

# Patient Safety Component – Surgical Site Infections (PSC - SSIs)

# How to Add and Analyze Custom Procedure and Events Part 1

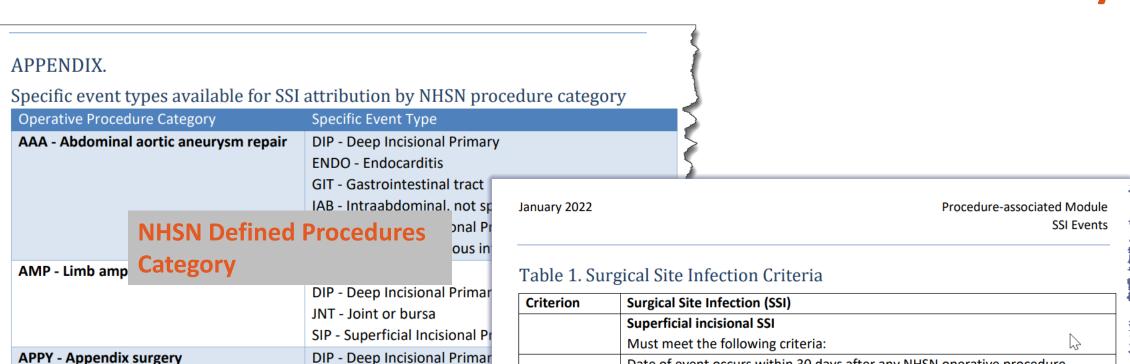
NHSN Acute Care Analytics Team
Division of Healthcare Quality Promotion, CDC

#### **Goals for Today**

- This training will provide an overview of NHSN Custom Reporting
- After the completion of this training, the PS user will be able to:

- Identify what a Custom Procedure is and how it is created
- Identify what a Custom Event is and how it is created

#### **NHSN Defined Procedures and Events – Patient Safety**



GIT - Gastrointestinal tract
IAB - Intraabdominal, not so

Criterion	Surgical Site Infection (SSI)												
	Superficial incisional SSI												
	Must meet the following criteria:												
	Date of event occurs within 30 days after any NHSN operative procedure												
	(where day 1 = the procedure date)												
	NHSN Defined Events												
	involves only sk												
	AND												
	patient has at least <u>one</u> or the rollowing.												
	<ul><li>a. purulent drainage from the superficial incision.</li><li>b. organism(s) identified from an aseptically-obtained specimen</li></ul>												
	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)),												
THE RESERVE AND ADDRESS OF THE PERSON NAMED IN													

#### **NHSN Defined Procedures and Events**



What if your facility wants to report and analyze data for procedures that are not am NHSN defined procedure?

 Answer – Create a custom procedure that fits your reporting needs in NHSN.



#### **Custom Procedure, Events and Fields**

- NHSN custom data tools are surveillance resources that allow a facility to tailor its data collections needs
  - Use of these tools is optional and must be defined by the facility
- The facility should define their own criteria prior to creating custom options

Custom procedure	<ul> <li>Not an NHSN procedure</li> <li>Not included in Monthly Reporting Plan</li> <li>Off-plan reporting</li> </ul>
Custom event	No NHSN Event criteria
Custom field	<ul> <li>Not an NHSN variable</li> <li>May be added to an NHSN defined procedure</li> </ul>
There is not benchmarking availab	le for custom created procedures.

SIRS can not be calculated

# Creating a New Procedure – Radical Cystectomy (RC)

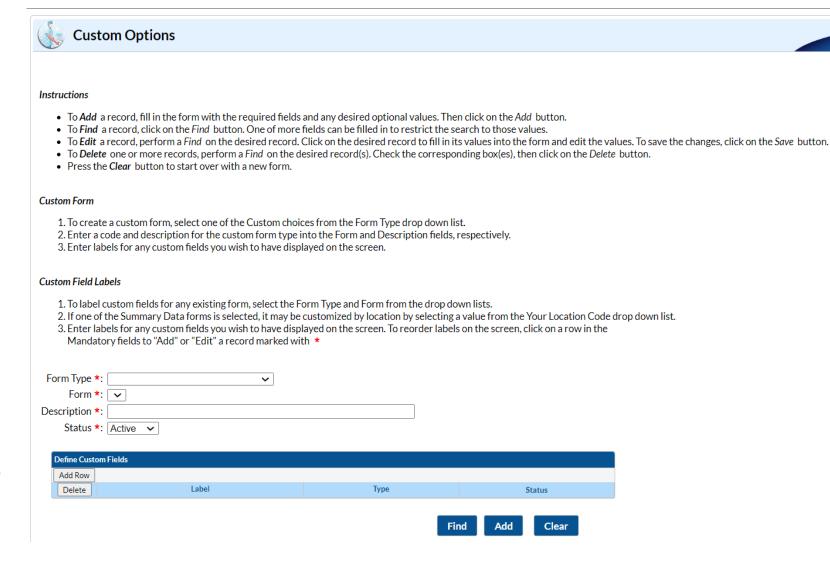
- Cystectomy is a procedure that removes the bladder for treatment of invasive bladder cancer
- An incision is made through the abdomen to remove the bladder and, potentially, other organs and affected tissue
- In 2019 a total of 75,022 new cases of Urinary Bladder cancer were reported, and 16,796 people died of this cancer in the United States<sup>1</sup>
- A 2016 Mayo clinic study of 3,187 patients who underwent RC, indicated 766 were diagnosed with a postoperative infection, including 404 or 12.7% with a surgical site infections (SSI) within 30 days<sup>2</sup>

### **Custom Options Function (PSC)**

 Accessed from the NHSN Facility side menu

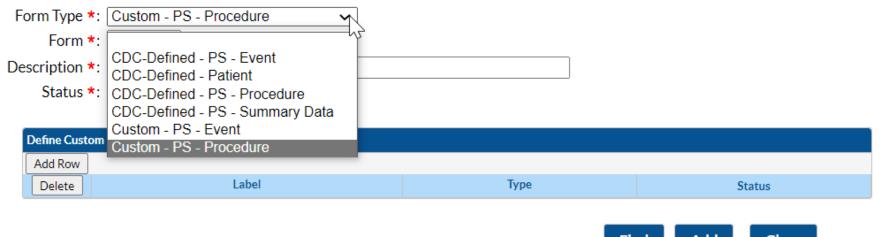
"Facility Customize Forms"

 The page provides instructions and options for new variables, procedures and events that can be added by the user



#### **Selecting the Appropriate Form**

- Selecting form type
  - a) CDC-Defined options are for adding new variables to existing CDC events and Procedures (example: COLO procedure, SSI event)
  - b) Custom indicates you want to create a new procedure category or event type that does not exist in the PSC
  - c) We want to add a <u>"Custom-PS-Procedure"</u> and <u>"CDC-Defined-PS-Event"</u> for this quick learn.





#### **Creating a New Procedure**

- Enter a Form: User defined code to assign your procedure
- 3) Enter a description: Detailed name of the procedure you are creating

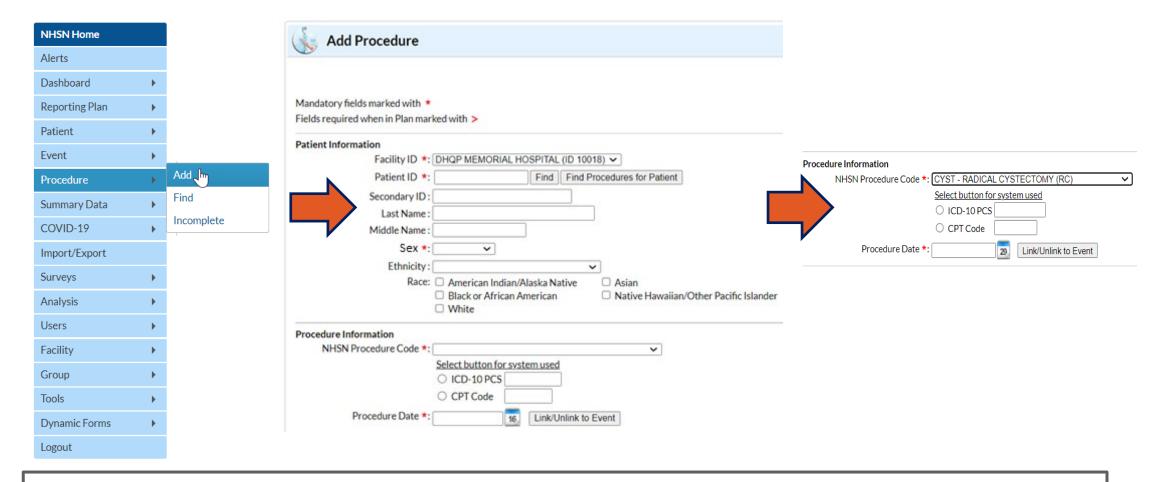
Keep status <u>"Active"</u> for procedures

Form Type \*: Custom - PS - Procedure V Form \*: CYST Description \*: Status \*: Form Type \*: Custom - PS - Procedure Form \*: CYST Description \*: RADICAL CYSTECTOMY (RC) Status \*: Form Type \*: | Custom - PS - Procedure Form \*: CYST Description \*: RADICAL CYSTECTOMY (RC) Status ★: Active ✓ Clear Find

Remember to click to Add Button

### Creating a New Procedure (cont.)

Quality check to see if the new procedure category can be used



Follow the same steps to manually add individual procedure records

https://www.cdc.gov/nhsn/pdfs/training/2022/SSI-Reporting-508.pdf

#### Creating a New SSI Event (PSC)

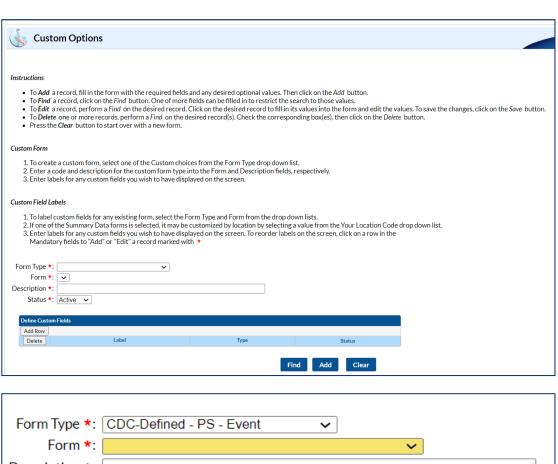
- Similar process as creating a new procedure
  - For events additional details are added to an already existing event form (SSI event)
- For this presentation, a new field will be added to indicate if urine leakage was responsible for an Intra-abdominal infection that can be linked to the newly created procedure Radical Cystectomy (RC)

## **Creating a New SSI Event** (cont.)

Start on the "Customize Forms" page:

- Select the form type for the new field - CDC - Defined-PS -Event
- 2) Assign the existing form for the new field to appear on
- 3) Enter a description that clearly describes the field

Remember to make to event active —

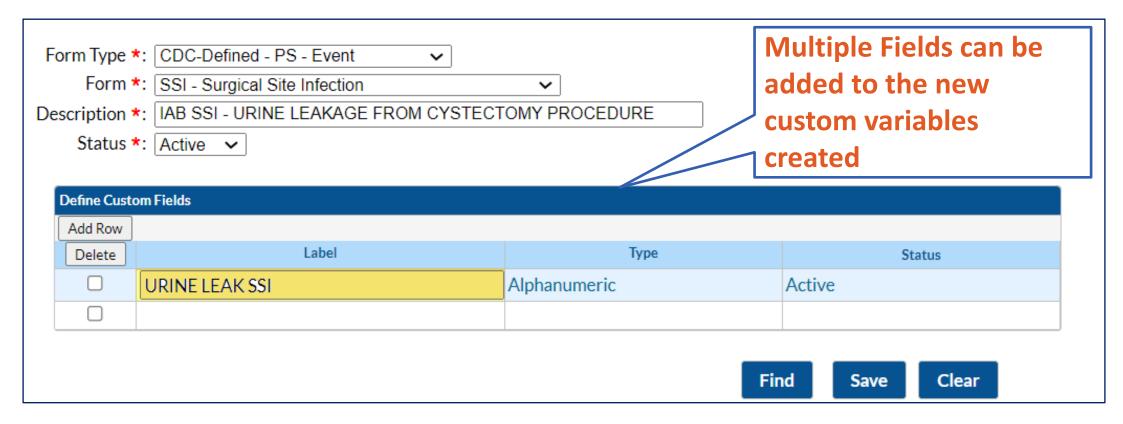


Form Type *:	CDC-Defined - PS - Event
Form *:	<b>▼</b>
Description *:	
Status *:	Active ~

Form Type *:	CDC-Defined - PS - Event
Form *:	SSI - Surgical Site Infection
Description *:	IAB SSI - URINE LEAKAGE FROM CYSTECTOMY PROCEDURE
Status *:	Active ~

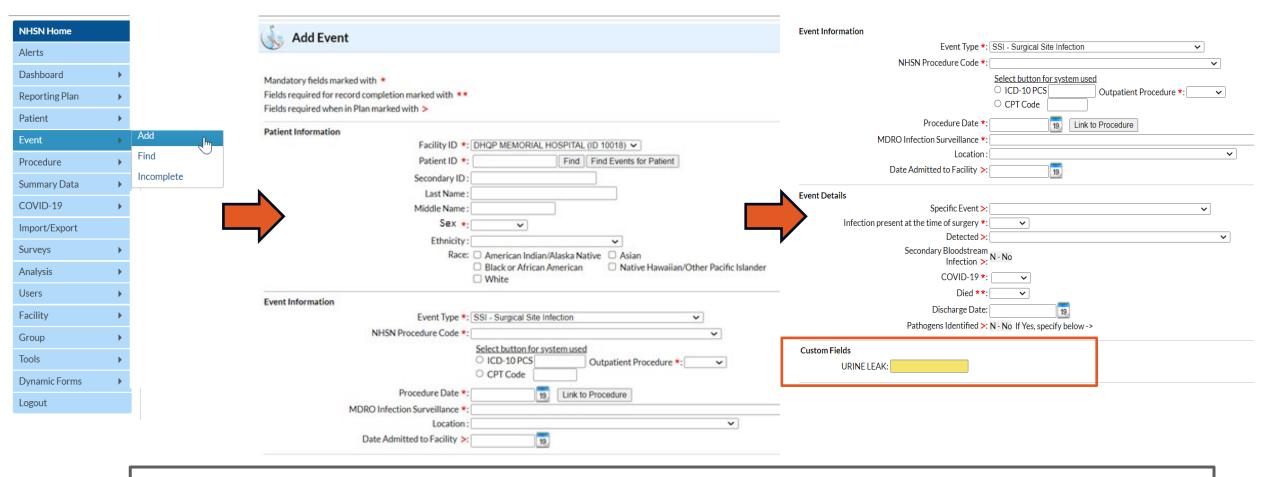
### Creating a New SSI Event (cont.)

- 5) Add a label to the field. This will be the label that appears on the form.
- 6) Select the type of variable (alpha-numeric, numeric, or date)
- 7) Save the newly created field



### Creating a New SSI Event (cont.)

Check to see if the new field is added to the event form



Follow the same steps to manually add individual procedure records

https://www.cdc.gov/nhsn/pdfs/training/2022/SSI-Reporting-508.pdf

#### **Import Custom Procedure File**

- Option to add multiple procedure records at once
- Data must be imported with a header row and the header names must match the variable names as they appear in the template file
- Must be uploaded via .cvs file
- Required fields must be completed in order to upload the file successfully
  - CPT codes are not required for custom procedures, but encouraged

patID	sex	dob	Medicare ID		Proc CPTC	Proc Date	Proc Duration Hr	Proc Duration Min	Sw Class	asa	scope	Surgeon Code	anesthesia	Ht Feet	Ht Inches	Wt English	diabetes	custom1
001534	F	5/24/53	2345671M	CSY		2/15/22	5	37	CC	2	Υ	5698	Υ	5	2	147	N	Υ
004558	M	9/16/43	3456892M	CSY		5/9/22	6	7	CC	2	Υ	7623	Υ	6	0	197	у	Υ

### **Resources for Importing Custom Files**

- Found on the PSC SSI website
  - Instructions on how to import SSI event data (<u>Importing Patient Safet Procedure Data (cdc.gov)</u>)
- Import template file to add procedures to
  - Provides example of how data is entered in a .cvs file format

patID	sex	dob	Medicare ID	100000000000000000000000000000000000000	Proc CPTC	Proc Date	Proc Duration Hr	Proc Duration Min	Sw Class	asa	scope	Surgeon Code	anacinacia	Ht Feet	Ht Inches	Wt English	diabetes	custom1
001534	F	5/24/53	2345671M	CSY		2/15/22	5	37	СС	2	Υ	5698	Υ	5	2	147	N	Υ
004558	M	0/16/43	3456892M	CSY		5/9/22	6	7	00	2	Y	7623		6	0	197		Y.

#### Supporting Materials

NHSN Organism List (All Organisms, Common Commensals, MBI Organisms, and UTI Bacteria) – June 2022 [XLS – 560 KB]

How to Import Patient
Safety Procedure Data,
January 2020

▶ [PDF – 400 KB]

#### References

- 1. U.S. Cancer Statistics Working Group. U.S. Cancer Statistics Data Visualizations Tool, based on 2021 submission data (1999-2019): U.S. Department of Health and Human Services, Centers for Disease Control and Prevention and National Cancer Institute; <a href="https://www.cdc.gov/cancer/dataviz">www.cdc.gov/cancer/dataviz</a>, released in June 2022.
- 2. Parker WP, Tollefson MK, Heins CN, Hanson KT, Habermann EB, Zaid HB, Frank I, Thompson RH, Boorjian SA. Characterization of perioperative infection risk among patients undergoing radical cystectomy: Results from the national surgical quality improvement program. Urol Oncol. 2016 Dec;34(12):532.e13-532.e19. doi: 10.1016/j.urolonc.2016.07.001. Epub 2016 Aug 5. PMID: 27503783.
- 3. Brown KG, Solomon MJ, Latif ER, Koh CE, Vasilaras A, Eisinger D, Sved P. Urological complications after cystectomy as part of pelvic exenteration are higher than that after cystectomy for primary bladder malignancy. J Surg Oncol. 2017 Mar;115(3):307-311. doi: 10.1002/jso.24511. Epub 2016 Nov 18. PMID: 27859276.



#### Thank you for viewing this NHSN Quick Learn Training!

**Additional NHSN training resources:** 

https://www.cdc.gov/nhsn/training/

Training Questions – NHSNTrain@cdc.gov