Analyzing Procedure Closure Technique

Description

Beginning in 2014, NHSN began collecting information on the closure technique for all procedures reported to NHSN. SSI standardized infection ratios (SIRs) generated within NHSN, that use the 2006-2008 baseline data, will include only those procedures and SSIs reported with a primary closure technique.

Facilities that report surgical site infection (SSI) data to NHSN may wish to analyze which procedures – and associated SSIs- were performed and reported with a non-primary closure technique. Facilities can generate line lists and frequency tables to determine which, and how many, records were reported with a closure technique of "Other than primary" (OTH).

Example

You have been following COLO procedures as part of your SSI surveillance efforts. You know that some COLOs were not primarily closed and each month, you would like to obtain a list of those procedures from NHSN.

In order to obtain this list, you can modify the "Line Listing – All Procedures" within the Advanced output options folder and include the variable **closure**. You may also wish to include additional procedure-specific variables to aide in your analysis (e.g., surgeoncode). For more information about running/modifying line lists in NHSN, please see: http://www.cdc.gov/nhsn/PS-Analysis-resources/PDF/LineLists.pdf

National Healthcare Safety Network

Line Listing for All Procedures

As of: February 3, 2014 at 12:25 PM

Date Range: PROCEDURES procDateYM 2014M01 to 2014M01

Procedure ID	Age on Proc Date	Procedure Date	Procedure Code	ASA Class	closure	Wound Class	Duration of Procedure - hr	Duration of Procedure - min
42673	72	01/01/2014	COLO	2	OTH	CC	2	16
42674	67	01/15/2014	COLO	1	OTH	CC	2	10
42675	56	01/22/2014	COLO	3	OTH	CO	4	15
42676	47	01/31/2014	COLO	2	OTH	D	3	25
42677	31	01/20/2014	COLO	3	OTH	D	5	10

You are also interested in reviewing a list of SSIs that may have resulted from procedures that were not primarily closed. In order to obtain this information, you can modify the "Line Listing – All SSI Events" and limit the data in the line list by specifying the criteria: **closure = OTH**. HINT: It is recommended to also limit this line list by time period, based on the date of procedure. For example, procDateYM = 01/2014 to 01/2014.

National Healthcare Safety Network

Line Listing for All Surgical Site Infection Events

As of: February 3, 2014 at 12:35 PM

Date Range: SSI_EVENTS procDateYM 2014M01 to 2014M01

Event ID	Event Date	Event Type	Specific Event	Linked Procedure	Procedure Code	closure	Procedure Date
42678	01/30/2014	SSI	DIP	42673	COLO	OTH	01/01/2014
42679	02/01/2014	SSI	SIP	42674	COLO	OTH	01/15/2014

In order to obtain a count of how many procedures were reported with a non-primary closure technique, you can modify the "Frequency Table – All Procedures" and specify the variable **closure** as either the row variable or the column variable. The example frequency table below illustrates the number of COLO procedures performed in January 2014 for each type of closure technique.

Frequency Row Pct	Table of procCode by closure			
	procCode(Procedure Code)	closure(closure)		
		OTH	PRI	Total
	COLO	5	20	25
		20.00	80.00	
	Total	5	20	25

Note that the above guidance for a procedure-level frequency table can also be applied to an SSI event-level frequency table in order for you to assess how many SSIs identified were attributed to procedures with a non-primary closure technique.

For more information about running/modifying frequency tables in NHSN, please see: http://www.cdc.gov/nhsn/PS-Analysis-resources/PDF/FrequencyTables.pdf