

# Line List-Outpatient Procedures Excluded from the SIR

## Outpatient Procedure Component

### Description

For the surgical site infections (SSI) module, there are inclusion and exclusion criteria that are applied to procedures and associated events, prior to applying the risk-adjustment models for the SIRs. The “Line Listing Outpatient Procedures Excluded from SIR” an NHSN analysis report that is intended to assist users in reviewing the procedures that are excluded from the SIRs and the reasons for the exclusion. This list of exclusion criteria is often called the “Universal Exclusion Criteria and applies to procedures. Often, the reason for procedure exclusion from the SIRs is due to data quality issues, which can be addressed, if applicable. For a complete list of inclusion and exclusion criteria, please see page 47 of the “NHSN Guide to the SIR”: <https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/nhsn-sir-guide.pdf>.

The purpose of this quick reference guide (QRG) is to describe how to determine procedures excluded from the SIRs within the Outpatient Procedure Component. The line list will allow for a record-level review of each procedure excluded from one or more SIRs and the reason(s) for the exclusion. If a procedure is excluded from one or more SIRs, any SSI event associated with that procedure will also be excluded.

### Example

In this example, we are interested in reviewing outpatient procedures that were performed in our facility in February 2019.

#### Select the Line Listing – Procedures Excluded from SIR report

Step 1: From the left-hand navigation pane, select the option *Analysis*

Step 2: Select, *Report* to view the analysis report options

Step 3: Select the *Procedure Component Measures* to view the reports that are available

Step 4: Next, select the *SSI* module folder

Step 5: Select the report titled *Line Listing – Outpatient Procedures Excluded from SIR*

Step 6: A pop-up notification will appear, select the *Modify Report* function

The image shows a two-part screenshot of the NHSN interface. On the left, the 'NHSN Home' navigation pane is visible with a red box around 'Analysis' (labeled '1') and a red box around 'Reports' (labeled '2'). An orange arrow points to the right, where the 'Analysis Reports' screen is shown. In the 'Analysis Reports' screen, a tree view shows 'Outpatient Procedure Component Measures' (labeled '3'), 'SSI' (labeled '4'), and 'Line Listing - Outpatient Procedures Excluded from SIR' (labeled '5'). A context menu is open over the selected report, with 'Modify Report' (labeled '6') highlighted in a red box. Other options in the menu include 'Run Report' and 'Export Data Set'.

## Modify the report by defining the appropriate criteria

The title and format of the report can be modified, as needed for your analysis. (*This step is optional*)

Step 1: Select the *Time Period* tab in the modification screen

Step 2: Using the procedure date, select the *procDateYM* option from the drop-down menu for the *Date Variable*

Step 3: Set the *Beginning* and *Ending* date to 02/2019

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

**Time Period:**

Date Variable Beginning Ending

procDateYM 02/2019 02/2019 Clear Time Period

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

Filters can be added to this report to limit the amount of data to display in the report output. We recommend the use of these filters when interested in analyzing data for a specific procedure category and/or reason for exclusion. For example, the February 2019 list of excluded procedures can be limited by defining a specific procedure code, such as “procCode equal to COLO.”

On the *Display Variable* tab, you will find the list of exclusion variables included in the *Selected Variable* list by default as shown in the screen shot below. The list of exclusion is explained by the table on [page 4](#).

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

**Display Variables:**

**Available Variables:**

- ageAtProc
- anesthesia
- asa
- asa\_cat
- asaDesc
- bedsize
- bmi\_val
- CCN
- comment
- completedFlag
- component
- createDate
- createUserID
- custom1
- custom10

**Selected Variables:**

- patID
- procID
- procCode
- allAdultExcl
- procDate
- dob
- gender
- procDurationHr
- procDurationMin
- exclMissingVarInd
- exclMissingVarList
- exclDurThresholdInd
- exclAgeGT109Ind
- exclGenderOth
- exclBMIThresholdInd

These are the default variables pre-selected to show the exclusion criteria variables

- Once you are satisfied with the selected modifications, click *Run* (or *export*) to obtain the results

Run in html format

export into another file format (i.e., csv)

Run Save... Export... Close

# Report Output and Interpretation

Below is the report output from the Line Listing – Outpatient Procedures Excluded from SIR report.

- (1) In the title of the report, you will notice the applicable baseline year in parenthesis.
- (2) The list of universal exclusion criteria variables is preceded by “**excl**”. As mentioned earlier in the modification steps, these variables outlined in the report below appeared in the “Selected Variable” by default and will be included in this report.
- (3) Our report shows that 1 BRST procedure is excluded from the SIR. When we review the exclusion variables (i.e., those beginning with **excl**), we can see that this procedure is excluded from the SIRs because the patient’s BMI is less than 12 or greater than 60. (i.e., **exclBMIThresholdInd** = Y).

**National Healthcare Safety Network**  
**Line Listing for Outpatient Procedures Excluded from SSI SIR (2015 Baseline)** 1

As of: July 31, 2019 at 9:58 AM  
 Date Range: OP\_PROCEDURES procDateYM 2019M02 to 2019M02

orgID	patID	procID	procCode	allAdultExcl	procDate	dob	gender	procDurationHr	procDurationMin	exclMissingVarInd	exclMissingVarList	exclDurThresholdInd	exclAgeGT109Ind	exclGenderOth	exclBMIThresholdInd
14913	TEST	86247	BRST	1	02/10/2019	05/22/1975	F	5	45	N		N	N	N	Y

1. The "Line Listing for Procedures Excluded from SSI SIR (2015 Baseline)" report contains procedures excluded from one or more SIRs.

2. Variables preceded by **excl** indicate the reason for exclusion. If **excl** criterion is set to Y, then the procedure is excluded from the denominator of the related SIR.

3. Please review the Quick Reference Guide on Procedure Exclusion Criteria (<https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/line-list-procedures-excluded-sir.pdf>) for more information on how to determine which records are included in the SIRs.

Sorted by procID  
 Data contained in this report were last generated on July 31, 2019 at 9:57 AM.

**Please Review the footnotes for additional information**

**Note: Data Tables included in this example are fictitious data and used for illustrative purposes only**

## Definitions of Exclusion Variables

Below is the list of exclusion variables and their corresponding definitions. If any of the exclusion variables, preceded by **excl** is set to 'Y' (Yes), as shown in the report output above, then the procedure is excluded from the SIR. And if any of the exclusion variable is set to 'Y', then the variables followed by 'Excl' will be set to 1, as shown in the report output above. This simply means that the procedure is excluded from the outpatient SSI SIR model.

Exclusion Variable	Definition
allAdultExcl	Procedure excluded from All Outpatient SSI SIR Model for Adults
exclMissingVarInd	Procedure excluded for missing risk factors used in risk adjustment of applicable procedure category
exclMissingVarList	List of missing risk factors used in risk adjustment of applicable procedure category
exclDurThresholdInd	Procedure excluded due to procedure duration being less than 5 minutes or exceeding the IQR5 value. Please see the list of procedure duration cutoff points in the new SIR Guide: <a href="https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/nhsn-sir-guide.pdf">https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/nhsn-sir-guide.pdf</a>
exclAgeGT109Ind	Procedure excluded if the patient's age at time of procedure is 109 years or older
exclGenderOth	Procedure excluded because patient's gender was not reported as male or female (i.e., gender = O)
exclBMIThresholdInd	Procedure excluded if the adult patient's BMI is less than 12 or greater than 60.

## Additional Resources

How to modify report: <https://www.cdc.gov/nhsn/pdfs/opc/opc-modify-report-508.pdf>

ASC Surveillance: <https://www.cdc.gov/nhsn/ambulatory-surgery/ssi/index.html>

NHSN Guide to the SIR: <https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/nhsn-sir-guide.pdf>



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