

# Importing Patient Safety Procedure Data

NHSN recommends using a comma-separated value or CSV file but will also allow importation of procedure data in an ASCII comma delimited text file format. You can generate the import files from different external sources, such as databases or hospital information systems. The default import option allows the importation of 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. If you wish to import records for procedures not in the Plan, you must specify which procedures to include. Custom procedures can also be imported if they are first created on the custom options page.

Please refer to the Procedure Import file specifications, as well as the NHSN Manual, for complete details on the data field requirements and definitions. These documents are available here: <http://www.cdc.gov/nhsn/acute-care-hospital/ssi/index.html>.

## NOTES:

1. Data in the CSV file **must** be imported with a header row, and the header names **must** match the variable names as they appear in the table below. The fields may be imported in any order.
2. The comma delimited text file format defined in the below table requires commas between fields even if no data values exist (e.g., optional or empty fields).
3. If a bilateral procedure is performed, two procedure records are required. Refer to the NHSN Procedure Codes table for a list of procedures that can be bilateral.
4. There should be a unique duration for each bilateral procedure. If only one total time is available for both procedures, estimate the duration for each or split the time evenly between them.
5. For procedures, if Outpatient = Y, then the procedure must be one of those listed in the NHSN Procedure Codes table as an Outpatient Procedure.
6. If you are importing Surgeon Code, all surgeon codes must be set-up in NHSN prior to importing.
7. If you are importing custom fields, all custom fields must be set up in NHSN prior to importing data in these fields.



8. If the optional Procedure Comment field has text that contains commas you must place a double quote at the beginning and end of the string of text (e.g., “with allograft, dowels, plates”).
9. When creating comma delimited files, be careful to exclude non-printable characters as they may cause the data to be improperly imported and result in errors.
10. Data must be entered in all fields marked as “Required” for both in plan and off plan procedure records. Fields marked as “Optional for Import” allow an incomplete record to be imported. **Note that these fields are considered required for completion of an in-plan procedure record and can be completed through manual edit of each record in the NHSN reporting application.**



NHSN Procedure Import File Format\*\*:

Variable	Field	Requirement	Values	Format†
patID	Patient ID	Required		Character length 15
gender	Gender	Required	M – Male F – Female O – Other	Character length 1
dob	Date of birth	Required		mm/dd/yyyy
medicareID	Medicare beneficiary number	Optional		Character length 15
procCode	NHSN procedure code	Required	<b>See NHSN procedure codes</b>	Character length 5
procICD9Code	ICD-9-CM	Optional	ICD-9-CM code must be a valid code as listed in the NHSN Operative Procedure Category list.	Character length 5 ##.##
procICD10Code	ICD-10-PCS	Optional	ICD-10-PCS code must be a valid code as listed in the NHSN Operative Procedures Category list	Character length 7
procICD10supp	ICD-10-PCS Supplemental	Optional	ICD-10-PCS supplemental code must be a valid code as listed in the NHSN Operative Procedures Category list; this code is used to help accurately convey if a KPRO or HPRO procedure is a revision	Character length 7
procCPTCode	CPT	Optional	CPT code must be a valid code as listed in the NHSN Operative Procedures Category list	Character length 5
procDate	Date of procedure	Required		mm/dd/yyyy
outpatient	Outpatient	Required	Y – Yes N – No  Note: Some procedures may only be inpatient. See NHSN procedure codes below.	Character length 1
procDurationHr	Duration hours	Required		Numeric length 2
procDurationMin	Duration minutes	Required		Numeric length 2
swClass	Surgical wound class	Required	C – Clean CC – Clean Contaminated CO – Contaminated D – Dirty/Infected  <i>U – Unknown</i> <i>(“Unknown” is only available for procedures performed in 2013 and earlier)</i>  Note: The following procedure codes can NOT have a “clean” designation for wound class:	Character length 2



Variable	Field	Requirement	Values	Format†
			APPY, BILI, CHOL, COLO, REC, SB, VHYS.	
asa	ASA score	Required if Outpatient = N	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
scope	Scope	Required	Y – Yes N – No	Character length 1  Hint: Starting in 2016 if you are importing an ICD-10 PCS code, if there is a 4 or an 8 in the 5th position of the ICD-10 PCS code, the Scope should be set to Y-Yes
surgeonCode	Surgeon code	Optional		Character length 20
emergency	Emergency	Required	Y – Yes N – No	Character length 1
closure	Closure Technique (for 2014 procedure dates and later)	Optional for Import; required for complete in-plan record.	PRI- Primary OTH- Other than Primary	Character length 3
anesthesia	General anesthesia	Required	Y – Yes N – No	Character length 1
trauma	Trauma	Required	Y – Yes N – No	Character length 1
htFeet	Height* in feet (Used in conjunction with “height in inches”)	Optional for import;  2013 procedures and earlier: used only when procedure code is CSEC  <u>ALL</u> 2014 procedures and later: required for complete in-plan record		Numeric length 2
htInches	Height* in inches	Optional for import;		Numeric length 2 (1-11)



Variable	Field	Requirement	Values	Format†
	(Used in conjunction with "height in feet")	2013 procedures and earlier: used only when procedure code is CSEC  <u>ALL</u> 2014 procedures and later: required for complete in-plan record		
htMetric	Height* in meters	Optional for import;  2013 procedures and earlier: used only when procedure code is CSEC  <u>ALL</u> 2014 procedures and later: required for complete in-plan record		Numeric decimal (6,3) 999.999
wtEnglish	Weight* in pounds	Optional for import;  2013 procedures and earlier: used only when procedure code is CSEC  <u>ALL</u> 2014 procedures and later: required for complete in-plan record		Numeric decimal (5,2) 999.99
wtMetric	Weight* in kilograms	Optional for import;  2013 procedures and earlier: used only when procedure code is CSEC  <u>ALL</u> 2014 procedures and later: required		Numeric decimal (5,2) 999.99



Variable	Field	Requirement	Values	Format†
		for complete in-plan record		
hrLabor	Duration of labor	Required; used only when procedure code is CSEC.  2014 procedures and later: required for complete in-plan record		Numeric length 2
diabetes	Diabetes mellitus	2013 procedures and earlier: required if procedure code is FUSN or RFUSN  2014 procedures and later: required for <u>ALL</u> procedures	Y – Yes N – No	Character length 1
spinalLevel	Spinal level	Required if procedure code is FUSN or RFUSN  Note: RFUSN is only valid for 2015 procedure dates and earlier	A – Atlas-axis AC – Atlas-axis/Cervical C – Cervical CD – Cervical/Dorsal/Dorsolumbar D – Dorsal/Dorsolumbar L – Lumbar/Lumbosacral  <u>N – Not specified</u> ("Not specified" is only available for procedures performed in 2013 and earlier)	Character length 2
approach	Type of approach	Required if procedure code is FUSN or RFUSN  Note: RFUSN is only valid for 2015 procedure dates and earlier	A – Anterior P – Posterior B – Anterior and Posterior  <u>T- Transoral</u> ("Transoral" is only available for procedures performed in 2014 and later)  <u>L – Lateral transverse</u> <u>N – Not specified</u> ("Lateral transverse" and "not specified" are only available for procedures performed in 2013 and earlier)	Character length 1

Variable	Field	Requirement	Values	Format†
hpro	Type of HPRO (for 2013 procedures and earlier)	Required if procedure code is HPRO	TP – Total primary PP – Partial primary TR – Total revision PR – Partial revision	Character length 2
kpro	Type of KPRO (for 2013 procedures and earlier)	Required if KPRO	T – Primary (total) R – Revision (total or partial)	Character length 1
jntRepType	Type of HPRO or KPRO (for 2014 procedure dates and later)	Required if procedure code is HPRO or KPRO	TOT – Total HEMI- Hemi RES- Resurfacing (HPRO only)	Character length 4
jntRepTot	Specific type of Total joint replacement (for 2014 procedure dates and later)	Required if procedure is a total HPRO or total KPRO	TOTPRIM - Total Primary TOTREV - Total Revision  Following value only available for 2015 procedures dates and earlier:  PARTREV - Partial Revision	Character length 8
jntRepHemi	Specific type of Hemi joint replacement (for 2014 procedure dates and later)	Required if procedure is a hemi HPRO or hemi KPRO	PARTPRIM - Partial Primary PARTREV - Partial Revision  Following value only available for 2015 procedures dates and earlier:  TOTREV - Total Revision	Character length 8
jntRepRes	Specific type of Resurfacing joint replacement (HPRO) (for 2014 procedure dates and later)	Required if procedure is resurfacing HPRO	TOTPRIM - Total Primary PARTPRIM - Partial Primary  Following values only available for 2015 procedures dates and earlier:  TOTREV - Total Revision PARTREV - Partial Revision	Character length 8
jntRepPriorInf	Prior infection at index joint, if total or partial revision	Required if procedure is HPRO or KPRO and if total or partial revision	Y – Yes N – No	Character length 1
comment	Comments	Optional		Character length 1000
custom1 – custom50	Custom fields 1-50	Optional		Format and order according to custom field set up and sort order, per procedure code: Alphanumeric field length = 15 character



Variable	Field	Requirement	Values	Format†
				Numeric field length decimal(12,3)  999999999.999

\* Values for weight and height can be either in pounds and feet/inches or in kilograms and meters. We do not recommend using both as the system will automatically convert the other.

\*\*For further clarification of each field, please refer to Chapter 9 (Surgical Site Infection Event) of the NHSN Manual: Patient Safety Component Protocol, available at:  
<https://www.cdc.gov/nhsn/pdfs/pscmanual/9pscscscurrent.pdf>

† The character length for non-date fields represents the *maximum* number of characters allowed, provided the appropriate values are imported according to the NHSN protocols. Values with a shorter character length may be allowed (e.g., the patient ID can be less than 15 characters).





## NHSN Procedure Codes

<u>Code</u>	<u>Operative Procedure</u>	<u>Description</u>	<u>Multiple</u>	<u>Inpatient Procedure</u>	<u>Outpatient Procedure</u>
AAA	Abdominal aortic aneurysm repair	Resection of abdominal aorta with anastomosis or replacement		In	
AMP	Limb amputation	Total or partial amputation or disarticulation of the upper or lower limbs, including digits	4	In	Out
APPY	Appendix surgery	Operation of appendix (not incidental to another procedure)		In	Out
AVSD	Shunt for dialysis	Arteriovenostomy for renal dialysis		In	Out
BILI	Bile duct, liver or pancreatic surgery	Excision of bile ducts or operative procedures on the biliary tract, liver or pancreas (does not include operations only on gallbladder)		In	Out
BRST	Breast surgery	Excision of lesion or tissue of breast including radical, modified, or quadrant resection, lumpectomy, incisional biopsy, or mastoplasty.	2	In	Out
CARD	Cardiac surgery	Procedures on the valves or septum of heart; does not include coronary artery bypass graft, surgery on vessels, heart transplantation, or pacemaker implantation		In	
CEA	Carotid endarterectomy	Carotid endarterectomy on vessels of head and neck (includes carotid artery and jugular vein)	2	In	Out
CBGB	Coronary artery bypass graft with <b>both</b> chest and donor site incisions	Chest procedure to perform direct revascularization of the heart; includes obtaining suitable vein from donor site for grafting.		In	



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CBGC	Coronary artery bypass graft with chest incision only	Chest procedure to perform direct vascularization of the heart using, for example the internal mammary (thoracic) artery		In	
CHOL	Gallbladder surgery	Cholecystectomy and cholecystotomy		In	Out
COLO	Colon surgery	Incision, resection, or anastomosis of the large intestine; includes large-to-small and small-to-large bowel anastomosis; does not include rectal operations		In	Out
CRAN	Craniotomy	Excision repair, or exploration of the brain or meninges;; does not include taps or punctures		In	
CSEC	Cesarean section	Obstetrical delivery by Cesarean section		In	Out
FUSN	Spinal fusion	Immobilization of spinal column	4	In	Out
FX	Open reduction of fracture	Open reduction of fracture or dislocation of long bones with or without internal or external fixation; does not include placement of joint prosthesis	4	In	Out
GAST	Gastric surgery	Incision or excision of stomach; includes subtotal or total gastrectomy; does not include vagotomy and fundoplication		In	Out
HER	Herniorrhaphy	Repair of inguinal, femoral, umbilical, or anterior abdominal wall hernia; does not include repair of diaphragmatic or hiatal hernia or hernias at other body sites.	5	In	Out
HPRO	Hip prosthesis	Arthroplasty of hip	2	In	Out
HTP	Heart transplant	Transplantation of heart		In	
HYST	Abdominal hysterectomy	Abdominal hysterectomy; includes that by laparoscope		In	Out
KPRO	Knee prosthesis	Arthroplasty of knee	2	In	Out

<b>Code</b>	<b>Operative Procedure</b>	<b>Description</b>	<b>Multiple</b>	<b>Inpatient Procedure</b>	<b>Outpatient Procedure</b>
KTP	Kidney transplant	Transplantation of kidney		In	
LAM	Laminectomy	Exploration or decompression of spinal cord through excision or incision into vertebral structures	2	In	Out
LTP	Liver transplant	Transplantation of liver		In	
NECK	Neck surgery	Major excision or incision of the larynx and radical neck dissection; does not include thyroid and parathyroid operations.		In	Out
NEPH	Kidney surgery	Resection or manipulation of the kidney with or without removal of related structures	2	In	Out
OVRY	Ovarian surgery	Operations on ovary and related structures	2	In	Out
PACE	Pacemaker surgery	Insertion, manipulation or replacement of pacemaker		In	Out
PRST	Prostate surgery	Suprapubic, retropubic, radical, or perineal excision of the prostate; does not include transurethral resection of the prostate.		In	Out
PVBY	Peripheral vascular bypass surgery	Bypass operations on peripheral arteries	4	In	Out
REC	Rectal surgery	Operations on rectum		In	Out
RFUSN	Refusion of spine	Refusion of spine	4	In	Out
SB	Small bowel surgery	Incision or resection of the small intestine; does not include small-to-large bowel anastomosis		In	Out
SPLE	Spleen surgery	Resection or manipulation of spleen		In	Out
THOR	Thoracic surgery	Noncardiac, nonvascular thoracic surgery; includes pneumonectomy and or hiatal hernia repair or diaphragmatic hernia repair (except through abdominal approach)		In	Out
THYR	Thyroid and/or parathyroid surgery	Resection or manipulation of thyroid and/or parathyroid		In	Out

<b>Code</b>	<b>Operative Procedure</b>	<b>Description</b>	<b>Multiple</b>	<b>Inpatient Procedure</b>	<b>Outpatient Procedure</b>
VHYS	Vaginal hysterectomy	Vaginal hysterectomy; includes that by laparoscope		In	Out
VSHN	Ventricular shunt	Ventricular shunt operations, including revision and removal of shunt		In	Out
XLAP	Abdominal surgery	Abdominal operations not involving the gastrointestinal tract or biliary system; includes diaphragmatic hernia repair through abdominal approach		In	Out
Custom	Custom procedure		5		

