



Florida Department of Health

Bureau of Epidemiology

Guide to Importing Data Into the National Healthcare Safety Network: Initial Setup

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Version 1.1

Version Control

Version 1.0	10/8/10	Original version
Version 1.1	11/17/10	Monthly Plan section to hyperlink to a PDF file

1. Introduction

The purpose of this help document, developed by the Florida Department of Health (FDOH), is to assist facilities with the process of enrolling and setting up their facility in the National Healthcare Safety Network (NHSN). The NHSN is a secure, web-based system maintained by the Centers for Disease Control and Prevention (CDC) into which facilities can report healthcare-associated infections (HAI) for quality improvement purposes and/or for compliance with Centers for Medicare and Medicaid Services (CMS) Hospital Inpatient Quality Reporting Program.

The main focus of this document is on the import process for both the ASCII comma-delimited files and Clinical Document Architecture (CDA) format files. This document will use CDA to refer to an Extensible Markup Language (XML) file that follows the CDA format. This is the required file type for importing data into the NHSN system. After a facility is registered with NHSN they will be able to add users, set up facility locations, and add surgeon information. This document guides the user through all these steps as well as the file import process.

1.1 Audience

The primary target audience for this document is all developers of software systems who want to enable their system to report HAI data to the NHSN and secondarily, Infection Preventionists (IP) who will be working with their software system developers. Since each hospital will vary the responsibility between the two groups differently, the document includes information for both groups.

1.1.1 Schedule of Events

Each IP and software system development group will have to set up a schedule for when and how often data will be added to the NHSN system. Since data can be imported at any time, one facility may decide to import daily, while another facility may decide to only import weekly. When a schedule of events is determined, the IT group can assist in setting up a scheduled job that will create the CDA file so the assigned group can import the file into NHSN.

1.2 List of Files that can be Imported

Currently the NHSN system allows facilities to import data either in the ASCII comma delimited file format or the CDA format. The CDC continues to add new import functionality to the NHSN system, but until import functionality for all the report types is implemented, certain data will have to be entered manually into the NHSN system.

1.2.1 List of ASCII Files

Below is the list of ASCII common delimited file types that can currently be used to upload data into the NHSN database. Each file type will be explained in more detail later within this document.

- Surgeon Codes
- Patient Demographics
- Procedure Data

1.2.2 List of CDA Files

Below is the list of CDA file types that can currently be used to import patient “event” and “procedure data” into the NHSN system.

- BSI events, Procedures, BSI Summary Data – Bloodstream Infections
- SSI events – Surgical Site Infections

1.2.3 List of Future CDA Files coming in January 2011

The NHSN system continues to be updated and improved to allow more data to be imported into the NHSN system. Below is a list of data that should be able to be imported in January 2011.

- CLIP – Central Line Insert Practices
- LIO – Laboratory-Identified Organism Report
- UTI – Urinary Tract Infections

1.3 Other Help Locations

If you need additional details that are not available in this document, there are several help documents you can reference on the CDC website, the FDOH site, and within the NHSN system. A list of some of the other help locations and documents follow.

- For questions concerning this document, please contact June Leverette at HAI_Program@doh.state.fl.us.
- The CDC NHSN website can be accessed at <http://www.cdc.gov/nhsn/index.html>.
- Help documents developed by FDOH are available at http://www.doh.state.fl.us/Disease_ctr/epi/HAI/HAI.html.
- The NHSN Help Manual is also referenced within this document. References include the direct path for the information being detailed. The NHSN Help Manual is available when you log into NHSN. The manual will guide you through definitions, reporting instructions, and capabilities relevant to the NHSN application. From the NHSN home page, you can access the manual by clicking on the Help link located at the top right side of the screen.
- If the help documents do not provide the information you need, you can always contact NHSN by emailing nhsn@cdc.gov or through their web site at <http://www.cdc.gov/nhsn/contact.html>.

2. Enrolling and Initial Set-Up for NHSN

Before a hospital can report their HAI cases through the NHSN system, the facility must be enrolled in the system. The facility must designate someone as the NHSN Facility Administrator (usually the IP) to complete the enrollment process. The NHSN enrollment is a multiple step process that includes reading and accepting the NHSN Rules of Behavior, registering with NHSN, obtaining rights to the system, and submitting a Consent Form. The Consent Form must have two signatures; one from the Facility Administrator and one from someone at the C-suite level. After the facility is successfully registered, the Facility Administrator can complete the set-up process, add other users, and give them rights to edit, read, and/or analyze the facility's data.

2.1 Facility Enrollment

Step one is to get the facility enrolled; this must be done by the Facility Administrator. There are two good resources for the facility enrollment process:

- FDOH site at http://www.doh.state.fl.us/disease_ctrl/epi/HAI/NHSN_Facility_Enrollment.pdf.
- CDC's enrollment guide that provides a step-by-step start-up procedure for enrolling a facility in NHSN at <http://www.cdc.gov/nhsn/PDFs/FacilityAdminEnrollmentGuideCurrent.pdf>.

2.2 Adding Users

After enrolling, step two is adding other users to the facility. (If the Facility Administrator is the only person that will use the NHSN system in your facility, you may skip this step.) Invited users will receive an email from the NHSN with instructions on how to proceed. The email will have directions for the user enrollment.

FDOH has created a quick help document for users that are enrolling and it can be found at one of the following locations:

- FDOH site at http://www.doh.state.fl.us/disease_ctrl/epi/HAI/NHSN_New_User_Enrollment.pdf
- CDC's step-by-step start-up guide for enrolling a facility in NHSN at <http://www.cdc.gov/nhsn/PDFs/FacilityAdminEnrollmentGuideCurrent.pdf>

2.3 Obtaining an Object Identifier (OID)

Step three of the process is only needed if the facility wants to use the CDA Import function within the NHSN system. Facilities that plan to use the CDA Import function must first obtain an Object Identifier (OID) that uniquely identifies the facility within the NHSN system. The OID can only be obtained from the Public Health Information Network (PHIN) Tech helpdesk.

To find out if your facility has already been assigned an OID you will need to log into the NHSN system. From the Navigation menu select the "Facility > Facility Info" and the OID should be displayed in the Object Identifier field.

If your facility has NOT been assigned an OID, the facility must request one by following the steps noted below.

Steps to Request a Facility OID

Step #	Detail
1	Email phintech@cdc.gov with the following subject line and text: Subject Line: OID Request Body of email: Please provide a facility OID for <your facility name here>. Facility Name: Facility Address, city, state and zip
2	You will receive a response via email that will include the OID assigned to your facility.
3	Log into NHSN and enter your OID number.
4	From the left-hand navigation bar, select "Facility".

5	Select "Facility Info" from the menu.
6	Enter the OID into the "object identifier" field that was assigned to your facility by the PHIN Tech helpdesk.

2.4 Completing a Facility Survey

Step four of the process is to give NHSN some vital information about your facility by completing a Facility Survey. The Facility Survey gives information about your facility so that your rates can be risk stratified, where appropriate, and so that your data can be understood in context. The Facility Survey must be completed before you can add locations and must be updated every January with data from the previous calendar year.

The Facility Survey includes questions about your facility characteristics, size, and microbiology laboratory practices. You should make sure you have all of the information you need prior to attempting to complete the survey in the NHSN system, as the NHSN will not allow you to save your work until you have answered all the questions. A blank survey can be printed from http://www.cdc.gov/nhsn/forms/57.103_PSHospSurv_BLANK.pdf. To complete the facility survey, from the left-hand navigation menu bar, expand the "Surveys" link and click on the "Add" link. Answer all the questions and hit the Save button at the bottom of the page.

2.5 Adding Facility Locations

Step five of the process is to add the facility locations in which you plan to conduct HAI surveillance. Each location you add must be mapped to a CDC location so that it can be analyzed with data from similar units in other facilities. Once the locations are added, they will be available in the location drop-down list in the data entry screens.

The CDC uses the 80% Rule for choosing the CDC location type. When there is more than one type of patient in a unit, the Rule states if 80% of the patients in the patient care area are of a certain type, the location should be designated as that type. The list of location types and descriptions can be found in the NHSN Help Manual; from the left-hand navigation menu, select "Patient Safety Component > How To > Locations > CDC Location Labels and Descriptions."

The steps for adding a location are noted below and if more help is needed it can also be found at the following locations.

- CDC help document starting with slide #33:
http://www.cdc.gov/nhsn/PDFs/slides/NHSN_Getting_Started.pdf
- To find a detailed description of each location types use the following link:
http://www.cdc.gov/nhsn/PDFs/pscManual/15LocationsDescriptions_current.pdf

Steps for Adding Facility Locations to the NHSN System

Step #	Detail
1	From the NHSN system left-hand navigation menu bar, expand the "Facility" link and click on the "Locations" link. On the Locations page, enter the information for the fields on the screen.
2	" Your Code " – a shorthand code of your choosing for the location. An example would be CRC to represent the Cardiac Rehabilitation Center. If you are

Step #	Detail
	planning on using the CDA Import function, this code needs to match the code assigned the location in your Admissions, Discharges, and Transfers (ADT) database.
3	“ Your Label ” – can be the same as the code or you can use an expanded name of your choice. An example could be “CRC-1”.
4	<p>“CDC Location Description” – select the location type that most closely resembles your facility location from the drop-down list. Selecting the best location type is important as this step is used by the CDC to put your data into a specific “bucket” for risk-adjusting. In this example, if you select “Cardiac Rehabilitation Center” when outputting your device-associated event rates, they will be compared to data from other facilities also tracking device-associated events in that type of unit. Use the CDC 80% Rule to define the locations.</p> <p>A list of CDC Locations Labels with their descriptions can be found on the NHSN website at http://www.cdc.gov/nhsn/PDFs/pscManual/15LocationsDescriptions_current.pdf</p>
5	“ Status ” – the choices in the drop-down are Active or Inactive and will be defaulted to Active. Do not change this unless the location is closed.
6	“ Bed Size ” – the number of beds within the unit that are set up and staffed.
7	When all fields are entered, click the Add button.
8	A confirmation message that the location was successfully added will be displayed at the top of the screen and the location will be displayed at the bottom of the screen.
9	Repeat the steps to add all the locations for which the facility will be reporting HAI.

2.6 Adding Surgeon Codes

If your facility will be conducting surveillance for SSI using the NHSN and would like to be able to report surgeon specific data, step five is to enter surgeon codes. Add surgeon codes and names either manually or by importing using an ASCII file outlined in [section 2.6.2](#) that follows; both process are defined there. Note that surgeon codes and names are not required in NHSN and the CDC does not use the data, but feedback about SSI rates to surgeons has been shown to be an important component of risk reduction in the surgical population.

If you choose to enter surgeon codes, there are a few things to keep in mind when setting up the “code.”

- A max of 20 characters can be used.
- Numbers and letters can be used.
- The only fields required to enter surgeons are the surgeon code and status.
- The surgeon codes and names will appear in order, based on the surgeon code; an example would be “A200 – Smith, Jay” or “A200” if no names were entered.

2.6.1 Surgeon Codes - Manually Entered

The steps for adding surgeon information manually are noted below or can be found in two other help locations. The other locations are:

- NHSN help manual; from the left-hand navigation menu, select “Patient Safety Component > How To > Surgeons > Add a Surgeon.”

- CDC help document starting with slide #44:
http://www.cdc.gov/nhsn/PDFs/slides/NHSN_Getting_Started.pdf

Steps for Manually Adding Surgeon Information to the NHSN System

Step #	Detail
1	From the NHSN system left-hand navigation menu bar, expand the “Facility” link and click on the “Surgeons” link. On the Surgeons screen, enter the information into the fields.
2	“ Surgeon Code ” – the code used to identify each surgeon. The facility will decide the make-up of the codes. A maximum of 20 alpha-numeric characters can be used.
3	“ Last Name ” – enter the surgeon’s last name if the facility desires. This is not a required field.
4	“ First Name ” – enter the surgeon’s first name if the facility desires. This is not a required field.
5	“ Middle Name ” – enter the surgeon’s middle name if the facility desires. This is not a required field.
6	“ Status ” – the choices in the drop-down are Active or Inactive and will be defaulted to Active. You should not change this unless the surgeon is no longer working at your facility.
7	When fields are entered, click the Add button.
8	A confirmation message that the surgeon was successfully added will be displayed at the top of the screen.
9	After a surgeon has been successfully added, their code and name will appear in the surgeon drop-down list when entering procedures and SSI event data.

2.6.2 Surgeon Codes – Importing Using ASCII

Surgeon data can also be imported into the NHSN system using an ASCII comma-delimited text file. Only users that have been assigned Administrative privileges in the NHSN by the registered Facility Administrator can import surgeon data.

Facilities using the import function must first create the ASCII file formatted as outlined below in the “NHSN Surgeon Import File Format” table and then this file can be imported using the NHSN import function outlined in the “Steps for importing surgeon information to the NHSN system.”

More details on importing surgeon data using a comma-delimited file format can be found in the help locations:

- NSHS Help manual: from the left-hand navigation menu, “Patient Safety Component > How To > Import link > Import Surgeon Data.”
- CDC help document starting with slide #44 with entering surgeon data and 53 with the import process:
http://www.cdc.gov/nhsn/PDFs/slides/NHSN_Getting_Started.pdf

NHSN Surgeon Import File Format

Field	Required/Optional	Values	Format
Surgeon Code	Required		Character Length - 20

Field	Required/Optional	Values	Format
Last name	Optional		Character Length - 30
First name	Optional		Character Length - 20
Middle name	Optional		Character Length - 15

Once the comma-delimited file has been created following the previous steps, the file should be imported into the NHSN system by following the steps below.

Steps for Importing Surgeon Information to the NHSN System

Step #	Detail
1	A comma-delimited file format is: Code, last name, first name, middle name, NOTE: This is a comma-delimited file; if the name is not being included in the file, the “,” placeholders must be included in the file.
2	Save the comma-delimited file where it can be imported into the NHSN system.
3	From the NHSN system left-hand navigation menu bar, expand the “Facility” link and click on the “Surgeons” link.
4	On the Surgeons screen, click the Import Surgeon Codes button.
5	Click the Browse button and location where you saved the surgeons comma-delimited file and select the file to be uploaded.
6	When the file location and name is displayed on the Surgeons screen, click the Submit button to upload the file.
7	A confirmation message appears indicating how many records will be imported. Click the Add button to continue.
8	After the file has been imported, a list of surgeons and codes display on the screen.

3. Reporting Plans – Monthly Plan

The purpose of the Monthly Reporting Plan is to inform CDC which events in which units will be monitored during a given month by the facility. CDC will include the data from the patient safety modules indicated for that facility and month in the aggregated data pool.

A Monthly Reporting Plan must be completed for every month of the year. For months when no data is collected, the facility may still submit a Monthly Reporting Plan and mark the box that says “No NHSN Patient Safety Modules Followed this Month.” Each facility must have a specific Monthly Reporting Plan for a minimum of six months during the year to remain an active participant in NHSN. Facilities can enter events that are not in their Monthly Reporting Plan, but cannot enter summary data (denominator data) for events not in their Plan.

Help additional help is needed for completing a Monthly Plan use one of the following :

- NHSN help site; from the left-hand navigation menu, click on “Patient Safety Component > Patient Safety Monthly Reporting Plan.”
- [Quick Reference for entering a Monthly Plan document.](#)

4. Patient Demographic Data

Patient demographic data can be added “on the fly” when adding an event or can be imported separately using an ASCII comma-delimited text file for the data generated

from an external hospital source such as TheraDoc or Premier/Safety Surveiller. The import function is available primarily for facilities doing Dialysis Event (DE) surveillance. Entering data “on the fly” will most likely be the most efficient course of action for facilities doing any other types of surveillance.

The import file must be in the same order as defined in the following “NHSN Patient Import File Format” table. When the file has been generated, it can then be imported into the NHSN system using the following steps outlined in the “Steps for Importing the Patient(s)’ File into the NHSN System” table.

For more detail about the importation of patient data, on the NHSN help site; from the left-hand navigation menu, select “Patient Safety Component > How To > Import.” There will be a link with detail about each import type.

4.1 Patient Record –Manually Entered

For entering Patient data manually in the NHSN system, please refer to the one of the following help locations:

- NHSN help site link – “Patient Safety Component > General Data Entry Instructions > Patient Information”
- The CDC help site starting with slide #12:
http://www.cdc.gov/nhsn/PDFs/slides/NHSN_trainingDec12DataEntry.pdf

4.2 Patient Record – ASCII Data File Format

Patient demographic data from different external sources such as a hospital information system or other databases can be imported into the NHSN system using an ASCII comma-delimited text file that can then be importing into the NHSN database. If an ASCII file can not be generated from the hospital system, an Excel file with the fields identified below in the NHSN Patient Import File Format table can be created and then saved as an ASCII comma-delimited file, which can then be imported.

Below is the NHSN-defined layout for the patient import file format. This format is required for importing patient information into the NHSN database. The file must be in the exact order described below to eliminate any errors when trying to import the data into the NHSN system. For more help on the file format, use the following help location:

- NHSN help site; from the left-hand navigation menu, select “Patient Safety Component > How To > Import link > Import Patient Data,”

NHSN Patient Import File Format

Field	Required/Optional	Values	Format
Patient ID	Required		Character Length 15
Secondary ID number	Optional		Character Length 25
First name	Optional		Character Length 30
Middle name	Optional		Character Length 15
Last name	Optional		Character Length 30
Date of Birth	Required; must be <= today's date; must be >= 1/1/1890		mm/dd/yyyy

Field	Required/Optional	Values	Format
Birth weight, in grams	Optional		Numeric
Gender	Required	M – Male F – Female	Character Length 1
Social Security Number	Optional		Numeric - Omit the "-"s
Comment	Optional		Character Length 2000
Custom alpha value 1	Optional		Character Length 15
Custom alpha value 2	Optional		Character Length 15
Custom alpha value 3	Optional		Character Length 15
Custom alpha value 4	Optional		Character Length 15
Custom alpha value 5	Optional		Character Length 15
Custom alpha value 6	Optional		Character Length 15
Custom alpha value 7	Optional		Character Length 15
Custom alpha value 8	Optional		Character Length 15
Custom alpha value 9	Optional		Character Length 15
Custom alpha value 10	Optional		Character Length 15
Custom date value 1	Optional		mm/dd/yyyy
Custom date value 2	Optional		mm/dd/yyyy
Custom numeric value 1	Optional		Numeric Length decimal(12,3) 999999999.999
Custom numeric value 2	Optional		Numeric Length decimal(12,3) 999999999.999
Ethnicity	Optional	HISP - Hispanic or Latino NOHISP - Not Hispanic or Not Latino	Character Length 6
Race	Optional	AMIN - American Indian/Alaskan Native ASIAN - Asian AAB - Black or African American NH-PI - Native Hawaiian/Other Pacific Islander WHITE - White	Character Length 5 Multiple race entries possible - separate by "/" (e.g., WHITE/ASIAN)

4.3 Patient Record – Importing Using ASCII File

Once the user has created an ASCII comma-delimited file, they can then import the patient(s) information into the NHSN system using the import function. Each of the patient records in the ASCII file will be checked for data errors, duplication records within the file, and records that already exist in the NHSN system. Note that all errors and duplications must be resolved before ANY of the patient records can be imported into the NHSN database.

Below are the steps for importing patient data into the NHSN database. If more information is needed for the import process, you can also use the following help link:

- NHSN help site; from the left-hand navigation menu, select “Patient Safety Component > How To > Import link > Import Patient Data.”

Steps for importing the Patient(s) file into the NHSN system

Step #	Detail
1	A comma-delimited file formatted as noted above has been created. NOTE: this is a comma-delimited file; if a field is being left blank “,” place holders must be included in the file.
2	Save the comma-delimited file where it can be accessed and imported into the NHSN system.
3	From the NHSN system left-hand navigation menu bar, click “ Import / Export. ”
4	From the drop-down on the Import/Export Data, select the “ Import Patients. ”
5	Click the “ Browse ” button and location where you saved the patient comma-delimited file and select the file to be uploaded.
6	The file location and name will be displayed in the import/export screen; click the Submit button to upload the file.
7	A list of patient records to be imported will be displayed on the Patient Import screen and may have up to four tabs of procedures data: Inserts, Bad Data, Updates, and Duplicate Data. <ul style="list-style-type: none"> a. Inserts: This tab includes all the patient records that have passed the quality acceptance checks. These records can be imported without any additional editing. b. Duplicate Data: This tab is displayed when there are multiple rows in the import file for the same person. All duplicate problems must be addressed before proceeding. Duplicates can be corrected by: <ul style="list-style-type: none"> • Deleting one or both of the rows: or • Selecting one of the duplicate rows and clicking the Transfer selected duplicate records for import button. c. Bad Data: This tab is displayed then there are rows in the file that cannot be imported and must be corrected or deleted before proceeding. Beneath each row, a message will be displayed to assist in fixing each record. Update the record by: <ul style="list-style-type: none"> • Using the “Edit” link, or • Selecting and deleting the row completely. d. Updates: This tab is displayed then a patient record already exists in the NHSN system for a patient you are trying to import. Your import file appears to contain updates for that patient in one or more columns. To address these records, you may <ul style="list-style-type: none"> • Choose to delete the new records from the import; or • Choose one or more columns to be updated in the NHSN record.
8	When all errors and duplicate records have been resolved, click the Update button. You will receive a verification message asking, “Are you sure you want to import

Step #	Detail
	records?" Answer "Yes" to import the records.
9	After the records have been imported, the screen will display a green check mark near the top left of the screen with the message "Data successfully imported."

5. Procedure Data

The NHSN system allows a facility to either manually enter procedure data or to import it into the NHSN system.

5.1 Procedure Data – Manually Entered

For help in manually entering procedure data into NHSN, please refer to the following link for help:

- CDC help document starting with slide #46
http://www.cdc.gov/nhsn/PDFs/slides/NHSN_trainingDec12DataEntry.pdf

5.2 Procedure Data – ASCII Format

If procedure data from different external sources, such as a hospital information system or other database, are extracted in an ASCII comma-delimited text file, the file can be imported into the NHSN system. The ASCII comma-delimited text file must be in the order described below in the "NHSN Procedure Import File Format" table and this file can then be used to import the procedure data into the NHSN system.

You may only import procedures where the procedure date occurs in a month for which a Monthly Reporting Plan exists and the Plan specifies the procedure code in the import file record. Facilities may import files that include procedures that are not in the Monthly Plan by specifying which procedures are to be included during the import process.

Below is the NHSN defined layout for the procedure import file. The file must be in the exact order described below to eliminate any errors when trying to import the data into the NHSN system. For more help you can on the file format the following help locations can also be used:

- CDC help document:
http://www.cdc.gov/nhsn/PDFs/ImportingProcedureData_current.pdf
- NHSN help site; from the NHSN help site, use the navigation menu and click on "Patient Safety Component > How To > Procedures."

NHSN Procedure Import File Format**

Field	Required/Optional	Values	Format
Patient ID	Required		Character Length 15
Gender	Required	M- Male F - Female	Character Length 1
Date of Birth	Required		mm/dd/yyyy
NHSN Procedure Code	Required	See NHSN procedure codes	Character Length 5
Date of Procedure	Required		mm/dd/yyyy
Outpatient	Required	Y - Yes N - No	Character Length 1
		Note: Some procedures may	

Field	Required/Optional	Values	Format
		only be inpatient or outpatient. See NHSN procedure codes below.	
Duration Hours	Required		Numeric Length 2
Duration Minutes	Required		Numeric Length 2
Wound Class	Required	C - Clean CC - Clean Contaminated CO - Contaminated D - Dirty/Infected U - Unknown	Character Length 2
ASA Class	Required	1 - Normally healthy patient 2 - Patient with mild systemic disease 3 - Patient with severe systemic disease, not incapacitating 4 - Patient with incapacitating systemic disease, constant threat to life 5 - Moribund patient < 24 hr. life expectancy	Character Length 1
Endoscope	Required	Y - Yes N - No	Character Length 1
Surgeon Code	Optional for import		Character Length 20
Emergency	Required	Y - Yes N - No	Character Length 1
Empty (formerly Multiple Procedure)	Required	This empty column is considered a placeholder and <u>must</u> be included in the import file.	
General Anesthesia	Required	Y - Yes N - No	Character Length 1
Trauma	Required	Y - Yes N - No	Character Length 1
Spinal Level	Required if procedure code is FUSN or RFUSN	A - Atlas-axis AC - Atlas-axis/Cervical C - Cervical CD - Cervical/Dorsal/Dorsolumbar D - Dorsal/Dorsolumbar L - Lumbar/Lumbosacral N - Not specified	Character Length 2
Type of HPRO	Required if procedure code is HPRO	TP - Total Primary PP - Partial Primary TR - Total Revision PR - Partial Revision	Character Length 2
Type of KPRO	Required if procedure code is KPRO	T - Primary (Total) R - Revision (Total or Partial)	Character Length 1

Field	Required/Optional	Values	Format
Height* in feet	Optional for import; used only when procedure code is CSEC		Numeric Length 2
Height* in inches	Optional for import; used only when procedure code is CSEC		Numeric Length 2
Height *in meters	Optional for import; used only when procedure code is CSEC		Numeric decimal(6,3) 999.999
Weight* in pounds	Optional for import; used only when procedure code is CSEC		Numeric decimal(5,2) 999.99
Weight* in kilograms	Optional for import; used only when procedure code is CSEC		Numeric decimal(5,2) 999.99
Duration of Labor	Optional for import; used only when procedure code is CSEC		Numeric decimal(6,3) 999.999
Estimated Blood Loss	Required if procedure code is CSEC		Numeric Length 9
Diabetes Mellitus	Optional for import; used only when procedure code is FUSN or RFUSN	Y - Yes N - No	Character Length 1
Type of Approach	Required if procedure code is FUSN or RFUSN	A - Anterior P - Posterior B - Anterior and Posterior L - Lateral transverse N - Not specified	Character Length 1
Procedure Comment	Optional for import		Character Length 1000
Custom alpha value 1	Optional for import		Character Length 15
Custom alpha value 2	Optional for import		Character Length 15
Custom alpha value 3	Optional for import		Character Length 15
Custom alpha value 4	Optional for import		Character Length 15
Custom alpha value 5	Optional for import		Character Length 15
Custom alpha value 6	Optional for import		Character Length 15
Custom alpha value 7	Optional for import		Character Length 15
Custom alpha value 8	Optional for import		Character Length 15
Custom alpha value 9	Optional for import		Character Length 15
Custom alpha value 10	Optional for import		Character Length 15
Custom date value 1	Optional for import		mm/dd/yyyy
Custom date value 2	Optional for import		mm/dd/yyyy

Field	Required/Optional	Values	Format
Custom numeric value 1	Optional for import		Numeric Length decimal(12,3) 999999999.999
Custom numeric value 2	Optional for import		Numeric Length decimal(12,3) 999999999.999
Implant	Required for import	Y - Yes N - No	Character Length 1
Non-autologous Transplant	Required for import	Y - Yes N - No	Character Length 1
ICD-9-CM	Optional	ICD-9-CM code must be included in NHSN Operative Procedure Category	Character Length 5 ##.##

* Values for weight and height can be either in pounds and feet/inches or in kilograms and meters.

**For further clarification of each field, please refer to Table 14 in the NHSN User Manual: Patient Safety Component Protocol.

5.2.1 Surgeon Codes – Importing Using ASCII

If a facility hospital system is not able to create an ASCII comma-delimited file for procedures, there is an additional option that can be used by the facility to create this ASCII comma-delimited file. The facility can manually enter their procedure data information into an Excel spreadsheet template that is available on the DOH Website. The Excel file can then be saved as an ASCII comma-delimited file and imported into the NHSN system.

Below are the steps for creating and saving an Excel document as a comma-delimited file.

Create and Convert Excel file to ASCII file

Step #	Detail
1	Open the procedure Excel file. You can use the following file if you have not already generated a procedure Excel document; Procedure NHSN Upload Template .
2	Enter all the required fields for the patient as noted above in the table NHSN Procedure Import File Format .
3	When all the procedures are entered in the worksheet and before you save the file: <ul style="list-style-type: none"> a. Make sure the Excel file only has one worksheet. b. Make sure you know in which folder your Excel file is located. c. Delete the header (i.e., if row 1 has labels in your Excel file, delete row 1).
4	Select “File > Save As” from the main menu.
5	From the “Save As” <ul style="list-style-type: none"> d. Change the “Save as type” drop-down” to CSV (Comma-delimited).” e. Click the Save button.

6	A Microsoft Excel pop-up screen will appear telling you many features are not compatible with CSV. Select Yes on this pop-up.
7	The program will save the CSV file in the same folder as your Excel file. NOTE: This new CVS file must be updated before it can be imported into NHSN as noted in following steps 9 and 10.
8	Open your saved CVS file. NOTE: To open a CVS file, open My Computer , then navigate to where you saved the file and right click on the file name. Then select "Open With > NotePad."
9	If you did not delete the header row from your file, you must delete it now. This will be the first row in the file that contains labels for the columns, rather than actual patient data.
10	You must also delete the last 3 lines from the file, which are all commas.
11	Now save your CSV file. Upload your file into NHSN by following the steps outlined in Section 7.3.

5.3 Procedure Data – Importing Using ASCII File

Facilities that have prepared an ASCII comma-delimited file import file according to the specifications provided by NHSN can then import their procedure data using the import function within the NHSN system.

The steps for importing procedure data into the NHSN system follow. For more detail about the procedure for importing data, use the following links:

- CDC help document:
http://www.cdc.gov/nhsn/PDFs/ImportingProcedureData_current.pdf.
- NHSN Help site: From the left hand Navigation menu click on "Patient Safety Component > How To > Import link > Import Patient Data."

Steps for Importing Procedure Data into NHSN

Step #	Detail
1	On the navigation bar, click on " Import/Export. " Select " Import Procedures (comma-delimited) " as the Import/Export Type.
2	The Import Procedure section of the screen will appear.
3	By default, records in the import file will be accepted under the following conditions: <ol style="list-style-type: none"> The procedure date occurs in a month for which a Monthly Reporting Plan exists, and The Plan specifies the procedure code in the import file record. <p>If you wish to import records for procedures not in the Plan, you must specify which procedures to include. Check the box for each procedure to accept or check "All Procedures" if you want to allow the importation of any procedure. There must still be a Monthly Reporting Plan for the procedure date period in the import file.</p>
4	Next, select the import file. Click " Browse " to search for and select the file to import. Once the file has been selected, click " Submit. "

Step #	Detail
5	As the file is being submitted, you will see a progress bar; it may take a few minutes depending on the size of the file. Once the entire file has been submitted, you will be brought to the Procedure Import screen.
6	<p>The Procedure Import screen may have up to 4 tabs of procedure data: Inserts, Bad Data, Updates, and Duplicate Data.</p> <ol style="list-style-type: none"> Inserts: This tab includes all procedure records that have passed the quality acceptance checks. These records can be imported without any additional editing. Duplicate Data: The tab lists all procedure records in your import file that are considered duplicates. NOTE: You must either select one of the duplicate records to import or delete both records from the import file before proceeding. If you select one of the duplicate records, click "Transfer selected duplicate records for import." Bad Data: This tab lists all procedure records in the import file that cannot be imported for one or more reasons. Beneath each record, details are provided that will assist you in fixing each record. NOTE: to import your file, each record in the Bad Data tab must either be fixed (click "Edit") or deleted. Updates: This tab lists all procedure records that already exist in the NHSN database but have updates in one or more columns. You can choose either to delete the new record, or update one or more columns.
7	<p>Once all desired edits and deletions have been made, you should have only the Inserts and/or Updates tab(s).</p> <ol style="list-style-type: none"> Click the Update button. When all records have been imported, you will see a message confirming the data file has been successfully imported.

6. Steps to Import CDA files

The NHSN system allows facilities to import certain "event" and/or "denominator" records into the NHSN database so manual entry is not required. To use the NHSN Import Data function, the facility must generate CDA zip files that contain the "event" and/or "denominator" records to be imported. In most cases, the files can be generated using an Export function provided by the infection control software that is used at your facility. The CDA files will be discussed below in [section 8](#) this document.

As noted earlier in the document, NHSN only allows import of the BSI and SSI data using the CDA zip file. All other reports must be entered manually through the NHSN screens. The steps for importing the BSI and SSI data into the NHSN database are given below. If additional help is needed, use the following help document:

- NHSN help site: from the NHSN help site, use the navigation menu and click on "Patient Safety Component > How To > Import > How to Import Procedures."

6.1 BSI – Importing Using a CDA File

A central line-associated bloodstream infection (CLABSI) is a primary bloodstream infection (BSI) in a patient that had a central line within the 48-hour period before the development of the BSI. (Note: there is no minimum time period that the central line must be in place to be considered central-line associated.) More information on the case definition for CLABSI can be found at http://www.cdc.gov/nhsn/PDFs/pscManual/4PSC_CLABScurrent.pdf.

The steps for importing the BSI CDA zip file into the NHSN database follow. If additional information is needed, use the following help document:

- CDC Website Training Slidesets, slide #4:
<http://www.cdc.gov/nhsn/PDFs/CDA/CDA%20Import%20Function.pdf>

Steps for Importing the BSI Events, Procedures, and Summary Data

Step #	Detail
1	On the navigation bar, click on " Import/Export. "
2	From the Import/Export Type drop-down list, select the "Import BSI events, Procedures, BSI Summary Data (CDA)". NOTE: The 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.
3	Click the Browse button and locate and select the applicable CDA zip file to be imported into NHSN.
4	When the CDA filename displays in the Selected Data File, click the Submit button. NOTE: The import validation process begins now.
5	The next screen will have three tabs: Events, Summary Data, and Procedures. a. After the import validation process has completed the validation of each CDA file, the system displays the information to you. Records have not been imported into the NHSN application. b. If every record passed the validation rules for import, the Submit button is enabled. c. If any of the records did not pass the validation rules, the Error Report button is enabled and the batch cannot be imported into the NHSN database. d. Click the applicable tab to view the records that are ready for import or the records that failed validation.
6	If the Submit button is enabled, click it to import all the records into the NHSN database.
7	When files have been imported into the NHSN database, a message indicating the imported documents were successfully imported will be displayed. NOTE: You should generate a report that gives the details for the import process by clicking the Report button. Keep this report for your records.
8	If the Error Report button is enabled, click it to generate a PDF Error Report that contains a detailed explanation for the failure.
9	When the Error Report or Report button is clicked, a report summary file in PDF format is generated and displayed on the screen. You can save, print or email this file. NOTE: If an Error Report is generated, you will need to send the PDF report to your infection control software vendor representative for troubleshooting.

6.2 SSI – Importing Using a CDA File

Patients having a selected surgical procedure are monitored for Surgical Site Infection (SSI). If a patient is found to have an SSI, patient demographic information, information about the procedure, information about the SSI, and organisms isolated are reportable in the NHSN system.

The steps for importing the SSI CDA zip file into the NHSN database follow. If additional information is needed, use the following help document:

- CDA Website Training Slidesets, slide #13:
<http://www.cdc.gov/nhsn/PDFs/CDA/CDA%20Import%20Function.pdf>

Steps for Importing the CDA Zip File for SSI Reports

Step #	Detail
1	On the navigation bar, click on " Import/Export. "
2	From the Import/Export Type drop-down list, select the "Import SSI events (CDA)." NOTE: Before importing Surgical Site Infection (SSI), you must import the associated procedure event records.
3	Click the Browse button and locate and select the applicable CDA zip file to be imported into NHSN.
4	When the CDA filename displays in the Selected Data File, click the Submit button. NOTE: The import validation process and linking begins now. The importation of an SSI record requires the linkage at the time of importation to its related procedure. Therefore, the procedure record records must already be present in the NHSN database.
5	The next screen will display whether the SSI records passed or failed the validation processes. <ul style="list-style-type: none"> a. After the import validation process has completed the validation of each record in the zip file, the system searches for and links each SSI record to the matched Procedure event record. At this point, the records have not been imported into the NHSN database. b. When the event records pass the validation rules for import and are linked correctly, validated records are shown and the Submit button is enabled. c. If any of the SSI records did not pass the validation rules or a valid procedure link was not made, the problem records are displayed on the screen and the Error Report button is enabled. The batch of records cannot be imported into the NHSN database. d. If any of the SSI records did not pass the validation rules or a valid procedure link was not made, the problem records are displayed on the screen and the Error Report button is enabled. The batch of records cannot be imported into the NHSN database.
6	For each SSI that was linked, you can verify that the correct record was linked to the procedure by clicking the blue Proc ID link .
7	The Procedure record that is linked to the SSI records will be displayed.
8	If the Submit button is enabled, click it to import all the records into the NHSN database. If any of the SSI records did not pass the validation rules or a valid procedure link was not made, the problem records are displayed on the screen and the Error Report button is enabled. The batch of records cannot be imported into the NHSN database
9	When the file has been imported into the NHSN database a message indicating the imported document was successfully imported will be displayed.

Step #	Detail
	NOTE: You should generate a report that gives the details for the import process by clicking the Report button. Keep this report for your records.
10	If the Error Report button is enabled, click it to generate a PDF Error Report that contains a detailed explanation for the failure.
11	When the Error Report or Report button is clicked, a report summary file in PDF format is generated and displayed on the screen. You can save, print or email this file. NOTE: If an Error Report is generated, send the PDF report to your infection control software vendor representative for troubleshooting.

Things you should remember when importing procedures and events:

- Contact NHSN support at NHSN@cdc.gov for any issues that relate to use of the import function.
- Contact your infection control software vendor support group 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 NHSN. Remember to import procedures before you attempt to import SSI events.
- All records imported must fall within a previously entered monthly reporting plan. No “out-of-plan” events are accepted into NHSN via the CDA import function. Remember to complete your monthly reporting plan before attempting to import any events.
- All facility locations must be defined in NHSN prior to the first CDA import.

7. Export NHSN Data

The NHSN system allows the facility to export their data at any time using the export function within the NHSN system. It is recommended that facilities export their data as part of their monthly routine. Facilities can export as often as they want, but should export at least once each month.

Below are the steps for exporting a facility’s data from the NHSN database. If more help is needed for data export use the following help document:

- NHSN Help site; from the left hand Navigation menu click on “Patient Safety Component > How To > Facility > Export Data.”

7.1 Export Data Steps

The steps for exporting data from the NHSN system are outlined below.

Steps for Exporting NHSN Data

Step #	
1	On the navigation bar, click on " Import/Export. " Select Export Data as the Import/Export Type.
2	On the export screen select "Save as type" and click the Submit button: Choices included: <ul style="list-style-type: none"> • Microsoft Access table (*.mdb) • Microsoft Access 97 table (*.mbd) • Delimited file (comma-separated values) (*.csv) • Delimited file (tab-delimited values) (*.txt)

	<ul style="list-style-type: none"> • Excel spreadsheet (*.xls) • Excel 5.0 or 7.0 (94) spreadsheet (*.xls) • dBASE 5.0, IV, II+, II, and II files (.dbf) • SAS for windows V7/8/9 (*.sas7dbat)
3	<p>Wait as NHSN compiles the file for your exported data. When the file is ready you will see a file download pop-up. You can then either open or save the file.</p> <p><i>Note: All files will be compressed (zip) download files.</i></p>
4	<p>If you do not see the file download pop-up, check your pop-up blocker setting and allow pop-ups from sdn.cdc.gov.</p>
5	<p>If you want to save the file, browse to the location where you want it saved and click Save. When the file is downloaded you will see the Download complete window.</p>

8. Creating the CDA Files

The instructions for how to create the CDA import files for each of the NHSN patient safety components (i.e., BSI, UTI, SSI) will be explained in individual documents that are currently being developed. As these documents are developed they will be added to the Florida Department of Health web site location [National Healthcare Safety Network \(NHSN\) Resources](#).