



Procedure-associated Module: Protocols and Definitions

Division of Healthcare Quality Promotion

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Target Audience

- This training is designed for those who will collect and analyze Patient Safety Component data or enroll a hospital into NHSN

This includes the following:

- NHSN Facility Administrator
- Patient Safety Primary Contact
- Infection Control Professional (ICP)
- Epidemiologist
- Microbiologist
- Pharmacist
- Data entry staff

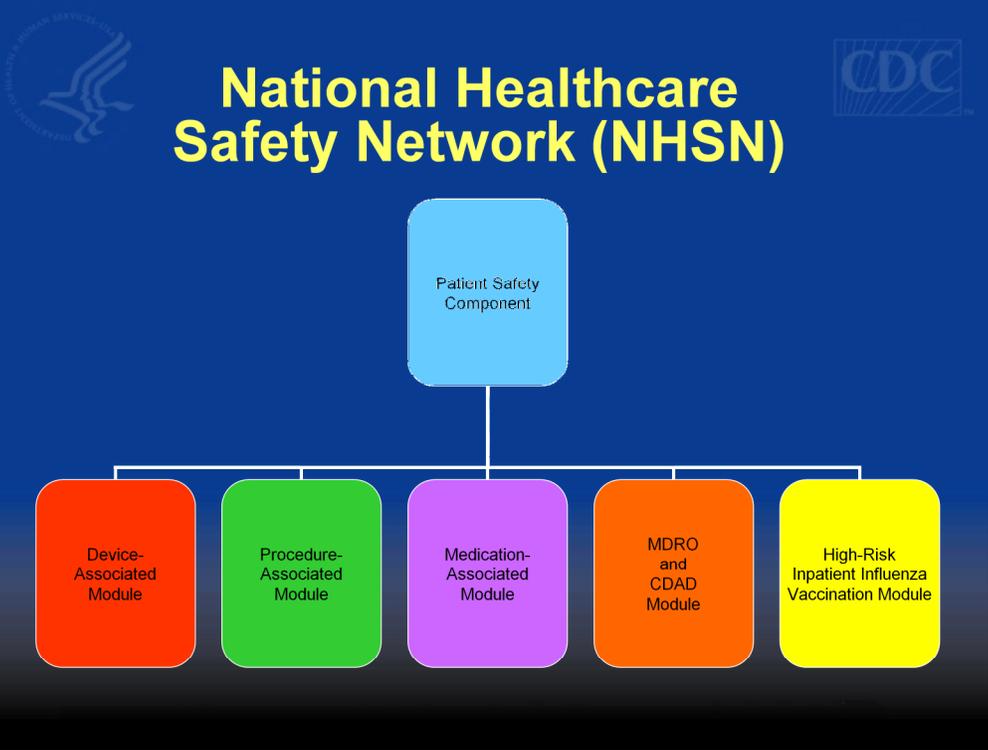
This training is designed for those who will collect and analyze Patient Safety Component data or enroll a hospital into NHSN. This includes: NHSN facility administrators, Patient Safety Primary contact, infection control professionals or ICPs, epidemiologists, microbiologists, pharmacists and data entry staff.

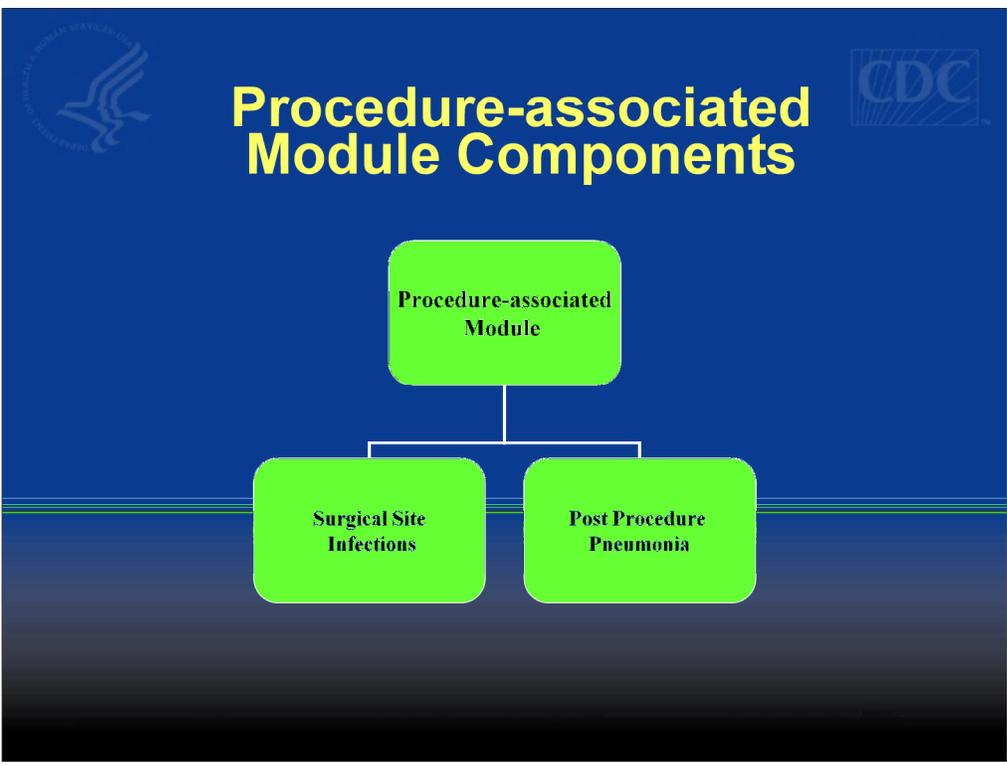


Objectives



1. Describe the NHSN Procedure-associated Module
2. Review key terms and definitions of infection and data fields used for reporting surgical site infection (SSI) and post-procedure pneumonia (PPP) events
3. Define the rates obtained using this module







The slide features a dark blue background with a white NHSN logo in the top left and a CDC logo in the top right. The title "NHSN Surveillance Methodology" is centered in yellow. Below the title is a bulleted list of five characteristics in white text.

NHSN Surveillance Methodology

- Active
- Patient-based
- Prospective
- Priority-directed
- Risk-adjusted, incidence rates

NHSN **surveillance is** the active, patient-based, prospective, priority-directed **collection of data** that results in risk-adjusted, incidence rates. The following slides will look at these characteristics in greater depth.



Procedure-associated Module Protocol

- First, choose which procedures* will be monitored during the month
 - Indicate the procedure category
 - Indicate whether the procedure was performed on inpatients only, or outpatients only, or both in- and outpatients
 - Example: Cholecystectomy procedures (CHOL) for in- and outpatients (BOTH)

*Currently, the only procedures included in the protocol are “NHSN Operative Procedures”

In the Procedure-associated module protocol, first the facility first chooses which procedures to monitor during a month and on which surgical patients (inpatients only, outpatients only, or both). Currently, the only procedures included in the protocol are “NHSN Operative Procedures”.



Procedure-associated Module Protocol

- Second, for the procedure(s) selected, choose which events will be monitored
 - Surgical site infections (SSI)
 - Post-procedure pneumonia (PPP)

Second, the facility chooses which events—SSI, PPP, or both—will be monitored.



Monthly Reporting Plan

- When following the Procedure-associated module, enter the procedures and events into the Monthly Reporting Plan
- Remember, the Monthly Reporting Plan informs CDC which modules a facility is following during a given month
- A facility must enter a Plan for every month of the year, even those in which no modules are followed
- A facility may enter data only for months in which Plans are on file

When following the Procedure-associated module protocol, enter the procedures and events chosen for surveillance during the month. Remember that the Monthly Reporting Plan informs CDC which modules a facility is following during a given month.

A facility must enter a Plan for every month of the year, even those in which no modules are followed.

A facility may enter data only for months in which Plans are on file.

Monitoring of Device- and Procedure- associated Events

Device-Associated Module

Locations	CLA	BSI	DI	VAP	CAUTI
2 EAST - HEM/ONC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SICU - SURGICAL ICU	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NICU3 - LEVEL 3 NICU	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OUTDIAL - OUTPATIENT DIALYSIS	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Procedure-Associated Module

Procedures	SSI	Post-procedure PNEU
CRAN - Craniotomy	IN - Inpatient	IN - Inpatient
CHOL - Gallbladder surgery	BOTH - In and outpatient	
HPRO - Hip prosthesis	IN - Inpatient	

Here is a screen shot of a Monthly Reporting Plan for a facility monitoring Device- and Procedure-associated events according to the protocols for a month. Using pull down menus you can clarify your plan, choosing the locations, modules, procedures and events that you will follow that month.



NHSN Operative Procedure

- An operative procedure ...
 - Is performed on a patient who is an NHSN inpatient or an NHSN outpatient
 - Takes place during an operation where a surgeon makes a skin or mucous membrane incision (including laparoscopic approach) and primarily closes the incision before the patient leaves the operating room
 - Is represented by an NHSN operative procedure code



NHSN Operative Procedures

- Each NHSN operative procedure category consists of a group of ICD-9-CM codes
Example: CBGB (CABG with chest and donor site incisions) = ICD-9 codes 36.10 – 36.14, 36.19
- When monitoring a specific NHSN operative procedure category, all the ICD-9 codes within that category that are done in your facility must be followed



NHSN Inpatient

- A patient whose date of admission to the healthcare facility and the date of discharge are different calendar days



NHSN Outpatient

- A patient whose date of admission to the healthcare facility and date of discharge are the same calendar day



Operating Room

- A patient care area that meets the American Institute of Architects (AIA) criteria for an operating room
- May include an operating room, c-section room, interventional radiology room, or cardiac cath lab



Examples of SSI Data Sources

- Microbiology reports
- Infection control rounds on nursing units
- Pharmacy reports for antimicrobial use
- Temperature chart
- Operating room report of surgeries
- Use post-discharge surveillance methods for SSI



Examples of SSI - Postdischarge Sources

- Readmission to hospital
- Emergency Department or Clinic records
- Health care system/HMO may have pharmacy records for antimicrobial agents
- Surgeon surveys – phone or mail
- Patient surveys – less reliable



Superficial Incisional SSI

Infection occurs within 30 days after the operative procedure
and
involves only skin and subcutaneous tissue of the incision
and

patient has at least one of the following:

- purulent drainage from the superficial incision.
- organisms isolated from an aseptically obtained culture of fluid or tissue from the superficial incision.
- at least one of the following signs or symptoms of infection: pain or tenderness, localized swelling, redness, or heat, and superficial incision is deliberately opened by surgeon, and is culture-positive or not cultured. A culture-negative finding does not meet this criterion.
- diagnosis of superficial incisional SSI by the surgeon or attending physician.



Deep Incisional SSI



Infection occurs within 30 days after the operative procedure if no implant is left in place or within one year if implant is in place and the infection appears to be related to the operative procedure

and

involves deep soft tissues (e.g., fascial and muscle layers) of the incision

and

patient has at least one of the following:

- purulent drainage from the deep incision but not from the organ/space component of the surgical site
- deep incision spontaneously dehisces or is deliberately opened by a surgeon and is culture-positive or not cultured when the patient has at least one of the following signs or symptoms: fever ($>38^{\circ}\text{C}$), or localized pain or tenderness. A culture-negative finding does not meet this criterion.
- an abscess or other evidence of infection involving the deep incision is found on direct examination, during reoperation, or by histopathologic or radiologic examination
- diagnosis of a deep incisional SSI by a surgeon or attending physician.



Definitions

- Superficial Incisional Primary (SIP) – a superficial incisional SSI that is identified in the primary incision in the patient that has had an operation with one or more incisions (e.g., C-section incision or chest incision for CBGB)
- Deep Incisional Primary (DIP) – a deep incisional SSI that is identified in a primary incision in the patient that has had an operation with one or more incisions



Definitions

- Superficial Incisional Secondary (SIS) - a superficial incisional SSI that is identified in the secondary incision in the patient that has had an operation with more than one incision (e.g., donor site [leg] incision for CBGB)
- Deep Incisional Secondary (DIS) - a deep incisional SSI that is identified in the secondary incision in the patient that has had an operation with more than one incision (e.g., donor site [leg] incision for CBGB)



Organ /Space SSI



Infection occurs within 30 days after the operative procedure if no implant is left in place or within one year if implant is in place and the infection appears to be related to the operative procedure

and

infection involves any part of the body, excluding the skin incision, fascia, or muscle layers, that is opened or manipulated during the operative procedure

and

patient has at least one of the following:

- purulent drainage from a drain that is placed through a stab wound into the organ/space
- organisms isolated from an aseptically obtained culture of fluid or tissue in the organ/space
- an abscess or other evidence of infection involving the organ/space that is found on direct examination, during reoperation, or by histopathologic or radiologic examination
- diagnosis of an organ/space SSI by a surgeon or attending physician.



Organ/Space SSI

- Specific sites are assigned to organ/space SSI to further identify the location of the infection
- Example: Report appendectomy with subsequent subdiaphragmatic abscess as an organ/space SSI at the intraabdominal specific site (SSI-IAB)



Specific Sites of an Organ/Space SSI



BONE	Osteomyelitis	JNT	Joint or bursa
BRST	Breast abscess or mastitis	LUNG	Other infections of the respiratory tract
CARD	Myocarditis or pericarditis	MED	Mediastinitis
DISC	Disc space	ORAL	Oral cavity
EAR	Ear, mastoid	OREP	Other reproductive tract
EMET	Endometritis	OUTI	Other urinary tract
ENDO	Endocarditis	SA	Spinal abscess without meningitis
EYE	Eye, other than conjunctivitis	SINU	Sinusitis
GIT	GI tract	UR	Upper respiratory tract
IAB	Intraabdominal, NOS	VASC	Arterial or venous
IC	Intracranial, brain abscess or dura	VCUF	Vaginal cuff



SSI Numerator Data

- Use Surgical Site Infection (SSI) form for each SSI that is identified during the month
- Indicate the specific site of the SSI
 - SIP
 - DIP
 - SIS
 - DIS
 - Organ/Space



Completed SSI Form

NHSN <small>National Healthcare Safety Network</small>		Surgical Site Infection (SSI)		OMB No. 0920-0666 Exp. Date: 09-30-2012
*required for saving		**required for completion		
Facility ID:	Event #:			
*Patient ID: 1131353	Social Security #:			
Secondary ID:				
Patient Name, Last: Green	First: Kelly			
Middle:				
*Gender: F <input type="radio"/> M <input checked="" type="radio"/>	*Date of Birth: 04/13/62			
Ethnicity (Specify):	Race (Specify):			
*Event Type: SSI	*Date of Event: 10/25/09			
*NHSN Procedure Code: COL0	ICD-9-CM Procedure Code:			
*Date of Procedure: 10/12/09	*Outpatient Procedure: Yes <input checked="" type="radio"/> No <input type="radio"/>			
*MDRO Infection Surveillance: <input type="checkbox"/> Yes, this event's pathogen & location are in-plan for the MDRO/CDAD Module <input checked="" type="checkbox"/> No, this event's pathogen & location are not in-plan for the				
MDRO/CDAD Module				
*Date Admitted to Facility: 10/11/09	Location:			
Event Details				
*Specific Event:				
<input type="checkbox"/> Superficial Incisional Primary (SIP)	<input checked="" type="checkbox"/> Deep Incisional Primary (DIP)			
<input type="checkbox"/> Superficial Incisional Secondary (SIS)	<input type="checkbox"/> Deep Incisional Secondary (DIS)			
<input type="checkbox"/> Organ/Space (specify site): _____				
*Specify Criteria Used (check all that apply):				
<u>Signs & Symptoms</u>		<u>Laboratory</u>		
<input type="checkbox"/> Purulent drainage or material	<input checked="" type="checkbox"/> Positive culture			
<input checked="" type="checkbox"/> Pain or tenderness	<input type="checkbox"/> Not cultured			
<input type="checkbox"/> Localized swelling	<input type="checkbox"/> Positive blood culture			
<input type="checkbox"/> Redness				



Pathogen Data

- List up to 3 pathogens for each SSI identified (in rank order of importance)
- For each pathogen, complete information about antimicrobial susceptibilities
- Only certain bug/drug combinations are required, but up to 20 drugs can be listed with susceptibilities



Completed SSI Pathogen Form



Surgical Site Infection (SSI) Form

CMD No. 0920-0906
Exp. Date: 02-29-2008

Page 2 of 2

Pathogen #	Gram-positive Organisms										
	Gram-negative Organisms										
	AMP	DAPTO	LNZ	PENG	VANC						
	ENTEROCOCCUS faecalis	SIRN	SIRN	SIRN	SIRN	SIRN					
	ENTEROCOCCUS faecium	AMP	DAPTO	LNZ	PENG	QUIDAL	VANC				
		SIRN	SIRN	SIRN	SIRN	SIRN	SIRN				
1	Staphylococcus aureus	CLIND	DAPTO	ERYTH	GENT	LNZ	OX	QUIDAL	RIF	TMZ	VANC
		S	R	S	R	S	R	S	R	S	R
Pathogen #	Gram-negative Organisms										
	Acinetobacter spp. (aerob)	AMK	AMPSUL	CEFEP	CEPTAZ	CIPRO	IMI	LEVO	NERO	PIPTAZ	
		SIRN	SIRN	SIRN	SIRN	SIRN	SIRN	SIRN	SIRN	SIRN	SIRN
	Escherichia coli	AMK	CEFEP	CEFOT	CEPTAZ	CEFTX	CIPRO	IMI	LEVO	NERO	
		SIRN	SIRN	SIRN	SIRN	SIRN	SIRN	SIRN	SIRN	SIRN	SIRN
	Salmonella spp. (aerob)	AMK	CEFEP	CEFOT	CEPTAZ	CEFTX	CIPRO	IMI	LEVO	NERO	
		SIRN	SIRN	SIRN	SIRN	SIRN	SIRN	SIRN	SIRN	SIRN	SIRN
	Neisseria meningitidis	AMK	CEFEP	CEFOT	CEPTAZ	CEFTX	CIPRO	IMI	LEVO	NERO	
		SIRN	SIRN	SIRN	SIRN	SIRN	SIRN	SIRN	SIRN	SIRN	SIRN



Completed SSI Data Entry Screen

- Patient**
- Event**
- Add
- Find
- Incomplete
- Procedure**
- Summary Data**
- Import/Export**
- Analysis**
- Surveys**
- Users**
- Facility**
- Group**
- Log Out**

Event 2487143 saved successfully.

Mandatory fields marked with *

Fields required for record completion marked with **

Fields required when in Plan marked with >

[Print P](#)

Patient Information [HELP](#)

Facility ID*: DHQP Memorial Hospital (10000)	Event #: 2487143
Patient ID*: 36912	
Social Security #:	Secondary ID:
Last Name: Green	First Name: Kelly
Middle Name:	
Gender*: M - Male	Date of Birth*: 03/11/1962
Ethnicity: NOHISP - Not Hispanic or Not Latino	
Race: American Indian/Alaska Native	Asian
<input checked="" type="checkbox"/> Black or African American	<input type="checkbox"/> Native Hawaiian/Other Pacific Islander
<input type="checkbox"/> White	

Event Information [HELP](#)

Event Type*: SSI - Surgical Site Infection	Date of Event*: 10/25/2009
NHSN Procedure Code*: COLO - Colon surgery	
ICD-9-CM Code:	Outpatient*: N - No
Procedure Date*: 10/12/2009	Event Linked



Completed SSI Data Entry Screen

Discharge Date:

Pathogens Identified*: Y - Yes N - No If Yes, specify below ->

Pathogens

Pathogen 1: * 10 drugs required

Drug	Result
<input type="text" value="OX - Oxacillin"/>	<input type="text" value="R - Resistant"/>
<input type="text" value="DAPTO - Daptomycin"/>	<input type="text" value="N - Not Tested"/>
<input type="text" value="CLIND - Clindamycin"/>	<input type="text" value="R - Resistant"/>
<input type="text" value="GENT - Gentamicin"/>	<input type="text" value="R - Resistant"/>
<input type="text" value="ERYTH - Erythromycin"/>	<input type="text" value="R - Resistant"/>
<input type="text" value="LNZ - Linezolid"/>	<input type="text" value="N - Not Tested"/>
<input type="text" value="QUIDAL - Quinupristin/dalfopristin"/>	<input type="text" value="N - Not Tested"/>
<input type="text" value="RIF - Rifampin"/>	<input type="text" value="S - Susceptible"/>
<input type="text" value="TMZ - Trimethoprim/sulfamethoxazole"/>	<input type="text" value="S - Susceptible"/>
<input type="text" value="VANC - Vancomycin"/>	<input type="text" value="S - Susceptible"/>

Pathogen 2:



Data Sources for Denominators - Procedures



- Operating room record review - patient medical record
- OR logs
- ICD-9-CM procedure codes



SSI Denominator Data



- Complete a Denominator for Procedure form for each procedure that is selected for surveillance
 - Example: If you are monitoring APPY, complete a Denominator for Procedure form for every patient that has an appendectomy during the month



SSI Denominator Data

- Some operative procedures have more than one incision
 - Example: CBGB in which an incision to harvest a donor vessel is made that is separate from the primary incision
- Record these procedures only one time – there is no separate procedure code for the donor harvest site



Duration

- Record the hours and minutes between the skin incision and skin closure
- Do not record anesthesia time
- If the patient goes to the OR more than once during the same admission and another procedure is performed through the same incision within 24 hours of the original incision, report the combined duration of operation for both procedures



Wound Classification



- **Clean (I)**
 - Uninfected wound, no inflammation; respiratory, alimentary, genital, or uninfected urinary tracts not entered; primarily closed; closed drainage, if needed
- **Clean contaminated (II)**
 - Respiratory, alimentary, genital, or urinary tracts entered under controlled conditions and without unusual contamination; include operations on biliary tract, appendix, vagina, oropharynx



Wound Classification Cont'd.



- **Contaminated (III)**
 - Open, fresh, accidental wounds; major breaks in sterile technique or gross spillage from GI tract; includes incisions into acute, nonpurulent inflamed tissues
- **Dirty / Infected (IV)**
 - Old traumatic wounds with retained devitalized tissue and those that involve existing clinical infection or perforated viscera



ASA* Class



- 1 = Normally healthy patient
- 2 = Patient with mild systemic disease
- 3 = Patient with severe systemic disease that is not incapacitating
- 4 = Patient with an incapacitating systemic disease that is a constant threat to life
- 5 = Moribund patient not expected to survive for 24 hours with or without operation

*American Society of Anesthesiologists



Endoscope

- If the entire operative procedure was performed using an endoscope/ laparoscope, select “Yes”
- Otherwise select “No”
- For CBGB, if the donor vessel was harvested using a laparoscope, select “Yes”



Implant

- A nonhuman-derived implantable foreign body (e.g., prosthetic heart valve, hip prosthesis) that is permanently placed in a patient during an NHSN operative procedure and is not routinely manipulated for diagnostic or therapeutic purposes
- Screws, wires, and mesh that are left in place are considered implants



Non-autologous Transplant

- Transplant: Human cells, tissues, organs, or cellular- or tissue-based products that are placed into a human recipient via grafting, infusion, or transfer. Examples include: heart valves, organs, ligaments, bone, blood vessels, skin, corneas, and bone marrow cells.
 - **Autologous** or “autograft” transplants are products that originate from the patient’s own body.
 - **Non-autologous** or “allograft” transplants are tissues or other products derived from another human body, either a donor cadaver or a live donor.

Some products are a combination of human- and nonhuman-derived materials, such as demineralized human bone matrix with porcine gel carrier. When placed in a patient during an operative procedure, indicate “Yes” for both the Implant and Non-autologous Transplant fields.

Some operative procedures involve placement of both autologous and non-autologous products. For these procedures, indicate “Yes” for Non-autologous Transplant field.



More ...

- **Emergency**
 - Nonelective, unscheduled operative procedure
- **Trauma**
 - Operative procedure performed because of blunt or penetrating injury to patient
- **General anesthesia**
 - Administration of drugs or gases that enter the general circulation and affect the central nervous system to render the patient pain-free, amnesic, unconscious, and often paralyzed with relaxed muscles



Surgeon Code

- Optional field
- Select the code of the surgeon who performed the principal operative procedure



Completed Denominator for Procedure Form

Patient
Event
Procedure
Add
Find
Incomplete
Summary Data
Import/Export
Analysis
Surveys
Users
Facility
Group
Log Out

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

Patient Information [HELP](#)

Facility ID*: DHQP Memorial Hospital (10000)	Procedure #: 2487362
Patient ID*: 36912	
Social Security #:	Secondary ID:
Last Name: Green	First Name: Kelly
Middle Name:	
Gender*: M - Male	Date of Birth*: 03/11/1962
Ethnicity: NOHISP - Not Hispanic or Not Latino	
Race: American Indian/Alaska Native Asian	Native Hawaiian/Other Pacific Islander
<input checked="" type="checkbox"/> Black or African American	
White	

Procedure Information [HELP](#)

NHSN Procedure Code*: COLO - Colon surgery

ICD-9-CM Code: _____

Procedure Date*: 10/12/2009 **Procedure Linked**



Completed Procedure Data Entry Screen

Event

Procedure

- Add
- Find
- Import
- Incomplete

Summary Data

Analysis

Survey

Users

Facility Group

Log Out

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

[Print PDF Form](#)

Patient Information

Facility ID*: DHQP MEMORIAL HOSPITAL (ID 10018) Procedure #: 6237

Patient ID*: 457801

Social Security #: Secondary ID:

Last Name: Jackson First Name: Gerald

Middle Name:

Gender*: M - Male Date of Birth*: 11/06/1945

Procedure Information

NHSN Procedure Code*: CARD - Cardiac surgery

ICD-9-CM Code:

Procedure Date*: 06/08/2006 **Procedure Linked**

Procedure Details



Completed Procedure Data Entry Screen-Cont'd.



Code:

Procedure Date*: 06/08/2006 Procedure Linked

Procedure Details

Outpatient*: Duration (Hrs:Mins)*: :

Wound Class*: General Anesthesia*:

ASA Class*:

Emergency*: Trauma*: Endoscope*:

Surgeon Code: Multiple Procedures*:

Custom Fields

Comments



SSI Rate

$$\text{SSI Rate} = \frac{\text{\# SSI in patients during specified time}^*}{\text{\# operations during specified time}} \times 100$$

* Stratify by:

- Type of NHSN operative procedure
- NNIS basic or modified risk index



NHSN Basic Risk Index

- For each patient that has a specific NHSN procedure, assign a risk index based on the following

Operation > duration cut point	1 point
Wound class III or IV	1 point
ASA score ≥ 3	1 point



Example of Assigning Risk Index Categories

Elements	Pt #1	Pt #2	Pt #3
Operation > duration cut point	Y	N	Y
Wound class	IV	I	II
ASA score	4	1	1
NHSN Risk Index category	3	0	1



Surgical Patient Component SSI Rates by Operation & Risk Index



Table 24. SSI rates* following inpatient coronary artery bypass graft procedure, by risk index category and specific site, PA module, 2006 through 2007

Risk index category Infection site	0		1		2,3	
	No. SSI	Rate	No. SSI	Rate	No. SSI	Rate
Secondary (donor site)						
Superficial incisional	1	0.10	362	0.77	266	1.69
Deep incisional	1	0.10	288	0.61	211	1.34
Primary (chest site)	0	0.00	74	0.16	55	0.35
Superficial incisional	2	0.20	1037	2.19	501	3.19
Deep incisional	1	0.10	451	0.95	197	1.26
Organ/space	1	0.10	315	0.67	162	1.03
Total	0	0.00	271	0.57	142	0.90
Total	3	0.30	1399	2.96	767	4.88

NOTE: Denominators for the risk categories are as follows: category 0 = 1003; category 1 = 47,216; category 2,3 = 15,706.
 CABG, coronary artery bypass graft with primary (chest) and secondary (donor) incisions.
 *Per 100 operations.

NHSN Report 2008; AJIC Jun 37(5) 425



PPP Numerator Data

- Hospital-associated pneumonia that occurs in a post-operative inpatient
- Using the Pneumonia form, indicate the type and date of operative procedure
- Indicate the specific type of pneumonia
 - PNU1 – Clinically defined pneumonia
 - PNU2 – Pneumonia with common bacterial pathogens
 - PNU3 -Pneumonia in immunocompromised patients



PPP Numerator Data

- Indicate presence or absence of ventilator, secondary BSI, death
- Do not conduct post-discharge surveillance, report those detected only during initial hospitalization
- Do not report PPP following outpatient operative procedures



Pathogen Data

- List up to 3 pathogens for each PPP identified (in rank order of importance)
- For each pathogen, complete information about antimicrobial susceptibilities
- Only certain bug/drug combinations are required but up to 20 drugs can be listed with susceptibilities



Completed PNEU Form

*Patient ID: 203768	Social Security #:
Secondary ID:	
Patient Name, Last: Green	First: Kelly
Middle:	
*Gender: <input checked="" type="radio"/> F <input type="radio"/> M	*Date of Birth:
Ethnicity (Specify): f	Race (Specify):
*Event Type: PNEU	*Date of Event: 9/30/09
*Post-procedure PNEU: <input checked="" type="radio"/> Yes <input type="radio"/> No	Date of Procedure: 9/12/09
NHSN Procedure Code:	ICD-9-CM Procedure Code:
*MDRO Infection Surveillance: <input type="checkbox"/> Yes, this event's pathogen & location are in-plan for the MDRO/CDAD Mo <input checked="" type="checkbox"/> No, this event's pathogen & location are not in-plan for the MDRO/CDAD Mo	
*Date Admitted to Facility:	*Location:
Risk Factors	
*Ventilator: <input checked="" type="radio"/> Yes <input type="radio"/> No	Location of Device Insertion: RIJ
	Date of Device Insertion: 9/12/2009
*For NICU only: Birth weight: _____ grams	
Event Details	
*Specific Event: <input checked="" type="checkbox"/> PNU1 <input type="checkbox"/> PNU2 <input type="checkbox"/> PNU3	*Immunocompromised: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
*Specify Criteria Used: (check all that apply)	
<input checked="" type="checkbox"/> X-Ray	
<input checked="" type="checkbox"/> New or progressive and persistent infiltrate <input type="checkbox"/> Consolidation <input type="checkbox"/> Cavitation <input type="checkbox"/> Pneumatoceles (in	

**Department of Health and Human Services
Centers for Disease Control and Prevention**

Add Event

Facility ID: CHCOP Memorial Hospital (D 10000) | Event #: 2518034

Patient ID: 246810 | Find Events for Patient

Social Security #: | Secondary ID: |

Last Name: Green | First Name: Kelly

Middle Name: | Date of Birth: 03/11/1959

Gender: M-Male | Ethnicity: | Race: American Indian/Alaska Native Asian Black or African American Native Hawaiian/Other Pacific Islander White

Event Information

Event: PNEU - Pneumonia | Date of Event: 09/14/2009

Postoperative: Yes

ICD-9-CM Code: | Procedure Date: | Link/Link to Procedure | Event Linked

Location: CTICU - CARDIOTHORACIC CC | Date Submitted to Facility: |

Risk Factors

Ventilator:

Event Details

Specific Event: | Secondary Bloodstream Infection: | Died: | Discharge Date: | Pathogens Identified: | If Yes, specify below ->

Pathogens

Custom Fields: EXTUBATION:

Comments:

Save | Back



Completed PPP Data Entry Screen

Summary Data Analysis Survey Users Facility Group Log Out	Patient Information	
	Facility ID*: DHQP MEMORIAL HOSPITAL (ID 10018)	Event #: 6235
	Patient ID*: 457801	<input type="button" value="Reassign"/> <input type="button" value="Find Events for Patient"/>
	Social Security #:	Secondary ID:
	Last Name: Jackson	First Name: Gerald
	Middle Name:	
	Gender*: M - Male	Date of Birth*: 11/06/1945
	Event Information	
	Event Type*: PNEU - Pneumonia	Date of Event*: 06/12/2006
	Post-procedure>: Y - Yes	
NHSN Procedure Code*: CARD - Cardiac surgery		
ICD-9-CM Code:		
Procedure Date*: 06/08/2006	<input type="button" value="Link to Procedure"/> Event is not Linked	
Location*: SICU - SURGICAL ICU		



Completed PPP Data Entry Screen- Cont'd.

Risk Factors
Ventilator*:

Event Details
Specific Event*:
Secondary Bloodstream Infection*:
Died**:
Discharge Date:
Pathogens Identified*: If Yes, specify below ->

Pathogens
Pathogen 1: *9 drugs required

Drug	Result
<input type="text" value="AMK - Amikacin"/>	<input type="text" value="S - Susceptible"/>
<input type="text" value="CEFTAZ - Ceftazidime"/>	<input type="text" value="S - Susceptible"/>
<input type="text" value="CEFEP - Cefepime"/>	<input type="text" value="S - Susceptible"/>
<input type="text" value="AMPSUL - Ampicillin/sulbactam"/>	<input type="text" value="S - Susceptible"/>
<input type="text" value="CIPRO - Ciprofloxacin"/>	<input type="text" value="S - Susceptible"/>



Completed PPP Data Entry Screen- Cont'd.

MERO - Meropenem	N - Not Tested
LEVO - Levofloxacin	R - Resistant
PIPTAZ - Piperacillin/tazobactam	R - Resistant
<input type="button" value="Add Rows"/>	
Pathogen 2:	
Pathogen 3:	
Custom Fields	
INTUBATION:	06/08/2006 <input type="button" value="LB"/>
INTUBATOR:	PETERS
Comments	
<div style="border: 1px solid black; height: 30px;"></div>	



Non- autologous Transplant Patient Procedure



Department of Health and Human Services
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Logged into DHQP Memorial Hospital (ID 10000) as BLORLA
Facility DHQP Memorial Hospital (ID 10000) is following the PS component.

View Procedure

[Print PDF Form](#)

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

Patient Information [HELP](#)

Facility ID*: DHQP Memorial Hospital (10000) Procedure #: 2517777
 Patient ID*: 246810
 Social Security #*:
 Last Name: Green First Name: Kelly
 Middle Name:
 Gender*: M - Male Date of Birth*: 03/11/1959
 Ethnicity:
 Race: American Indian/Alaska Native Asian
 X Black or African American Native Hawaiian/Other Pacific Islander
 White

Procedure Information [HELP](#)

NHSN Procedure Code*: COLO - Colon surgery
 ICD-9-CM Code:
 Procedure Date*: 09/12/2009 **Procedure is not Linked**

Procedure Details [HELP](#)

Outpatient*: N - No Duration (Hrs: Mins)*: 2 : 5
 Wound Class*: CC - Clean-contaminated General Anesthesia*: Y - Yes
 ASA Class*: 3 - Patient with severe systemic disease not incapacitating
 Emergency*: N - No Trauma*: N - No Endoscope*: N - No
 Surgeon Code: 123 - ~~Bugially-benist-multiple-procedure~~ N - No
 Implant*: N - Non-autologous Transplant*: Y - Yes

Custom Fields [HELP](#)

TIMING OF ANTI: _____

Comments [HELP](#)

Outpatient Surgery Procedure



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Logged into DHQP Memorial Hospital (ID 10000) as GLORIA.
Facility DHQP Memorial Hospital (ID 10000) is following the PS component.

- NHSN Home
- Reporting Plan
- Patient
- Event
- Procedure
 - Add
 - Find
 - Incomplete
- Summary Data
- Import/Export
- Analysis
- Surveys
- Users
- Facility
- Group
- Log Out

View Procedure

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

Patient Information [HELP](#)

Facility ID*: DHQP Memorial Hospital (10000) Procedure #: 2517918
Patient ID*: 24689
Social Security #: Secondary ID:
Last Name: Redd First Name: Wally
Middle Name:
Gender*: M - Male Date of Birth*: 04/13/1946
Ethnicity:
Race: American Indian/Alaska Native Asian
Black or African American Native Hawaiian/Other Pacific Islander
X White

Procedure Information [HELP](#)

NHSN Procedure Code*: COLO - Colon surgery
ICD-9-CM Code:
Procedure Date*: 09/04/2009 Procedure is not Linked

Procedure Details [HELP](#)

Outpatient*: Yes Duration (Hrs:Mins)*: : 50
Wound Class*: CC - Clean-contaminated General Anesthesia*: Y - Yes
ASA Class*: 2 - Patient with mild systemic disease
Emergency*: N - No Trauma*: N - No Endoscope*: Y - Yes
Surgeon Code: 0400 - Beckwith, Jonas Multiple Procedures*: N - No
Implant*: Y - Yes Non-autologous Transplant*: N - No



PPP Rate

$$\text{PPP Rate}^* = \frac{\text{\# PPP identified}}{\text{\# of operative procedures}} \times 100$$

* Stratify by type of NHSN operative procedure



References

- For more information about these topics, refer to the NHSN website
 - *NHSN Manual: Patient Safety Component Protocol* located at
 - <http://www.cdc.gov/nhsn/>
 - Tables of instruction for completing all forms
 - Key terms
 - Operative procedure codes
 - NHSN data collection forms

For more information about these topics, you can visit the NHSN Website.



—<http://www.cdc.gov/nhsn/>