



Clinical Document Architecture (CDA) Import Function

Division of Healthcare Quality Promotion

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Target Audience

- This training is designed for those who will submit NHSN event records using the NHSN import data function. These users might include an NHSN Facility Administrator or other qualified individuals within the facility.
- The records submitted are provided from the facility's infection control software system.



Objectives

- Identify the steps in submitting records to NHSN via the NHSN Import Data function.
- Demonstrate import for the following events:
 - Bloodstream infection (CLABSI)
 - ICU denominator
 - Surgical Site infection
 - Procedure
- Describe how to link SSI and Procedure records can be linked to form an association between them
- Generate import result reports



Information about the CDA ZIP File



- Before using the NHSN Import Data function, you must generate CDA zip files that contain the event and/or denominator records to be imported.
- In most cases, you can generate this file using an Export function provided by the Infection Control software that you use at your facility.
- For details on generating your CDA zip files, consult your Infection Control software vendor representative.

Access the Import Function

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NHSN - National Healthcare Safety Network (ISD-CLFT-NHSN1)

Logged into DHQP MEMORIAL HOSPITAL (ID 10018) as MALBITZ.
Facility DHQP MEMORIAL HOSPITAL (ID 10018) is following the PS component.

NHSN Patient Safety Component Home Page

Use the Navigation bar on the left to access the features of the application.

Assurance of Confidentiality: The information obtained in this surveillance system that would permit institution is collected with a guarantee that it will be held in strict confidence, will be used only for the otherwise be disclosed or released without the consent of the individual, or the institution in accordance of the Public Health Service Act (42 USC 242b, 242k, and 242m(d)).

NHSN maintenance may occur nightly between 12am and 6am Eastern time.

 [Get Adobe Acrobat Reader for PDF files](#)

In the left navigation panel. Select the Import/Export option.
For NHSN login instructions, please see the Enrollment training slides (slide 49) on the NHSN web site: www.cdc.gov

Import Bloodstream Infections, Procedures or ICU summary event records



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Facility DHQP MEMORIAL HOSPITAL (ID 10018) is following the PS component.

Import/Export Data

Import/Export Type:

- Import Patients
- Import Surgeons
- Import Procedures (comma delimited)
- Import BSI events, Procedures, BSI Summary Data (CDA)
- Import SSI events (CDA)
- Export Data



In the Import/Export drop-down list, select Import BSI Events, Procedure or BSI Data (CDA).

Import Bloodstream Infection, Procedure or ICU summary event records (Continued)



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Import/Export Data

Import/Export Type:

- Import Patients
- Import Surgeons
- Import Procedures (comma delimited)
- Import BSI events, Procedures, BSI Summary Data (CDA) ←
- Import SSI events (CDA)
- Export Data

BSI, Summary and Procedure records can be imported using a single zip file. However, you must import SSI records in a separate zip file after importing the associated Procedure event records.

Import Bloodstream Infection, Procedure or ICU summary event records (Continued)



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Import/Export Data

Import/Export Type:

Import BSI events, Procedures, BSI Summary Data (CDA)

Select Data file



Click the Browse button. Using the browsing window, locate and select the applicable CDA zip file to be imported into NHSN.

Import Bloodstream Infection, Procedure or ICU summary event records (Continued)



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Facility Parkview Hospital (ID 10235) is following the PS component.

Import/Export Data

Import/Export Type:

Import BSI events, Procedures, BSI Summary Data (CDA)

Select Data file



Submit

Back

When the correct CDA sip filename displays in the Selected Data File field, click Submit. The import validation process begins.

Import Bloodstream Infection, Procedure or ICU summary event records (Continued)



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Facility Parkview Hospital (ID 10235) is following the PS component.

Import BSI events, Procedures and/or Summary Data

Records processed

Record Type	# of Records	# Passed
Events	1	1
Summary Data	0	0
Procedures	0	0

Validation results

Events Summary Data Procedures

Event Type	Event Date	Patient ID	Location	Set ID	Status
BSI	06/17/2009	IDT6-BSIC	INSURGCC	2.16.840.1.113883.3.117.1.1.5.2.1.1.6994-31	Ready for Import



Error Report Submit Cancel

- After the import validation process has completed the validation of each CDA file, the system displays the information to you. At this point the records have not been imported into the NHSN application.
- If each record passed the validation rules for import, the Submit button is enabled.
- If any of the records did not pass validation rules, the Error Report button is enabled and the batch cannot be imported into the NHSN database.
- Click the applicable tab to view the records that are ready for import or which records failed validation

Import Bloodstream Infection, Procedure or ICU summary event records



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Logged into Parkview Hospital (ID 10235) as MALBITZ.
Facility Parkview Hospital (ID 10235) is following the PS component.

Import BSI events, Procedures and/or Summary Data

Records processed

Record Type	# of Records	# Passed
Events	1	1
Summary Data	0	0
Procedures	0	0

Validation results

Events Summary Data Procedures

Event Type	Event Date	Patient ID	Location	Set ID	Status
BSI	06/17/2009	IDT6-BSIC	INSURGCC	2.16.840.1.113883.3.117.1.1.5.2.1.1.6994-31	Ready for Import

Error Report

Submit

Cancel

- When the Submit button is enabled, click it. The records are imported into the NHSN database.
- If the Error Report button is enabled, click it. A PDF Error Report is generated that contains a detailed explanation for the failure. Send that PDF report to your Infection Control software vendor representative for resolution.

Import Bloodstream Infection, Procedure or ICU summary event records (Continued)



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Logged into Parkview Hospital (ID 10235) as MALBITZ.
Facility Parkview Hospital (ID 10235) is following the PS component.

Successfully imported all CDA document data (BSI_cda_import_07_16_2009_15_25_29.zip) into the NHSN Database.

[Report](#)

[Back](#)

When the files that have passed validation have been successfully imported and saved in the NHSN database, this message indicating the report was successful displays.

You can generate a report that gives the details of the import process. If desired, click the Report button.

Import Bloodstream Infection, Procedure or ICU summary event records (Continued)

CDA Import Report

FACILITY ID: Parkview Hospital Date of Import: 15/Aug/2009 04:32:45 EDT

Summary:

Event ID	Total # attempted	Total # Imported
Events	1	1
Summary Data	0	0
Procedures	0	0

All records loaded into the NHSN Application database.

ImportDetails - Successful
Line listing for each record imported successfully

Record #	Event Type	Event Date
2.16.840.1.113893.3.117.1.1.5.2.1.1.6994.31	BSI	06/17/2009

ImportDetails - Failed
Line listing for each record loaded and failed the validation

Record #	Event Type	Event Date
No entries are available to display in this section.		

Warnings:
Following file(s) are not valid CDA documents:

Unexpected Errors:

When you click the Error Report or Report button, a file in PDF format is generated and displayed. You can save, print and or email this file.

If the file shows errors, please send this PDF report to your Infection Control software vendor representative for troubleshooting.



Import Surgical Site Infections Event Records and Link Event Records

The following information assumes that you are logged into the NHSN application, have accessed the NHSN Patient Safety Home Page, and have clicked the Import/Export button in the Navigation pane.

Import SSI Events and Link Procedure events



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Logged into DHQP MEMORIAL HOSPITAL (ID 10018) as MALBITZ.
Facility DHQP MEMORIAL HOSPITAL (ID 10018) is following the PS component.

Import/Export Data

Import/Export Type:

- Import Patients
- Import Surgeons
- Import Procedures (comma delimited)
- Import BSI events, Procedures, BSI Summary Data (CDA)
- Import SSI events (CDA)**
- Export Data

Before importing Surgical Site Infection (SSI) event records, ensure that you have imported the associated Procedure events records.
In the Import/Export Type drop-down list, select Import SSI events (CDA).

Import SSI Events and Link Procedure events (continued)

The screenshot shows the NHSN web application interface. At the top, the CDC logo and the text "Department of Health and Human Services Centers for Disease Control and Prevention" are visible. Below this, the NHSN logo and "NHSN - National Healthcare Safety Network (ISD-CLFT-NHSN1)" are displayed. The user is logged in as MALBITZ at DHQP MEMORIAL HOSPITAL. The main content area is titled "Import/Export Data". On the left, there is a navigation menu with options like "NHSN Home", "Reporting Plan", "Patient", "Event", "Procedure", "Summary Data", "Import/Export", "Analysis", "Surveys", "Users", "Facility", "Group", and "Log Out". The "Import/Export" section is active, showing a dropdown menu for "Import/Export Type" with the following options: "Import SSI events (CDA)", "Import Patients", "Import Surgeons", "Import Procedures (comma delimited)", "Import BSI events, Procedures, BSI Summary Data (CDA)", "Import SSI events (CDA)", and "Export Data". Below the dropdown is a file input field with a "Browse..." button. A red arrow points to the "Browse..." button. At the bottom of the form are "Submit" and "Back" buttons.

Browse for the applicable CDA zip file by clicking the Browse button.

Using the browsing window, locate and select the applicable CDA zip file to be imported into NHSN.

Linking the SSI Events and Link Procedure events (continued)



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Facility Parkview Hospital (ID 10235) is following the PS component.

Import SSI events

Records processed

Record Type	# of Records	# Passed
Surgical Site Infections	1	1

Validation results

Event Type	Event Date	Patient ID	Proc Code	Proc Date	Link	Proc ID	Set ID	Status
SSI	08/08/2009	IDT9-SSI36	HYST	07/10/2009		15857	2.16.840.1.113883.3.117.1.1.5.2.1.1.5065-32	Ready for Import

When the correct CDA zip filename displays in the Selected Data File field, click Submit. The import validation process and linking process begins. The importation of an SSI record requires the linkage at the time of importation to its related procedure. Therefore, the procedure record must already be present in the NHSN database. The import process performs a search and matching of the procedure records and presents the user with a candidate procedure record for linkage to the SSI record being imported.

Linking the SSI Events and Link Procedure events (continued)



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Import SSI events

Records processed

Record Type	# of Records	# Passed
Surgical Site Infections	1	1

Validation results

Event Type	Event Date	Patient ID	Proc Code	Proc Date	Link	Proc ID	Set ID	Status
SSI	08/08/2009	IDT9-SSI36	HYST	07/10/2009		15857	2.16.840.1.113883.3.117.1.1.5.2.1.1.5065-32	Ready for Import

Error Report

Submit

Cancel

After the import validation has completed the validation of each record in the zip file, the system searches for and links the matched Procedure event record. At this point the records have not been imported into the NHSN database.

If the event record passed the validation rules for import and is linked correctly, validated records are shown and the Submit button is enabled.

If any of the records did not pass validation or a valid procedure link has not be made for each SSI event record, problem records are shown and the Error Report button is enabled. The batch of records cannot be imported into NHSN database.

Linking the SSI Events and Link Procedure events (continued)



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Import SSI events

Records processed

Record Type	# of Records	# Passed
Surgical Site Infections	1	1

Validation results

Event Type	Event Date	Patient ID	Proc Code	Proc Date	Link	Proc ID	Set ID	Status
SSI	08/08/2009	IDT9-SSI36	HYST	07/10/2009		15857	2.16.840.1.113883.3.117.1.1.5.2.1.1.5065-32	Ready for Import

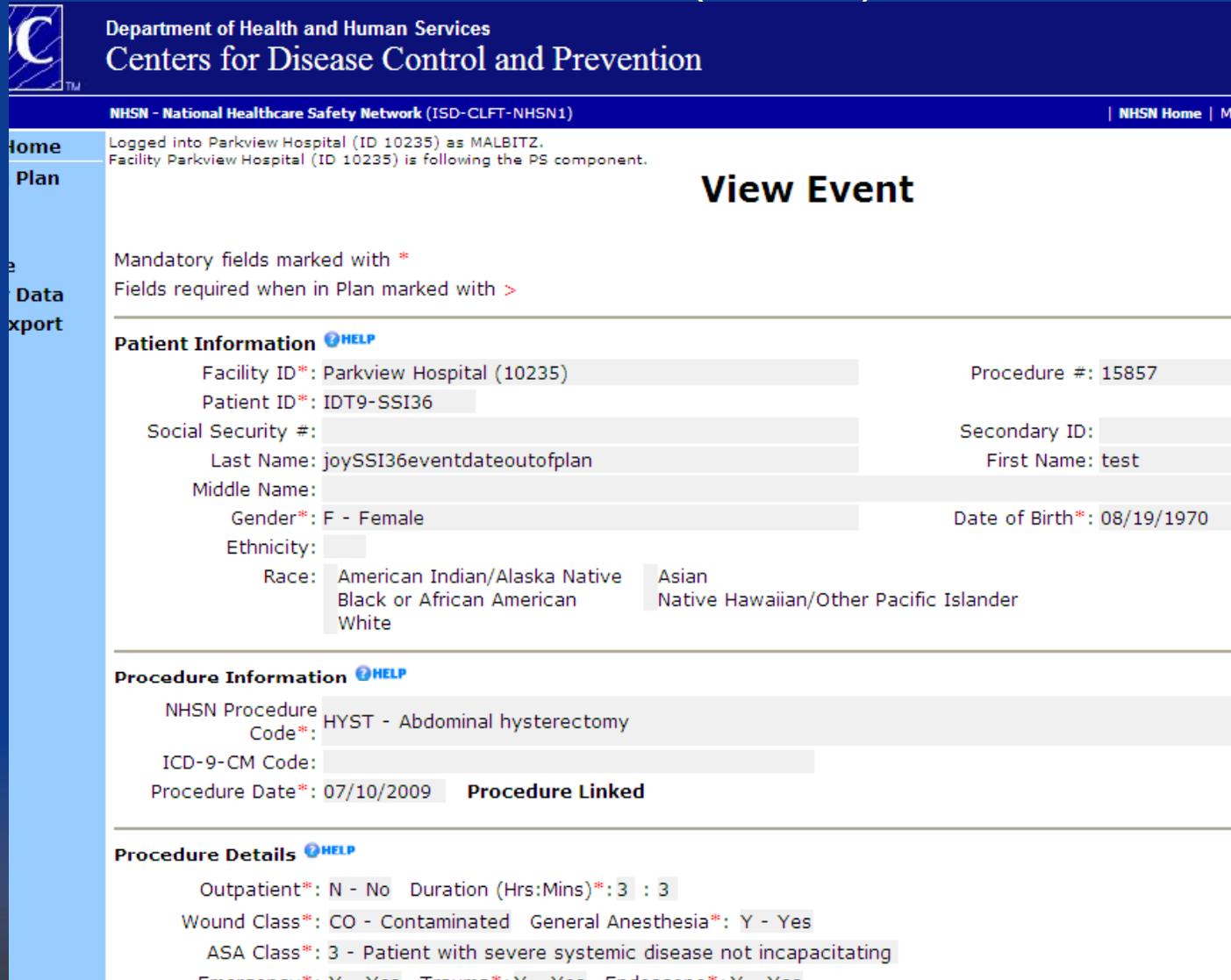
Error Report

Submit

Cancel

Validate the correct record was linked to the procedure by clicking the blue Proc ID link.

Linking the SSI Events and Link Procedure events (continued)



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Logged into Parkview Hospital (ID 10235) as MALBITZ.
Facility Parkview Hospital (ID 10235) is following the PS component.

View Event

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

Patient Information [HELP](#)

Facility ID*:	Parkview Hospital (10235)	Procedure #:	15857
Patient ID*:	IDT9-SSI36		
Social Security #:		Secondary ID:	
Last Name:	joySSI36eventdateoutofplan	First Name:	test
Middle Name:			
Gender*:	F - Female	Date of Birth*:	08/19/1970
Ethnicity:			
Race:	American Indian/Alaska Native Black or African American White	Asian Native Hawaiian/Other Pacific Islander	

Procedure Information [HELP](#)

NHSN Procedure Code*:	HYST - Abdominal hysterectomy
ICD-9-CM Code:	
Procedure Date*:	07/10/2009 Procedure Linked

Procedure Details [HELP](#)

Outpatient*:	N - No	Duration (Hrs:Mins)*:	3 : 3
Wound Class*:	CO - Contaminated	General Anesthesia*:	Y - Yes
ASA Class*:	3 - Patient with severe systemic disease not incapacitating		
Emergency*:	Y - Yes	Trauma*:	Y - Yes
Endoscope*:	Y - Yes		

The Procedure record that is linked to the SSI record displays.

Linking the SSI Events and Link Procedure events (continued)



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Logged into Parkview Hospital (ID 10235) as MALBITZ.
Facility Parkview Hospital (ID 10235) is following the PS component.

Import SSI events

Records processed

Record Type	# of Records	# Passed
Surgical Site Infections	1	1

Validation results

Event Type	Event Date	Patient ID	Proc Code	Proc Date	Link	Proc ID	Set ID	Status
SSI	08/08/2009	IDT9-SSI36	HYST	07/10/2009		15857	2.16.840.1.113883.3.117.1.1.5.2.1.1.5065-32	Ready for Import



When the Submit button is enabled, click it. The SSI records are imported into the NHSN database.

If the Error Report button is enabled, click it. A PDF Error Report is generated that contains a detailed explanation for the failure. Send that PDF report to your Infection Control software vendor representative for resolution.



Things to remember

- Please contact NHTS support at NHTS@cdc.gov for any issues that relate to use of the Import function
- Please contact your infection control software vendor support staff for error messages that appear on the Error Report produced by the import function.
- Each SSI record must be linked to its procedure prior to the acceptance of the SSI batch by NHTS.
- All records imported must fall within a previously entered monthly reporting plan. Therefore, no “out of plan” events are accepted into NHTS via the CDA import function.
- All local location entries must be made in NHTS prior to the first CDA import.