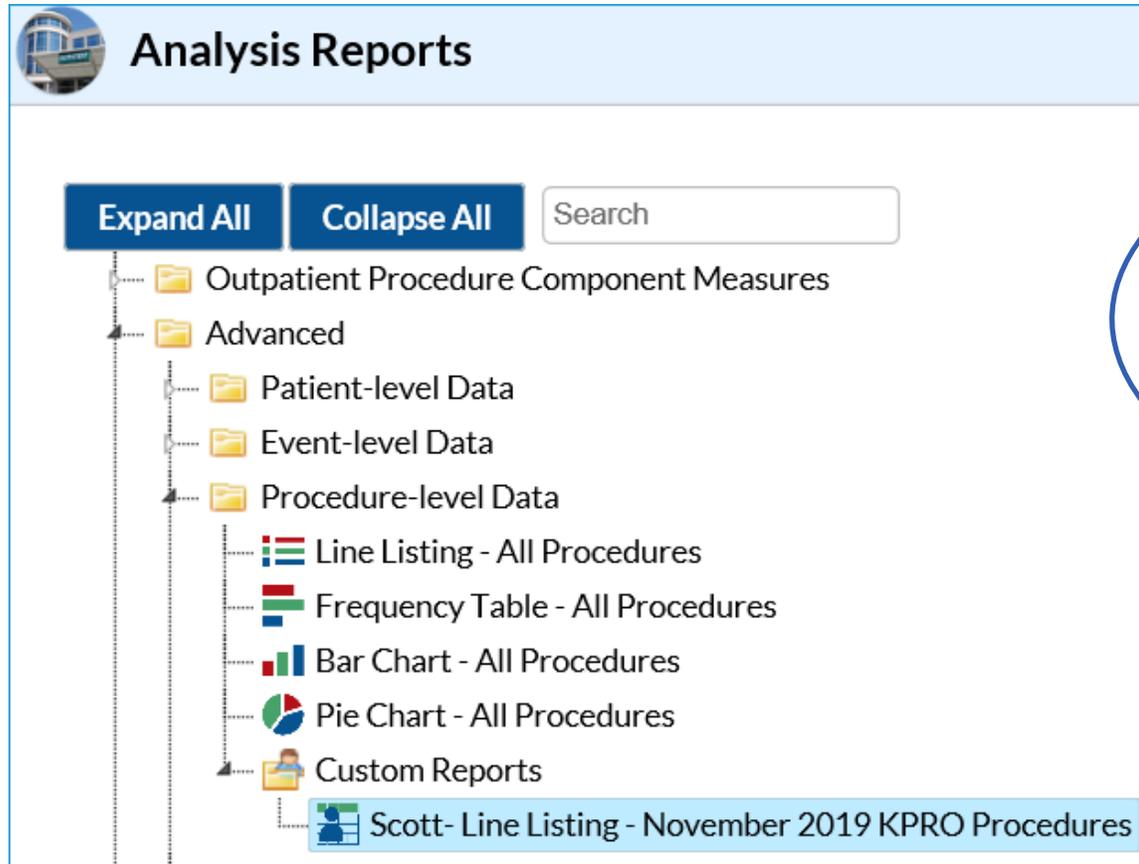
Overwrite existing Custom Analysis Report (Save)

Create a new Custom Analysis Report based on this one (Save as)

Enter a name that best describes the report for you and/or staff



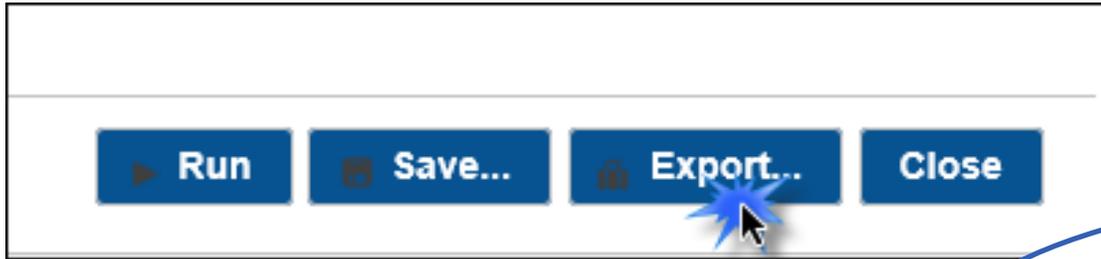
Modifying Analysis Report: Saving Your Report



Custom report will be saved at the bottom of the folder in which you found the initial report.



Modifying Analysis Report: Exporting Your Report

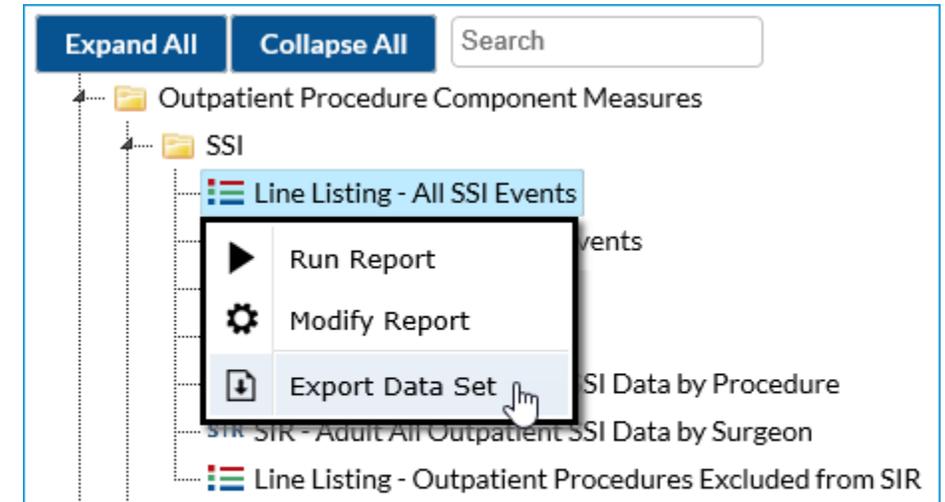


To export a modified report to a .xls, .sas, .csv and many more file types, select “Export”



Modifying Analysis Report: Exporting Datasets

- Export Analysis Data Set
 - Appears when you select your report type
 - Exports the entire dataset from which the resulting report is generated



Modifying Analysis Report: Exporting Datasets

- Export Output Data Set
 - Appears at the bottom of the Modify Screen
 - Two options:
 - Exports entire Analysis Data Set
 - Exports only data used in generating the report for the specified time period and including selection criteria

Export Analysis Data Set

Analysis Data Set: OP_Procedures

Export Format: delimited file (comma-separated values) (*.csv) ▼

Export Entire Analysis Data Set

Export Analysis Data Set using Modifications

Export Cancel

SSI Event Analysis

The screenshot shows the 'Analysis Reports' interface. At the top, there is a header with a logo and the text 'Analysis Reports'. Below the header, there are two buttons: 'Expand All' and 'Collapse All', followed by a search input field. The main content area displays a tree view of reports. The 'SSI' folder is expanded, showing several report items. The 'Line Listing - All SSI Events' report is selected, and a context menu is open over it. The menu options are: 'Run Report' (with a play button icon), 'Modify Report' (with a gear icon and highlighted by a mouse cursor), and 'Export Data Set' (with a download icon). Other visible report items include 'Line Listing - Outpatient Procedures Excluded from SIR' and 'SIR - Adult All Outpatient SSI Data by Surgeon'.

- Modify your SSI line list to find Mr. Clarke's KPRO Event

SSI Event Analysis

Title/Format **Time Period** Filters Display Variables Sort Variables Display Options

Time Period:

Date Variable	Beginning	Ending	
Event~Yr/Qtr	2019Q4	2019Q4	Clear Time Period

Enter Date variable/Time period at the time you click the Run button

- Select the time period for when the event of interest occurred
- We are interested in Mr. Clarke, so we select 2019 Q4

Title/Format Time Period **Filters** Display Variables Sort Variables Display Options

Additional Filters: Show Clear

AND OR Add group

AND OR Add rule

Procedure Code equal KPRO Delete

- Filter by Procedure Code to only observe KPRO
- Make sure your procedure code matches exactly the code from your reporting plan (case sensitive)

SSI Event Analysis Output

National Healthcare Safety Network
Line Listing of All Surgical Site Infection Events
 As of: January 7, 2020 at 11:51 AM
 Date Range: OP_SSI_EVENTS procDateYQ 2019Q4 to 2019Q4

Facility Org ID	Patient ID	First Name	Last Name	OP Event Type	OP Specific Event	Procedure Date	Procedure Code	Date of Birth	Age on Proc Date	Gender	Duration of Procedure - hr	Duration of Procedure - min	Outpatient?	SSI Event Detected	allAdultExcl
57258	T123456	Sam	Clarke	OPSSI - Surgical Site Infection	OS	11/14/2019	KPRO	08/10/1966	53	M	2	25	Y	ACTIVE	0
57258	TEST11381			OPSSI - Surgical Site Infection	OS	12/11/2019	KPRO	10/23/1964	55	F	3	30	Y	ACTIVE	0
57258	TEST11360			OPSSI - Surgical Site Infection	OS	10/11/2019	KPRO	03/13/1978	41	M	1	52	Y	PASSIVE	0
57258	TEST11362			OPSSI - Surgical Site Infection	OS	11/01/2019	KPRO	11/12/1969	49	M	3	5	Y	PASSIVE	0
57258	TEST11364			OPSSI - Surgical Site Infection	OS	11/03/2019	KPRO	12/02/1968	50	F	3	5	Y	ACTIVE	0

- The list includes 5 KPRO SSI events that occurred during this time period
- Mr. Clarke's event is among the 5 listed
- 5 KPRO events in one quarter!
 - Additional analysis may be helpful to identify clinical interventions to improve future procedures

SSI Event Analysis

The screenshot shows the 'Display Variables' tab selected. The 'Available Variables' list includes: Review of patient's medical record, Source NHSN Component for this Data, SSI Plan?, SSN, State, Status, Surgeon contacts facility to report, Surgeon Middle Name, Swelling or inflammation?, Type of Facility, User ID for Data Entry, When Detected Description, Wound Class, Wound Class~Description, and Wound spontaneously dehisces?. The 'Selected Variables' list includes: Procedure Date, Procedure Code, Date of Birth, Age on Proc Date, Gender, Duration of~Procedure - hr, Duration of~Procedure - min, Outpatient?, SSI Event Detected, allAdultExcl, ASA Class, BMI, Surgeon Code, Surgeon First Name, and Surgeon Last Name. A callout box points to the surgeon variables with the text 'New variables brought in to analysis output'.

The screenshot shows the 'Display Options' tab selected. Under 'Line Listing Options', the 'Page by variable' dropdown menu is set to 'Surgeon Last Name'.

- Select more variables to view additional information about the patient, procedure, and/or event
- We include surgeon information in our new selections
- Display options allow you to break up data by variable type to create multiple tables
- We will create a table organized by “Surgeon Last Name” for each procedure

SSI Event Output

National Healthcare Safety Network Line Listing of All Surgical Site Infection Events

As of: January 8, 2020 at 12:52 PM
Date Range: OP_SSI_EVENTS procDateYQ 2019Q4 to 2019Q4

Surgeon Last Name=Garrett

Facility Org ID	Patient ID	OP Event Type	OP Specific Event	Procedure Date	Procedure Code	Date of Birth	Age on Proc Date	Gender	Duration of Procedure - hr	Duration of Procedure - min	Outpatient?	SSI Event Detected	allAdultExc	ASA Class	BMI	Surgeon Code	Surgeon First Name	Surgeon Last Name
57258	TEST11360	OPSSI - Surgical Site Infection	OS	10/11/2019	KPRO	03/13/1978	41	M	1	52	Y	PASSIVE	0	3	21.89	003	Kim	Garrett

Sorted by procCode surgSurname

Data contained in this report were last generated on January 7, 2020 at 12:25 PM to include data beginning January 2017 through January 2020.

National Healthcare Safety Network Line Listing of All Surgical Site Infection Events

As of: January 8, 2020 at 12:52 PM
Date Range: OP_SSI_EVENTS procDateYQ 2019Q4 to 2019Q4

Surgeon Last Name=Jacobs

Using Surgeon Codes can also be used in your procedure line lists to assemble post discharge surveillance surveys

Facility Org ID	Patient ID	OP Event Type	OP Specific Event	Procedure Date	Procedure Code	Date of Birth	Age on Proc Date	Gender	Duration of Procedure - hr	Duration of Procedure - min	Outpatient?	SSI Event Detected	allAdultExc	ASA Class	BMI	Surgeon Code	Surgeon First Name	Surgeon Last Name
57258	T123456	OPSSI - Surgical Site Infection	OS	11/14/2019	KPRO	08/10/1966	53	M	2	25	Y	ACTIVE	0	1	23.43	001	Jennifer	Jacobs

Sorted by procCode surgSurname

Data contained in this report were last generated on January 7, 2020 at 12:25 PM to include data beginning January 2017 through January 2020.

National Healthcare Safety Network Line Listing of All Surgical Site Infection Events

As of: January 8, 2020 at 12:52 PM
Date Range: OP_SSI_EVENTS procDateYQ 2019Q4 to 2019Q4

Surgeon Last Name=Tyler

Facility Org ID	Patient ID	OP Event Type	OP Specific Event	Procedure Date	Procedure Code	Date of Birth	Age on Proc Date	Gender	Duration of Procedure - hr	Duration of Procedure - min	Outpatient?	SSI Event Detected	allAdultExc	ASA Class	BMI	Surgeon Code	Surgeon First Name	Surgeon Last Name
57258	TEST11381	OPSSI - Surgical Site Infection	OS	12/11/2019	KPRO	10/23/1964	55	F	3	30	Y	ACTIVE	0	1	14.19	002	Johnathon	Tyler
57258	TEST11362	OPSSI - Surgical Site Infection	OS	11/01/2019	KPRO	11/12/1969	49	M	3	5	Y	PASSIVE	0	2	27.43	002	Johnathon	Tyler
57258	TEST11364	OPSSI - Surgical Site Infection	OS	11/03/2019	KPRO	12/02/1968	50	F	3	5	Y	ACTIVE	0	2	25.05	002	Johnathon	Tyler

Key Takeaways for OPC-SSI

- Means to track and trend ASC SSI events associated with the 30 NHSN operative procedure categories
- 2 sets of SSI criteria – General and Breast Surgery
- SSIs are identified as the superficial incisional, deep incisional and organ space
- Must monitor all procedures and events of the selected operative procedure category
- Post-discharge surveillance is required

Key Takeaways for OPC-SSI

- Risk factor variables can be analyzed at the procedure level to help identify areas of improvement for the Standardized Infection Ratio (SIR)
- Time spent creating custom modified reports will help save time in the future for data analysis and will bolster data quality efforts.
- Data can be exported and saved into several different file types using NHSN reports.

How can OPC assist Downtown ASC with monitoring its KPRO outcome measures?

How can OPC assist Downtown ASC?

- Using the SDOM module allows the ASC to monitor falls and hospital transfers or admissions
- Using the OPC-SSI module allows the ASC to perform surveillance for SSI events
- Both modules provide analysis reports that include options to modify and customize reports

What are the benefits to using OPC?

- Includes NQF Endorsed Measures (or have been in the past)
 - Same Day event measures (developed by ASCQC)
 - BRST SSI (developed by ASCQC-CDC-CO Department of Health collaboration)
- The OPC-SSI protocol was created specifically for ASCs
 - Can be used to meet state-based reporting mandates
- Will enable ASCs to benchmark against nationally aggregated data
- Allows data collection for all payer types

What are the benefits to using OPC?

- Monitor outcome of adherence to infection prevention/control clinical practice guidelines and strategies
- Track incidence of surgical site infections and other adverse healthcare outcomes
- Enables the use of surveillance data for:
 - Measuring clinical quality and benchmarking performance
 - Exerting positive change(s) in patient care practices
 - Public reporting and other accountability purposes
 - Building knowledge related to infection risk in the ASC environment
- Minimizes reporting burden for ASCs while assuring data are validated, credible, and actionable

Within our presentation we have successfully:

- *Identified when and how to apply the SDOM criteria*
- *Demonstrated how to perform analysis of SDOM data and generate a Bar Chart*
- *Shown how to evaluate an SSI event using the OPC-SSI criteria*
- *Outlined how to perform analysis of SSI data and reviewed the analysis output*
- *Described how OPC can assist ASCs with monitoring outcome measures*

Send questions related to the
NHSN Outpatient Procedure Component
to nhsn@cdc.gov

