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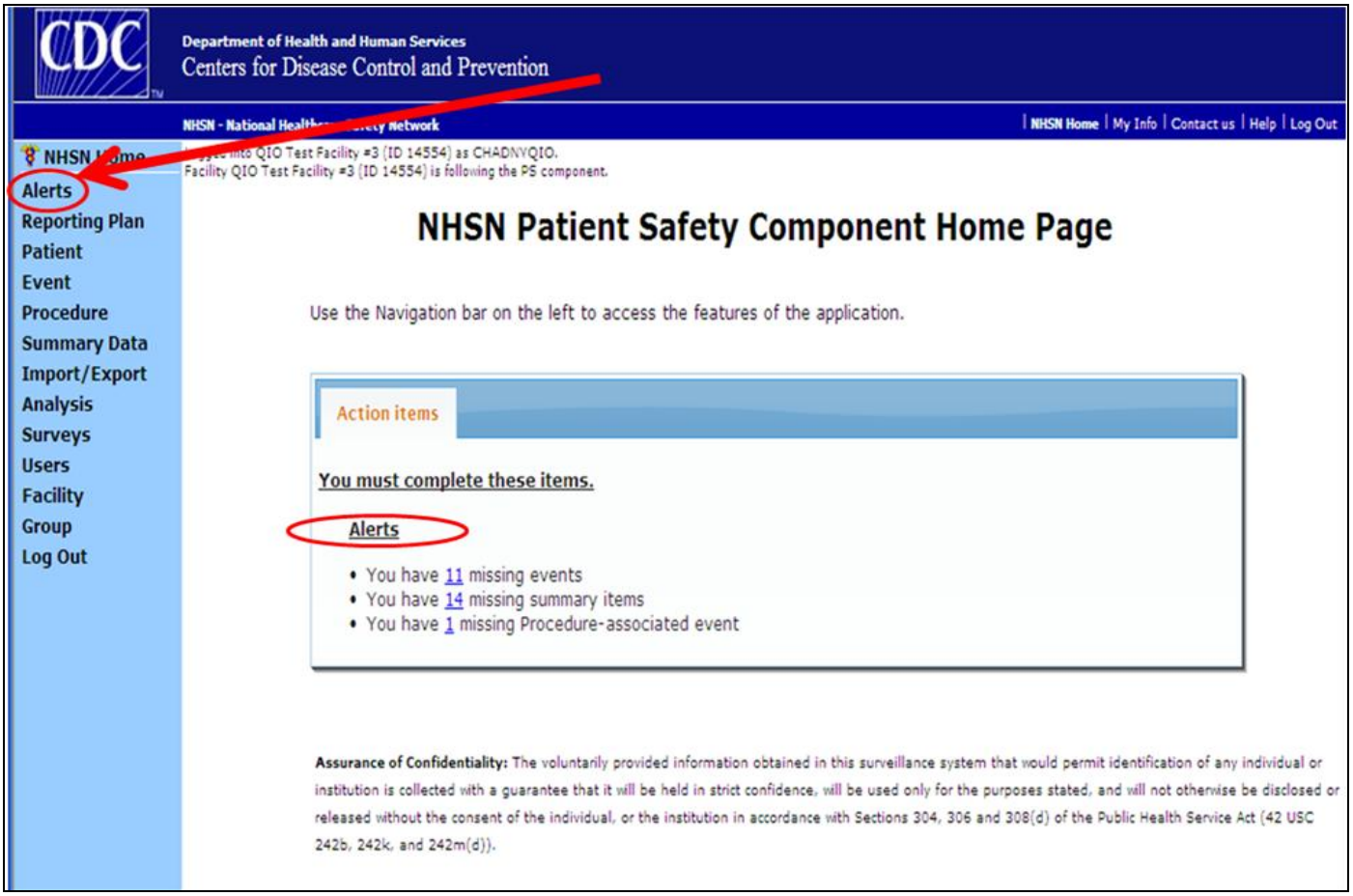
IPRO

How to Verify Your NHSN Data is Being Reported to CMS for IPPS Reporting

To comply with the Inpatient Prospective Payment System (IPPS) CMS Reporting Requirements, National Health and Safety Network (NHSN) data for CLABSIs, CAUTIs, and SSIs will need to be properly entered and available through the NHSN. Your monthly reporting plan will need to indicate that surveillance of these Hospital Acquired Infections (HAIs) is ongoing in each of your critical care units for CLABSI and CAUTI and that COLO, HYST, HPRO, and CABG (if performed) procedures are being followed. Entering procedure and SSI information for HPRO and CABG are New York State Health Department requirements and will not be shown on the CMS IPPS NHSN reports below.

This document is to serve as a guide for hospitals to check that their NHSN data is complying with the CMS IPPS requirements. We recommend that hospitals always verify the accuracy of their data reporting if any concerns arise.

Prior to checking any data, always verify that the Alerts and Action Items have been addressed. If any updates are made, a new data set will need to be generated under *Analysis* on the far left side.

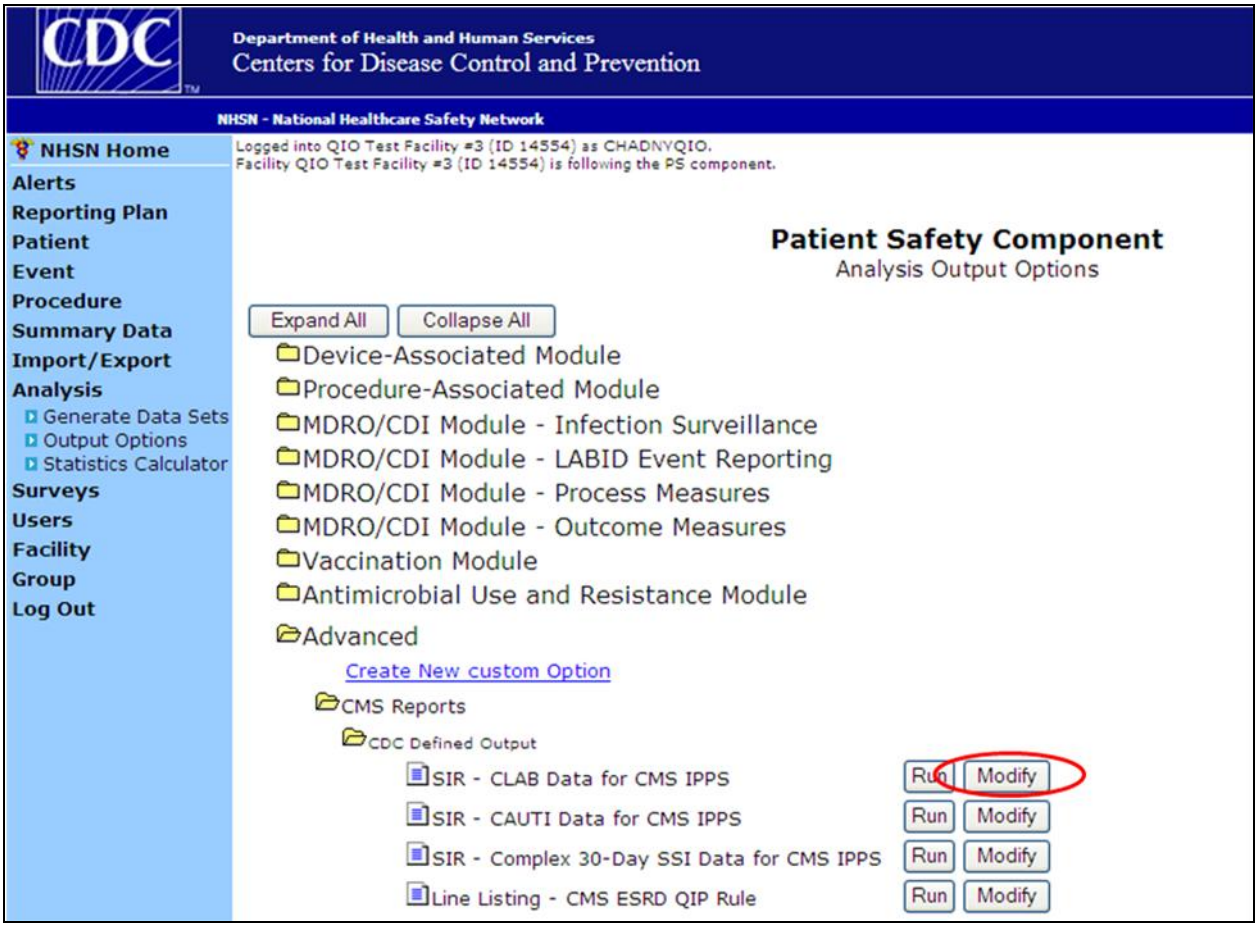


CLABSI Instructions

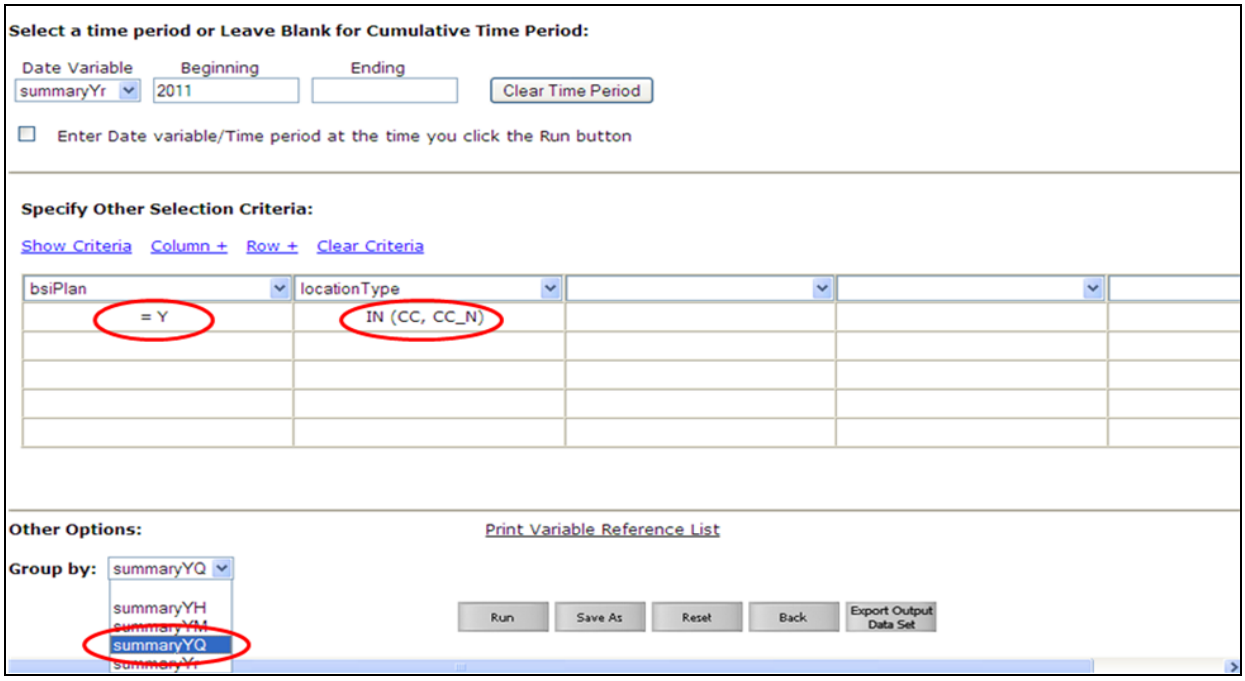
Verifying that CLABSI data is properly entered in the NHSN for all critical care units in your hospital.

Sign into the NHSN

1. Select "*Analysis*" from the far left column.
    a. Click "*Output Options*"
2. From the list now open, click on "*Advanced*"
    a. Click "*CMS Reports*"
        i. Click "CDC Defined Output"
            1. Click "*Modify*" (circled in red on the screen below) for "*SIR – CLAB Data for CMS IPPS*"



3. Check to make sure that the "bsiPlan" is marked "Y" and the "locationType" shows "IN (CC, CC_N)" to indicate inpatient critical care and neonatal intensive care units. (NHSN will default to these selections and set the time period to Beginning in 2011)
    a. Scroll to the bottom of the screen and click the drop-down "*Group by:*"
        i. Select "summaryYQ"
        ii. Click "*Run*"



4. Scroll to the bottom of the data output. All critical care areas beginning in 2011 should be listed with complete three months of corresponding quarter data. (This facility only has one critical care unit: 1 MICU)
    a. The output below should show complete 3-months of data for each quarter beginning in 2011.
        i. 2012Q2 is <u>incorrectly</u> only showing 2 months of available data.

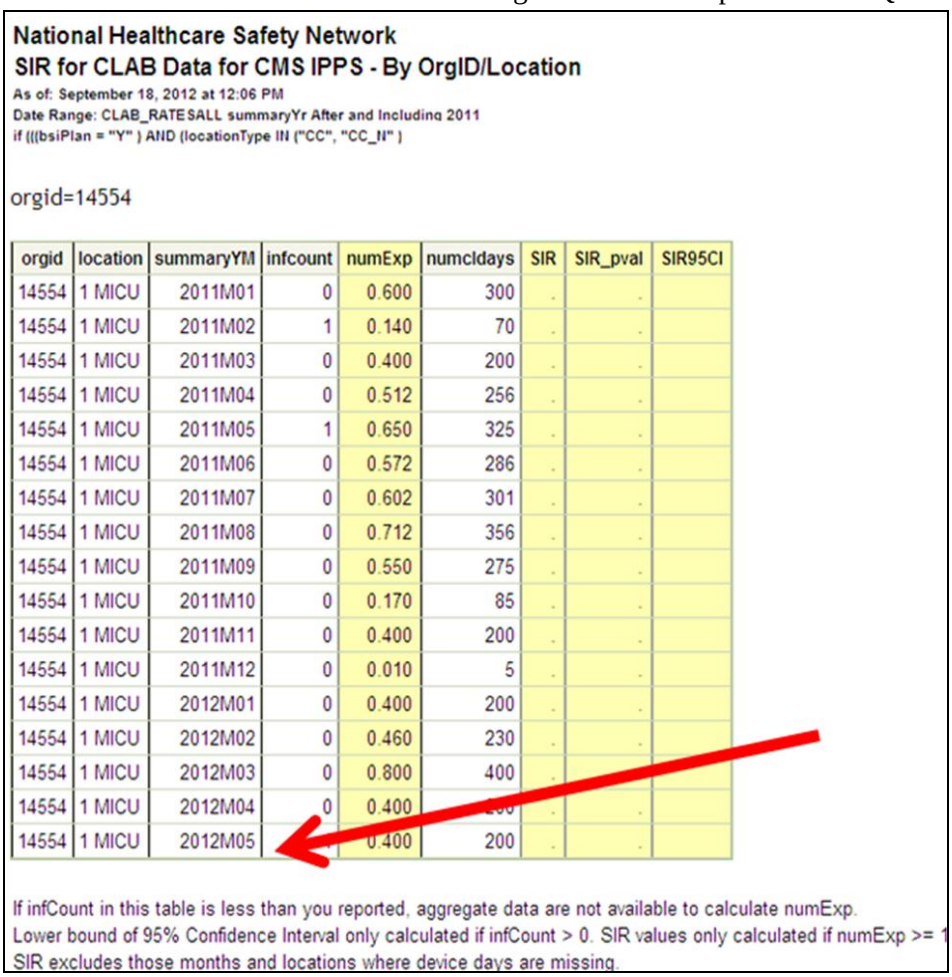
National Healthcare Safety Network
SIR for CLAB Data for CMS IPPS - By OrgID/Location
As of: September 18, 2012 at 11:41 AM
Date Range: CLAB_RATESALL summaryYr After and Including 2011
if (((bsiPlan = "Y") AND (locationType IN ("CC", "CC_N"))

orgid=14554

orgid	location	summaryYQ	months	infcount	numExp	numcldays	SIR	SIR_pval	SIR95CI
14554	1 MICU	2011Q1	3	1	1.140	570	0.877	0.6844	0.022, 4.887
14554	1 MICU	2011Q2	3	1	1.734	867	0.577	0.4828	0.015, 3.213
14554	1 MICU	2011Q3	3	0	1.864	932	0.000	0.1551	, 1.979
14554	1 MICU	2011Q4	3	0	0.580	290	.	.	
14554	1 MICU	2012Q1	3	0	1.660	830	0.000	0.1901	, 2.222
14554	1 MICU	2012Q2	2	1	0.800	400	.	.	

If infCount in this table is less than you reported, aggregate data are not available to calculate numExp.
Lower bound of 95% Confidence Interval only calculated if infCount > 0. SIR values only calculated if numExp >= 1.
SIR excludes those months and locations where device days are missing.

5. Return to step 3, and instead of using "summaryYQ" in the "*Group By:*", select "summaryYM" in the dropdown and *run* the report.
    a. Review the months corresponding to the missing quarter. In this case 2012Q2.
        i. Notice that 2012M06 is the month missing in the NHSN report for 2012Q2.



National Healthcare Safety Network
SIR for CLAB Data for CMS IPPS - By OrgID/Location
As of: September 18, 2012 at 12:06 PM
Date Range: CLAB_RATESALL summaryYr After and Including 2011
if (((bsiPlan = "Y") AND (locationType IN ("CC", "CC_N")

orgid=14554

orgid	location	summaryYM	infcount	numExp	numcldays	SIR	SIR_pval	SIR95CI
14554	1 MICU	2011M01	0	0.600	300	.	.	
14554	1 MICU	2011M02	1	0.140	70	.	.	
14554	1 MICU	2011M03	0	0.400	200	.	.	
14554	1 MICU	2011M04	0	0.512	256	.	.	
14554	1 MICU	2011M05	1	0.650	325	.	.	
14554	1 MICU	2011M06	0	0.572	286	.	.	
14554	1 MICU	2011M07	0	0.602	301	.	.	
14554	1 MICU	2011M08	0	0.712	356	.	.	
14554	1 MICU	2011M09	0	0.550	275	.	.	
14554	1 MICU	2011M10	0	0.170	85	.	.	
14554	1 MICU	2011M11	0	0.400	200	.	.	
14554	1 MICU	2011M12	0	0.010	5	.	.	
14554	1 MICU	2012M01	0	0.400	200	.	.	
14554	1 MICU	2012M02	0	0.460	230	.	.	
14554	1 MICU	2012M03	0	0.800	400	.	.	
14554	1 MICU	2012M04	0	0.400	[illegible]	.	.	
14554	1 MICU	2012M05	[illegible]	0.400	200	.	.	

If infCount in this table is less than you reported, aggregate data are not available to calculate numExp.
Lower bound of 95% Confidence Interval only calculated if infCount > 0. SIR values only calculated if numExp >= 1
SIR excludes those months and locations where device days are missing.

6. To investigate the issue with the missing month's data, click on the *Alerts* on the far left (*see page one*).

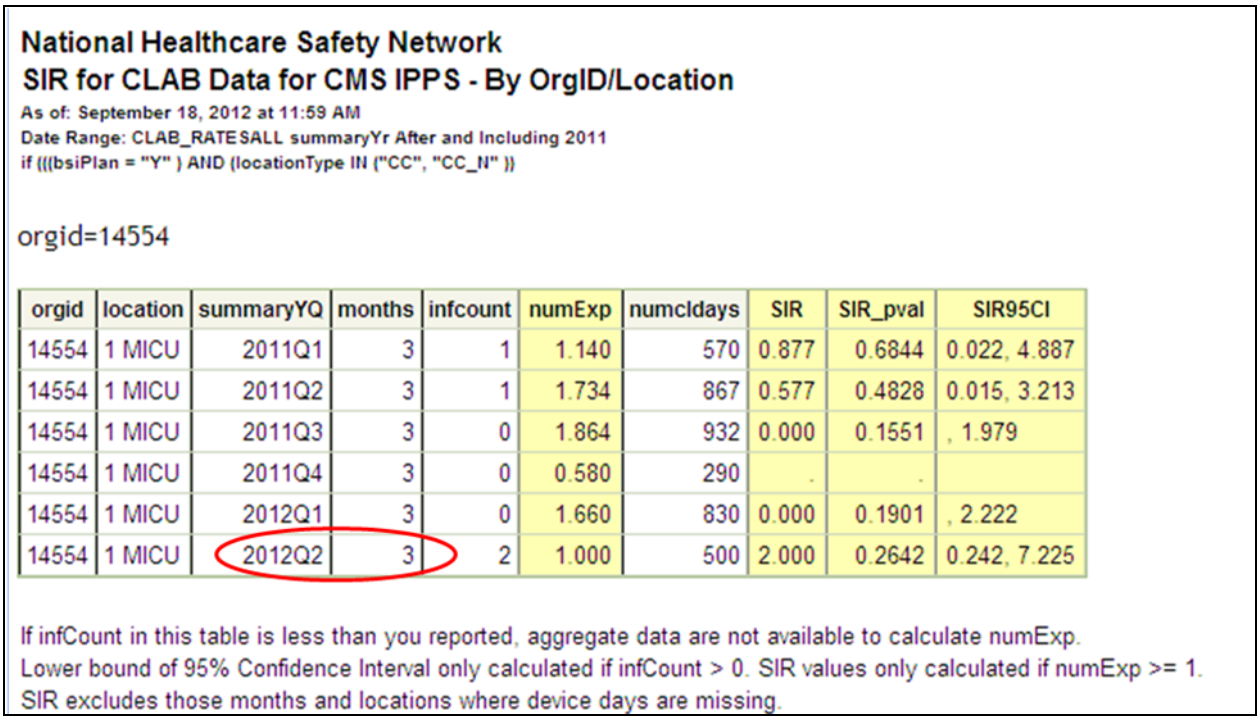
Common problems to check:

1. Check the *Alerts* on the far left side of the page for incomplete events, missing events, incomplete summary data, and missing summary data.
2. The reporting plan for the month is either missing or does not indicate that CLABSIs were being tracked for a given unit. This will not show as an alert on the *Alerts* display.

Remember, if any data is updated in the NHSN, a new dataset will need to be generated before the changes can be seen.

The data has been corrected and a new dataset was generated.

7. Below you can see that all quarters beginning in 2011 have 3-months of data in the NHSN for the MICU.



National Healthcare Safety Network
SIR for CLAB Data for CMS IPPS - By OrgID/Location

As of: September 18, 2012 at 11:59 AM
Date Range: CLAB_RATESALL summaryYr After and Including 2011
if (((bsiPlan = "Y") AND (locationType IN ("CC", "CC_N"))

orgid=14554

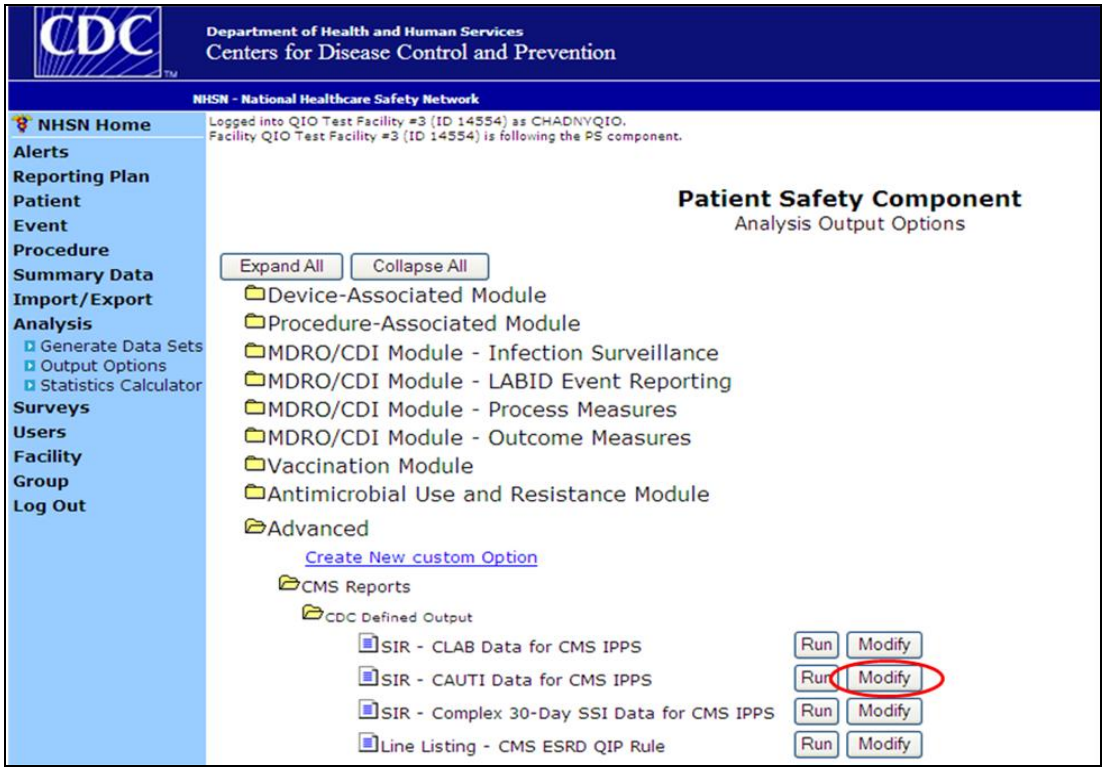
orgid	location	summaryYQ	months	infcount	numExp	numcldays	SIR	SIR_pval	SIR95CI
14554	1 MICU	2011Q1	3	1	1.140	570	0.877	0.6844	0.022, 4.887
14554	1 MICU	2011Q2	3	1	1.734	867	0.577	0.4828	0.015, 3.213
14554	1 MICU	2011Q3	3	0	1.864	932	0.000	0.1551	, 1.979
14554	1 MICU	2011Q4	3	0	0.580	290	.	.	
14554	1 MICU	2012Q1	3	0	1.660	830	0.000	0.1901	, 2.222
14554	1 MICU	2012Q2	3	2	1.000	500	2.000	0.2642	0.242, 7.225

If infCount in this table is less than you reported, aggregate data are not available to calculate numExp.
Lower bound of 95% Confidence Interval only calculated if infCount > 0. SIR values only calculated if numExp >= 1.
SIR excludes those months and locations where device days are missing.

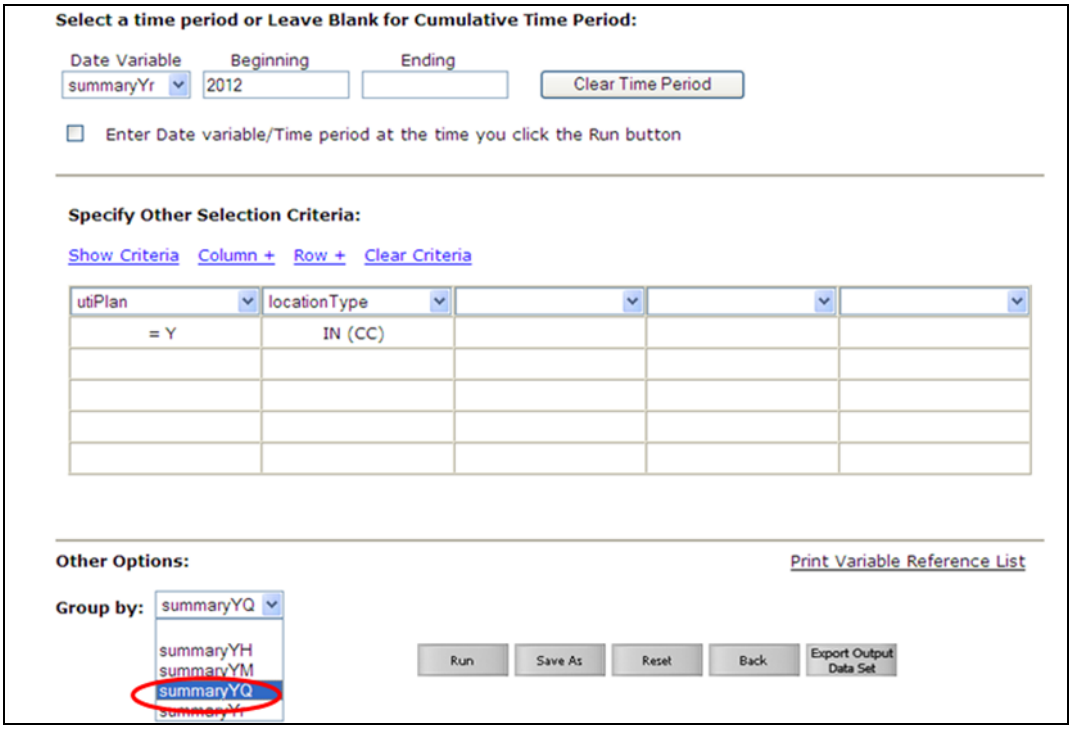
CAUTI Instructions

Verifying that CAUTI data is properly entered in the NHSN for all critical care units in your hospital. The process is nearly identical to that performed for CLABSI.

1. Select "*Analysis*" from the far left column.
    a. Click "*Output Options*"
2. From the list now open, click on "*Advanced*"
    a. Click "*CMS Reports*"
        i. Click "CDC Defined Output"
            1. Click "*Modify*" (circled in red on the screen below) for "*SIR – CAUTI Data for CMS IPPS*"



3. The NHSN system will automatically pull all critical care areas properly identified that are in plan. Do not change the "utiPlan" or "locationType" selections. (*The time variable is set to only show 2012 available data as per CMS mandated reporting beginning January 2012)
    a. Scroll to the bottom of the screen and click the drop-down "*Group by:*"
        i. Select "summaryYQ"
        ii. Click "*Run*"



4. Scroll to the bottom of the data output. All critical care areas should be listed with complete three months of corresponding quarter data. (This facility has a single critical care unit: 1 MICU)
    a. On the output below, 2012Q2 shows only 2 months of CAUTI data being reported out of the NHSN.

National Healthcare Safety Network
SIR for CAUTI Data for CMS IPPS - By OrgID/Location

As of: September 7, 2012 at 2:18 PM
Date Range: CAU_RATESICU_SCA summaryYr After and Including 2012
if (((utiPlan = "Y") AND (locationType IN ("CC"))))

orgid=14554

orgid	location	summaryYQ	months	infcount	numExp	numucathdays	SIR	SIR_pval	SIR95CI
14554	1 MICU	2012Q1	3	0	1.800	900	0.000	0.1653	, 2.049
14554	1 MICU	2012Q2	2	1	1.000	500	1.000	0.1653	0.025, 5.572

If infCount in this table is less than you reported, aggregate data are not available to calculate numExp.
Lower bound of 95% Confidence Interval only calculated if infCount > 0. SIR values only calculated if numExp >= 1.
SIR excludes those months and locations where device days are missing.

5. Return to step 3, and instead of using "summaryYQ" in the "*Group By:*", select "summaryYM" in the dropdown and *run* the report.
    a. CAUTI data is missing for 2012M05

National Healthcare Safety Network
SIR for CAUTI Data for CMS IPPS - By OrgID/Location
As of: September 18, 2012 at 12:25 PM
Date Range: CAU_RATESICU_SCA summaryYr After and Including 2012
if (((utiPlan = "Y") AND (locationType IN ("CC")) AND (location = "1 MICU")))

orgid=14554

orgid	location	summaryYM	infcount	numExp	numucathdays	SIR	SIR_pval	SIR95CI
14554	1 MICU	2012M01	0	0.500	250	.	.	
14554	1 MICU	2012M02	0	0.700	350	.	.	
14554	1 MICU	2012M03	0	0.600	300	.	.	
14554	1 MICU	2012M04	0	0.600	300	.	.	
14554	1 MICU	2012M06	1	0.400	200	.	.	

If infCount in this table is less than you reported, aggregate data are not available to calculate numExp.
Lower bound of 95% Confidence Interval only calculated if infCount > 0. SIR values only calculated if numExp >= 1.
SIR excludes those months and locations where device days are missing.

6. To investigate the missing month's data, return to the *Alerts* tab on the far left of the screen for prompts on incomplete reporting. (*shown on page one*)

7. The data has been corrected and a new dataset was generated.
    a. Below you can see that both 2012Q1 and 2012Q2 have 3 months of data in the NHSN for the MICU.

National Healthcare Safety Network
SIR for CAUTI Data for CMS IPPS - By OrgID/Location
As of: September 7, 2012 at 2:09 PM
Date Range: CAU_RATESICU_SCA summaryYr After and Including 2012
if (((utiPlan = "Y") AND (locationType IN ("CC"))))

orgid=14554

orgid	location	summaryYQ	months	infcount	numExp	numucathdays	SIR	SIR_pval	SIR95CI
14554	1 MICU	2012Q1	3	0	1.800	900	0.000	0.1653	, 2.049
14554	1 MICU	2012Q2	3	2	1.800	900	1.111	0.5372	0.135, 4.014

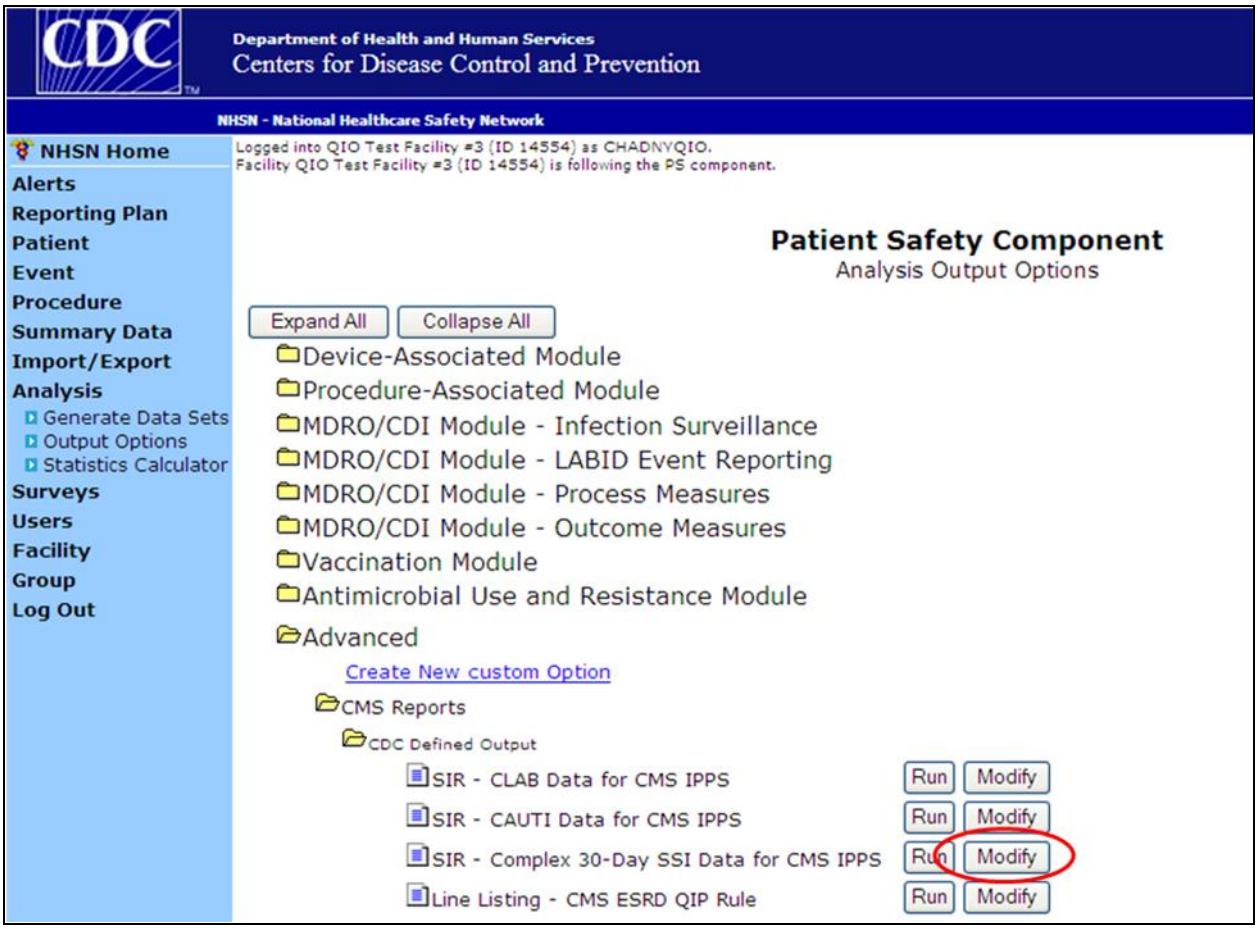
If infCount in this table is less than you reported, aggregate data are not available to calculate numExp.
Lower bound of 95% Confidence Interval only calculated if infCount > 0. SIR values only calculated if numExp >= 1.
SIR excludes those months and locations where device days are missing.

Surgical Site Infections and Surgical Procedures Instructions

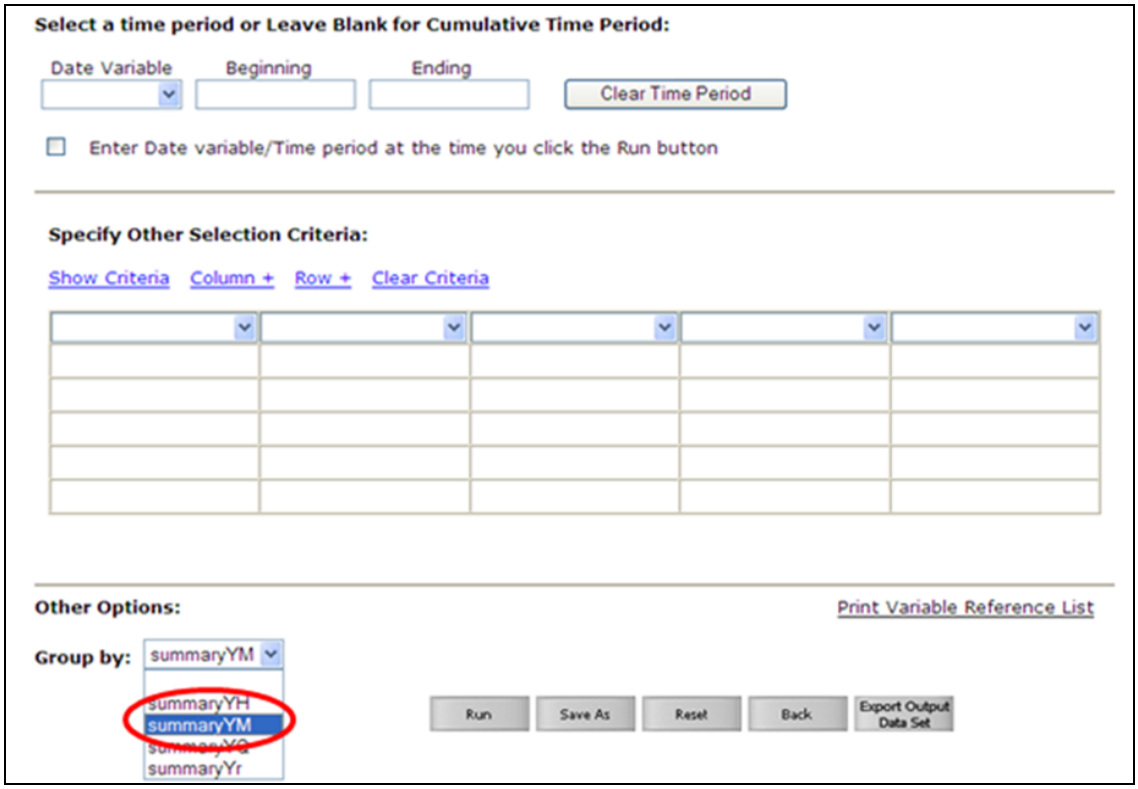
Verifying that the SSI data and procedures are properly entered in the NHSN.

Prior to running the output, we advise that you review the dashboard tabs for incomplete or missing procedures and missing procedure-associated (PA) events. If any corrections are made, you will need to generate a new dataset before reviewing your SSI CMS IIPS reporting. CMS requires entering data for COLO and HYST. Additional tracking of HPRO and CABG (if performed) are required for the New York State Department of Health and will not display any information using these instructions.

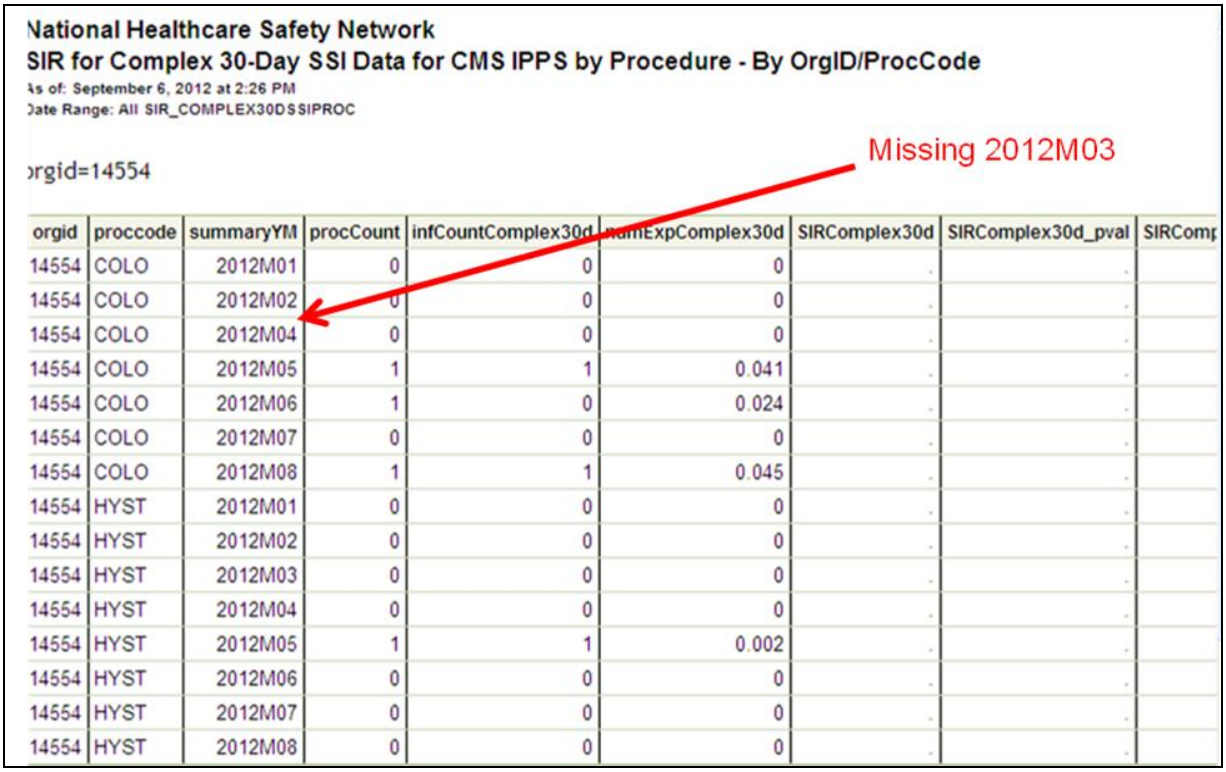
1. Select "*Analysis*" from the far left column.
    a. Click "*Output Options*"
2. From the list now open, click on "*Advanced*"
    a. Click "*CMS Reports*"
        i. Click "CDC Defined Output"
            1. Click "*Modify*" (circled in red on the screen below) for "*SIR – Complex 30-Day SSI Data for CMS IPPS*"



3. Use the "Group by:" drop down "**summaryYM**"
    a. Using "summaryYQ" will report each quarter of procedures, despite if all data is present for each month. It is easier to view each month to verify data are not missing (*as shown below*).



4. Output shows missing COLO data for 2012M03. HYST data is complete from 2012M01-2012M06. Verify that the number of procedures and SSIs match the number shown for your facility.



National Healthcare Safety Network
SIR for Complex 30-Day SSI Data for CMS IPPS by Procedure - By OrgID/ProcCode
As of: September 6, 2012 at 2:26 PM
Date Range: All SIR_COMPLEX30DSSIPROC

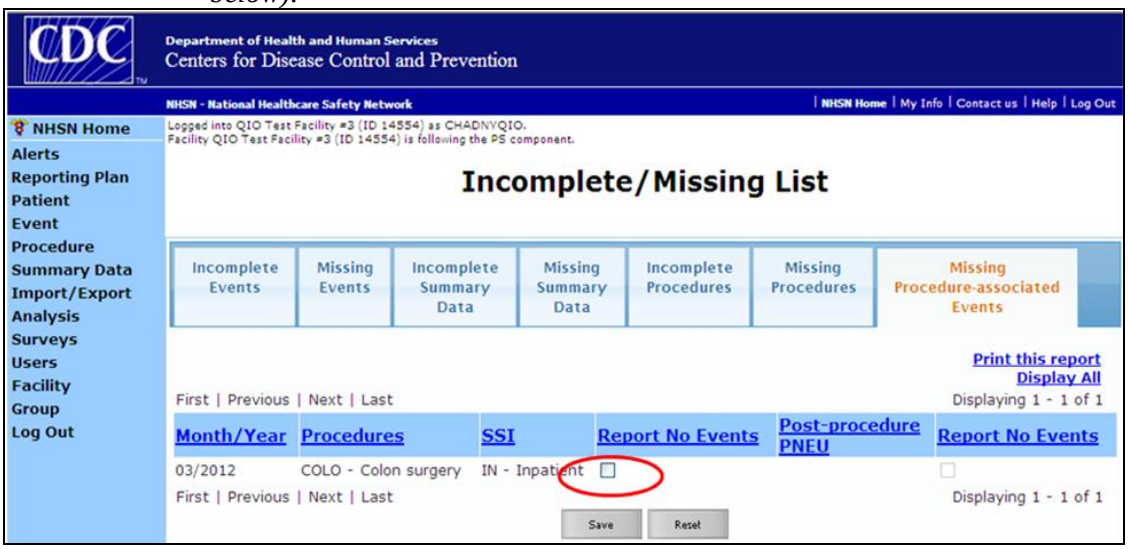
orgid=14554

Missing 2012M03

orgid	proccode	summaryYM	procCount	infCountComplex30d	xamExpComplex30d	SIRComplex30d	SIRComplex30d_pval	SIRComp
14554	COLO	2012M01	0	0	0	.	.	
14554	COLO	2012M02	0	0	0	.	.	
14554	COLO	2012M04	0	0	0	.	.	
14554	COLO	2012M05	1	1	0.041	.	.	
14554	COLO	2012M06	1	0	0.024	.	.	
14554	COLO	2012M07	0	0	0	.	.	
14554	COLO	2012M08	1	1	0.045	.	.	
14554	HYST	2012M01	0	0	0	.	.	
14554	HYST	2012M02	0	0	0	.	.	
14554	HYST	2012M03	0	0	0	.	.	
14554	HYST	2012M04	0	0	0	.	.	
14554	HYST	2012M05	1	1	0.002	.	.	
14554	HYST	2012M06	0	0	0	.	.	
14554	HYST	2012M07	0	0	0	.	.	
14554	HYST	2012M08	0	0	0	.	.	

Check the *Alerts* for Missing Procedures and/or Missing PA Events.

5. Click on *Alerts*,
   a. Check the "Missing Procedures" tab **and**
   b. Check "Missing Procedure-associated Events" tab for Incomplete/Missing Information
      i. The "Report No Events" tab was not marked for 03/2012 for COLO surgeries (*shown below*).



6. Generate another data set to update and view the changes.

7. Return to the "*SIR – Complex 30-Day SSI Data for CMS IPPS*" report (*instructions on page 10)*

   a. Re-run the report using the "Group by:" drop down "summaryYM"
      i. COLO data is now complete.

National Healthcare Safety Network
SIR for Complex 30-Day SSI Data for CMS IPPS by Procedure - By OrgID/ProcCode
As of: September 18, 2012 at 2:13 PM
Date Range: All SIR_COMPLEX30DSSIPROC

orgid=14554

orgid	proccode	summaryYM	procCount	infCountComplex30d	numExpComplex30d	SIRComplex30d	SIRComplex30d_pval	SIRComplex30d9
14554	COLO	2012M01	0	0	0	.	.	
14554	COLO	2012M02	0	0	0	.	.	
14554	COLO	2012M03	3	0	0.068	.	.	
14554	COLO	2012M04	0	0	0	.	.	
14554	COLO	2012M05	1	1	0.041	.	.	
14554	COLO	2012M06	1	0	0.024	.	.	
14554	COLO	2012M07	0	0	0	.	.	
14554	COLO	2012M08	1	1	0.045	.	.	
14554	HYST	2012M01	0	0	0	.	.	
14554	HYST	2012M02	0	0	0	.	.	
14554	HYST	2012M03	0	0	0	.	.	
14554	HYST	2012M04	0	0	0	.	.	
14554	HYST	2012M05	1	1	0.002	.	.	
14554	HYST	2012M06	0	0	0	.	.	
14554	HYST	2012M07	0	0	0	.	.	
14554	HYST	2012M08	0	0	0	.	.	

Includes in-plan, inpatient COLO and HYST procedures in patients >=18 years of age.
Includes SSIs with an event date within 30 days of the procedure date.
Excludes all Superficial Incisional SSIs and Deep Incisional Secondary (DIS) SSIs.
Lower bound of 95% Confidence Interval only calculated if infCount > 0. SIR values only calculated if numExp >= 1.

This material was prepared by IPRO, the Medicare Quality Improvement Organization for New York State, under contract with the Centers for Medicare & Medicaid Services (CMS) an agency of the U.S. Department of Health and Human Services. The contents do not necessarily reflect CMS policy. 10SOW-NY-AIM 7.4-12-12