
Software Requirements Specification



for

Thousand Smiles Digital Charts – Anesthesia Subsystem

Version 0.9.4

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Thousand Smiles Foundation

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Revision History

Name	Date	Reason For Changes	Version
Syd Logan	03/08/2021	Original	0.9
Syd Logan	03/27/2021	Create vaccinations section, update labs based on review/meeting with Dr. Nussbaum.	0.9.1
Syd Logan	04/01/2021	Final review on data with Dr. Nussbaum	0.9.2
Syd Logan	04/24/2021	Complete post-operative section, flesh out user interface (Section 3)	0.9.3
Syd Logan	04/25/2021	Incorporate feedback from Dr. Nussbaum	0.9.4

1. Introduction

1.1 Purpose

The purpose of this document is to outline the basic requirements associated with the Anesthesia portion of the Thousand Smiles Digital Chart. The overall requirements of the system are described in a separate document. This document focuses specifically on Surgery Screening requirements that were gathered via interviews with the primary stakeholders.

The scope of this design is the data and interfaces used to record, view, and edit patient records that record anesthesiology-related data. This data is collected prior to, during, and after surgery. Thus, there are three separate bodies of data collected and stored, and broadly speaking, three separate user interfaces that are considered in this document.

1.2 Document Conventions

There are no specific conventions associated with this document.

1.3 Intended Audience and Reading Suggestions

The intended audience includes:

Thousand Smiles Board Members: Board members should read this document to become familiar with the overall scope of Anesthesiology in the digital charts project. This knowledge may prove helpful as background when evaluating logistics and expenditures associated with the implementation of the system, e.g., equipment purchases.

Implementation Team: This document spells out requirements which guide the implementation of the system. It is not intended to be a design document, rather it spells out the requirements that a design must follow to be considered valid.

Anesthesiologists: This document must be read and approved by the end user(s) of the system, the anesthesiologists. Surgeons and nurses who are involved with the care of the patient and who might need to be involved with its design should read this document, though it is optional. This document will likely go through some number of revisions towards eventual approval. During this phase, the document should be read critically to identify omissions, errors, and changes so that they can be dealt with.

1.4 Product Scope

The anesthesiology portion of the digital chart is intended to provide anesthesiologists and nurses post surgery with the following capabilities:

- Allow the anesthesiologist to record a pre-operative evaluation of the patient. In this document, this is referred to as “pre-operative” data.

- Allow the anesthesiologist to refer to the pre-operative data collected above, and to record data related to anesthesiology during the surgery. In this document, data collected during surgery is referred to as “intra-operative” data.
- Allow nurse(s) to view and edit both the pre-operative and intra-operative anesthesiology data, and record post-operative data.
- Ability for all to view data (pre-, intra-, and post-operative) recorded for a patient at past clinics.
- Eliminate the need for paper charts to the extent possible.

The benefits we hope to realize by digitally recording anesthesia-related data include:

- Increased access to data by other specialists. We aim to make the data recorded by the anesthesiologist and nurses more easily located and viewed by other specialists involved with the care of the child during his or her visit at one of our clinics
- Increased reporting functionality. Migrating to a database-backed chart allows the organization to more readily generate reports; for example, number of children, types and numbers of procedures, incident counting (e.g., number of children seen with a specific condition). This data could be used for various purposes, both clinical and administrative in nature.

1.5 References

This document makes reference to the following documents

- *Software Requirements Specification for Thousand Smiles Digital Charts – Surgery Reports*
https://github.com/slogan621/tscharts/blob/master/docs/requirements/pdf/surgeryapp_requirements_0.9.pdf
- *Standard Official Mexicana NOM-024-SSA3-2010*
https://github.com/slogan621/tscharts/blob/master/docs/nom/NOM-024-SSA3-2012_English.pdf

2. Chart Content

2.1 Overview

There are three points in time, relative to a patient surgery, when anesthesiology-related data is created and/or viewed:

- Pre-surgery
- Intra-surgery
- Post-surgery

2.1.1 Pre-surgery

Prior to a surgery, the anesthesiologist performs a pre-surgery evaluation of the patient. This evaluation collects basic information related to the surgery of relevance to the anesthesiologist. This data is general in nature, including patient name, drug allergies, and the type of surgery to be performed. Refer to Section 2.2 for details on the data collected, and Section 3.2 for user-interface requirements associated with this phase.

2.1.2 Intra-surgery

The intra-surgery phase represents the time that patient is actually in surgery. It is during this phase that most of the data for the patient and the surgery is recorded by the anesthesiologist. Much of this data is temporal in nature, collected at pre-defined intervals during the surgery. As an example, blood pressure is typically collected at 15-minute intervals. During this time, access to the pre-surgery data must be provided. Refer to Section 2.3 for details on the data collected, and Section 3.3 for user-interface requirements associated with this phase.

2.1.3 Post-surgery

Post-surgery, nurses need to be able to access both the pre-surgery and intra-surgery data in order to make informed decisions regarding post-operative care of the patient. Refer to Section 2.4 for details on the data collected, and Section 3.4 for user-interface requirements associated with this phase.

2.2 Pre-surgery Data

This section lists the data items collected during pre-surgery phase by the anesthesiologist. Some of this data will be pre-filled by referring to data already collected for the patient, for example, at registration time.

In the UI, each item should have a checkbox next to it that can be used to identify the item as “significant”. Items where this checkbox is selected will show in the pre-surgical summary section of the Intra-surgery UI.

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Item Name	Data Type	Range, Possible Values	Example	Required	Pre-filled	Comment
Patient Name	String	LAST, Mother last, First, Middle	GOMEZ, Perez, Alicia, Maria	Y	Y	
Date of Birth	Date	DDMMYY YYY	12OCT2020	Y	Y	
ID	Numeric		1015	Y	Y	
Height	Numeric	Centimeters, [0 - 213]	20	Y	Y	
Weight	Numeric	Kilograms [1-180]	4	Y	Y	Whole number rounded to nearest value
Today's Date	Date	DDMMYY YYY	03AUG2022	Y	Y	System clock
Planned Procedures	List/ Enumeration	See Section 2.2.1 for list of procedures.		Y	N	
Surgeons	List of String	Last, First, title		Y	N	M.D., D.O., DMD, DDS
Anesthesiologist	String	Last, First, title		Y	N	M.D., D.O., DMD, DDS
Indications for Surgery	List/ Enumeration	See Section 2.2.1 for list of procedures		Y	N	
PMHx	List/ Enumeration	See Section 2.2.2 for list		Y	Y	Initialized with data from registration medical history. Can be modified. Includes immunizations, COVID-vaccinations which currently we do not collect at registration

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						time.
PSXx	List/ Enumeration	Date, Surgery Type, Notes. See Section 2.2.3 for list of surgery, procedure codes.		Y	Y	Not collected at registration time. Initialized with data collected from previous evaluations.
Anesthetic History	Yes/No questions, text	See Section 2.2.4		Y	Y	Pre-filled with data from previous surgeries recorded in our database.
Medications	Enumeration	FDA Drug database		Y	Y	Collected at registration time, editable (add, remove)
Allergies	Enumeration	FDA Drug database		Y	Y	Collected at registration time, editable (add, remove)
Laboratory and other special studies	Test, Value, OK For surgery	See Section 2.2.5.		Y	Y	
Vital Signs	Name, Value	See Section 2.2.6.		Y	Y	
AW Exam						
MP Class	Numeric	1-4		Y	N	
Prognathia	Boolean	Yes/No		Y	N	
Retrognathic	Boolean	Yes/No		Y	N	
Mandibular distance	Centimeters	2-6		Y	N	
Mouth opening	Centimeters	1-6		Y	N	

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Thick Neck	Boolean	Yes/No		Y	N	
Limited Extension	Boolean	Yes/No		Y	N	
Prominent Dentition	Boolean	Yes/No		Y	N	
Large Tongue	Boolean	Yes/No		Y	N	
Prior or likely difficult airway	Boolean	Yes/No		Y	N	
Cardiac						
Rhythm	Enumeration	Regular, Irregular		Y	N	Choose one
Murmur Grade	Location, grade	See Section 2.2.7		Y	N	
Prominent Apical Impulse	Boolean	True/False		Y	N	
Pulmonary				N	N	Consists of one of more items, each described by Category, Location, Upper or Lower, Anterior or Posterior
Category	Enumeration	Bilateral, Wheezes, Rales, Crackles		Y		
Location	Enumeration	Right/Left		Y		
Upper or Lower	Enumeration	Upper/ Lower		Y		
Anterior or Posterior	Enumeration	Anterior/ Posterior		Y		
Pulses				Y		One or more record, based on location (left, right)
Prominent or	Enumeration	Prominent/		Y	N	

Faint		Faint				
Radial or DP	Enumeration	Radial/DP		Y	N	
Location	Enumeration	Right/Left		Y	N	
IV Access				N	N	One or more records describing potential IV access points
Visibility	Enumeration	Visible, Faint, or Prominent		Y	N	
Location	Enumeration	UE or LE		Y	N	
Anesthetic Plan	Enumeration	GA/MAC		Y	N	Choose one
Details	Enumeration	ETT, LMA, Mask,		Y	N	Choose one or more
Anesthetic Type	Enumeration	Regional or Local		Y	N	Choose one

2.2.1 Planned Procedures and Indications for Surgery

The following is a list of planned procedures and indications for surgery. Except where indicated these are based on ICD billing codes Q37 (see <https://icd.codes/icd10cm/Q37> for details).

- Cleft hard palate with bilateral cleft lip
- Cleft hard palate with unilateral cleft lip
- Cleft soft palate with bilateral cleft lip
- Cleft soft palate with unilateral cleft lip
- Cleft hard and soft palate with bilateral cleft lip
- Cleft hard and soft palate with unilateral cleft lip
- Unspecified cleft palate with bilateral cleft lip
- Unspecified cleft palate with unilateral cleft lip
- Fistula (not Q37)
- Extra-Aveolar Tooth (not Q37)
- Aveolar Defect (not Q37)
- Exam under anesthesia
- Tympanoplasty
- Tubes (not Q37)

2.2.2 PMHx

The idea here is to pre-fill using the medical history obtained at registration. To this, we augment specific items that are of interest to the anesthesiologist.

Here are the items we currently collect outside at registration time. Most of these are yes/no or true/false responses obtained from the patient or the parent(s) at registration.

- cold_cough_fever
- hivaids
- anemia
- asthma
- cancer
- congenitalheartdefect
- congenitalheartdefect_workup
- congenitalheartdefect_planforcare
- diabetes
- epilepsy
- bleeding_problems
- hepatitis
- tuberculosis
- troublespeaking
- troublehearing
- troubleeating
- pregnancy_duration
- pregnancy_smoke
- birth_complications
- pregnancy_complications
- mother_alcohol
- relative_cleft (which relative?, direct blood descendent)
- parents_cleft
- siblings_cleft
- first_crawl
- first_sit
- first_words
- first_walk
- birth_weight
- height
- weight

2.2.3 PSXx/ICD-9-CM Codes

See Appendix A for complete list of the surgery procedure codes. These codes will be located in the database and searchable, similar to the FDA drug database and Dental CDT code databases currently in use by our system. If a particular surgery is not found, the UI will allow for the entry of the item, which will then be inserted into the database and be made available for future searches.

2.2.4 Anesthetic History

The following table describes the Anesthetic History data recorded in the database.

Item Name	Data Type	Range, Possible Values	Example	Required	Default Value
Problem with Prior Anesthetics	Boolean	Yes/No		Y	No
Malignant Hypothermia	Boolean	Yes/No		Y	No
PONV	Boolean	Yes/No		Y	No
PONV Description	Text	0 to 1024 characters		N	""
Motion Sickness	Boolean	Yes/No		Y	No
Motion Sickness Description	Text	0 to 1024 characters		N	""
Transfusion Required	Boolean	Yes/No		Y	No
Transfusion Required Description	Text	0 to 1024 characters		N	""
Other	Boolean	Yes/No		Y	No
Other Description	Text	0 to 1024 characters		N	""

2.2.5 Vaccinations

As far as vaccinations are concerned, we will augment the registration process to query for these. A list of such vaccinations is available here <https://www.cdc.gov/vaccines/schedules/hcp/imz-child-adolescent.html#vaccines-schedule> to which we might add COVID-19 and number of dosages. The

anesthesiologist can then review this information which was obtained at registration, and perhaps modify based on patient/parent interview at time of pre-surgery screening.

Common Name	Name	Trade Name
Diphtheria, tetanus, and acellular pertussis vaccine	DTaP	Daptacel® Infanrix®
Diphtheria, tetanus vaccine	DT	No Trade Name
<i>Haemophilus influenzae</i> type B vaccine	Hib (PRP-T) Hib (PRP-OMP)	ActHIB® Hiberix® PedvaxHIB®
Hepatitis A vaccine	HepA	Havrix® Vaqta®
Hepatitis B vaccine	HepB	Engerix-B® Recombivax HB®
Human papillomavirus vaccine	HPV	Gardasil 9®
Influenza vaccine (inactivated)	IIV	Multiple
Influenza vaccine (live, attenuated)	LAIV4	FluMist® Quadrivalent
Measles, mumps, and rubella vaccine	MMR	M-M-R® II
Meningococcal serogroups A, C, W, Y vaccine	MenACWY-D MenACWY-CRM MenACWY-TT	Menactra® Menveo® MenQuadfi®
Meningococcal serogroup B vaccine	MenB-4C MenB-FHbp	Bexsero® Trumenba®
Pneumococcal 13-valent conjugate vaccine	PCV13	Prevnar 13®
Pneumococcal 23-valent polysaccharide vaccine	PPSV23	Pneumovax® 23
Poliovirus vaccine (inactivated)	IPV	IPOL®
Rotavirus vaccine	RV1 RV5	Rotarix® RotaTeq®
Tetanus, diphtheria, and acellular pertussis vaccine	Tdap	Adacel® Boostrix®
Tetanus and diphtheria vaccine	Td	Tenivac® TDvax™
Varicella vaccine	VAR	Varivax®
DTaP, hepatitis B, and inactivated poliovirus vaccine	DTaP-HepB-IPV	Pediarix®
DTaP, inactivated poliovirus, and <i>Haemophilus influenzae</i> type B vaccine	DTaP-IPV/Hib	Pentacel®
DTaP and inactivated poliovirus vaccine	DTaP-IPV	Kinrix® Quadracel®
DTaP, inactivated poliovirus, <i>Haemophilus influenzae</i> type b, and hepatitis B vaccine	DTaP-IPV-Hib-HepB	Vaxelis®
Measles, mumps, rubella, and varicella vaccines	MMRV	

2.2.6 Laboratory

The following table describes the laboratory data that can be recorded in the database. Items are optional, it is up to the anesthesiologist to decide what data from a lab report to enter. Units should

be specifiable as a preference, for example L vs dL. Internally, the data will be stored in the smallest of these units; the UI will display the covered value based on the selected preference.

Sources:

<https://www.mayoclinic.org/tests-procedures/complete-blood-count/about/pac-20384919>.

Ranges for CMP derived from <https://www.ucsfhealth.org/medical-tests/003468>

https://en.wikipedia.org/wiki/Complete_blood_count

http://www.health.am/encyclopedia/more/chem_20/

Item Name	Data Type	Range, Possible Values	Example	Required	Default Value
CBC					
Hemoglobin	mg/dL	11600 to 17000		Y	Mid-range
White Count	cells/mcL	3,400 to 9,600		Y	Mid-range
COVID-19 Test	Boolean	Positive/ Negative		Y	Negative
Na	Numeric	135 to 145 mEq/L		Y	Mid-range
K	Numeric	3.7 to 5.2 mEq/L		Y	Mid-range
CO2	Numeric	23 to 29 mEq/L		Y	Mid-range
Cl2 (Chloride)	Numeric	96 to 106 mEq/L		Y	Mid-range
Glucose	Numeric	70 to 100 mg/dL		Y	Mid-range
ALT	Numeric	4 to 36 U/L		Y	Mid-range
AST	Numeric	8 to 33 U/L		Y	Mid-range
Ca	Numeric	8.5 to 10.2 mg/dL		Y	Mid-range
Alb	Numeric	3.4 to 5.4 g/dL		Y	Mid-range
ALP	Numeric	44 to 147 U/L		Y	Mid-Range
BUN	Numeric	7 to 20 mg/dl		Y	Mid-Range
Creatine	Numeric	0.8 to 1.4 mg/dl		Y	Mid-Range

Direct bilirubin	Numeric	0.0 to 0.3 mg/dl		Y	Mid-Range
Gamma-GT	Numeric	0-51 U/L		Y	Mid-Range
LDH	Numeric	105 to 333 U/L		Y	Mid-Range
Phosphorus - serum	Numeric	2.4 to 4.1 mg/dl		Y	Mid-Range
Total bilirubin	Numeric	0.2 to 1.9 mg/dl		Y	Mid-Range
Total cholesterol	Numeric	100 to 240 mg/dl		Y	Mid-Range
Total protein	Numeric	Total protein: 6.3 to 7.9 g/dl		Y	Mid-Range
Uric acid	Numeric	4.1 to 8.8 mg/dl		Y	Mid-Range

The following table has units and ranges broken out based on age ranges. The UI should attempt to set a slider and other control range default based on this and the age of the patient as recorded in the EMR. The user shall be provided with a text field to enter in a value that falls out of the provided range, if necessary.

Test	Units	Adult	Pediatric	Neonate
			(4–7 years old)	(0–1 days old)
WBC	$\times 10_9/L$	3.6–10.6	5.0–17.0	9.0–37.0
RBC	$\times 10^{12}/L$	<ul style="list-style-type: none"> M: 4.20–6.00 F: 3.80–5.20 	4.00–5.20	4.10–6.10
HGB	g/L	<ul style="list-style-type: none"> M: 135–180 F: 120–150 	102–152	165–215
HCT	L/L	<ul style="list-style-type: none"> M: 0.40–0.54 F: 0.35–0.49 	0.36–0.46	0.48–0.68
MCV	fL	80–100	78–94	95–125
MCH	pg	26–34	23–31	30–42
MCHC	g/L	320–360	320–360	300–340
RDW	%	11.5–14.5	11.5–14.5	elevated ^[note 6]
PLT	$\times 10_9/L$	150–450	150–450	150–450

Neutrophils	$\times 10^9/L$	1.7–7.5	1.5–11.0	3.7–30.0
Lymphocytes	$\times 10^9/L$	1.0–3.2	1.5–11.1	1.6–14.1
Monocytes	$\times 10^9/L$	0.1–1.3	0.1–1.9	0.1–4.4
Eosinophils	$\times 10^9/L$	0.0–0.3	0.0–0.7	0.0–1.5
Basophils	$\times 10^9/L$	0.0–0.2	0.0–0.3	0.0–0.7

2.2.7 Vital Signs

Item Name	Data Type	Range, Possible Values	Example	Required	Default Value
HR	Numeric	40 - 200		Y	Mid-range
Temperature	Numeric, Celsius	33 - 40		Y	37
Temperature Method	Enumeration	Oral, Rectal, Tympanic		Y	Oral
RR	Numeric	10 – 50		Y	Ped 20, 12 – 16 adult
BP Systolic	Numeric	60 - 200		Y	120
BP Diastolic	Numeric	30 - 120		Y	80
SpO2	Numeric	80 - 100		Y	Mid-range
Weight	Numeric, kg	0 - 180		Y	50

2.2.8 Cardiac Murmur Grades

Total of 4 records, one per location. Example: LSB, 4; Apex 2; Ao 2; PA 3

Item Name	Data Type	Range, Possible Values	Example	Required	Default Value
Murmur Grade	Numeric	1 - 4		Y	
Location	Enumeration	LSB, Apex, Ao, or PA		Y	

2.3 Intra-Surgery Data

The intra-surgery phase follows the pre-operative phase. During this phase, the anesthesiologist uses the tablet to record data gathered during the actual surgery.

There are several types of data recorded during surgery. Some data describes the methods and equipment used, for example the type and location of IV. Other data records the vital signs of the patient, for example heart rate and blood pressure is gathered at fixed intervals.

2.3.1 Preoperative Summary

The tablet will display a preoperative summary of the patient, to include basic information about the patient, the surgery, and highlighting any “significant findings as identified by the anesthesiologist”. The items included in “significant findings” category were selected by the anesthesiologist at the time the pre-surgery data that was collected, see Section 2.2.

Item	Type	Example	Pre-filled	Source	Comment
Name	string	GOMEZ Alberto	Y	Database	Father Last, first
DOB	String, mil format date	12Oct2006	Y	Database	
Patient Number	Number	12345	Y	Database	
NPO	Hours	24	N	Anesthesiologist	Select hours from menu, None, 24, 48
Date	String, mil format date	12Oct2006	Y	System clock	
Allergies	set of strings separated by commas	tylenol, penicillin	Y	Database from registration med history	Latex checkbox NKMA checkbox Reactions - rash, respiratory, anaphylaxi, other [describe] - pre-op, might see during surgery.
Medications	set of strings separated by commas	tylenol, penicillin	Y	Database from registration med history	
PMHx (past medical history)	extracted from preop eval,	A, B, C	Y	Cardiac, diabetes, hypertension,	

	summary of any significant findings			asthma, etc.. (get this from pre-op eval)	
PSHx (past surgical history)	extracted from preop eval, summary of any significant findings				
PAnestHx (past anesthetic history)	extracted from preop eval, summary of any significant findings	3 or 4 items			
Procedures	set of strings separated by commas, plus other and text field	Fistula repair	Y	Comes from pre-operative eval. At end, check what was done.	
Surgeons	set of names separated by commas	Name1, name2, ...			
Anes provider/assistants	set of names separated by commas	Name1, name2, ...			
Antibiotic given @ 'A'	Time of day	06:15 a.m. local, pre-fill, editable.			
Anes start @ 'X'	Time of day	06:15 a.m. local, pre-fill, editable.			
Induction/Intubation @ 'T'	Time of day	06:15 a.m. local, pre-fill, editable.			
Surgical Start @ '!'	Time of day	06:15 a.m. local, pre-fill, editable.			
Surgical End @ '!'	Time of day	06:15 a.m. local, pre-fill, editable.			
Extubation @ 'E'	Time of day	06:15 a.m. local, pre-fill, editable.			

Transport to recovery @ 'T'	Time of day	06:15 a.m. local, pre-fill, editable.			
Anes end @ 'X'	Time of day	06:15 a.m. local, pre-fill, editable.			
Recovery area in @ (before anes end)	Time of day	06:15 a.m. local, pre-fill, editable.			

2.3.2 Pre-Operative Medications

In this section, provide ability to enter, edit, modify any pre-operative medications. These are medications provided at the time of the clinic, which is a different list than the current medications that were obtained by interviewing the patient during registration and/or pre-op eval.

For each such medication, the following table indicates what is recorded.

Name	Format	Comment
Medication	string	Select from FDA DB Control
Dosage	number	Number and type (mg, ml, mcg)
Route	enumeration	PO (mouth), IV, IM (intra-muscular, PR (per-rectum)
Time	hh:mm a.m./p.m.	Local time, pre-filled current, editable

2.3.3 Timeline 1

This area is used to record various data collected during the course of the surgery at some fixed, configurable time interval, typically every 15 minutes. Here we detail the data which is recorded and visualized in this area. For heart rate and blood pressure, see Section XXX.

Item	Range/Values	Comment
O2 liters/min	1-10 in half-liter increments	Set and leave, change a few times, independent of other items below. Applies to all below.
N2O liters/min	1-10 in half-liter increments	
Sevo Des Iso vol%	Isoflurane, Sevoflurane, Desflurane, Halothane Vol % is in range [0 - 10] in .1%	Mutually exclusive (only one used per surgery)

	increments	
Drugs and route	<p><i>Do the below have different units? Or all same?</i></p> <p><i>What is/are the unit(s)? mL?</i></p> <p><i>Is this a cumulative value, e.g., 1, 4, 8, 16?</i></p> <p><i>Or is it a delta from the last recorded value, e.g., 1, 3, 4, 8?</i></p> <p>Answer: Timestamped dosage - show cumulative</p> <p>Infusion continuous administration, e.g.</p> <ul style="list-style-type: none"> - 25mcg per kg per min/hour or mcg min/hour - start, change rate, end controls. 	
Fentanyl	mcg inf	
Propofol inf	mg	
Midazolam	mg	
Dexamethasone	mg	
Glycopyrrolate	mg	
Atropine	mg	
Clonidine inf	mcg	
Dexmetatomadine inf	mcg	
Ephedrine	mg	
Phenylephrine	mcg	
Epinephrine	mcg	
Fluids: NS LR D5LR (Normal Saline, Lactated Ringers, 5% Dextrose Lactated Ringers)	<p>All of these are infusion.</p> <p>What units? mls per hour</p> <p>What ranges of values? 1 - 200 pediatric, 50 - 1000 for adult, select by checkbox</p> <p>Default? 25 pediatric, 100 adult</p>	
LA: lidocaine (1 - 350), bupivacaine (1 - 250), mepivacaine (1 - 300), septocaine (1 - 450) (mg)	Single dosage event, not infusion, show cumulative.	
ECG Rhythm	<p>What are the units here? SR (Sinus Rhythm), ST (Sinus Tachycardia), AF (Atrial Fibrillation)</p> <p>This can change during the surgery.</p>	
SpO2 (%) measurement, may change, plot with time	SpO2 80-100	

EtCO2 (mm of Hg) measurement, may change, plot with time, from start to end. Prompt at start.	5 - 100, default is 30.	
Rep Rate/min typically one value, can change.	RR 6-40	
Ventilation		
Vent [] S (spontaneous), A (assisted), C (controlled)		
TV (m) (Tidal Volume)	ML, 50 - 1000, default 100	
PEEP/PIP (cm of H2O) (checkbox, or default 0 unused)	0 - 10, default 0	
Spontaneous: S	Checkbox	Mutually exclusive, inflection point
Assisted: A	Checkbox	
Controlled: C	Checkbox	
Temp C F Site:	Oral, Rectal, Tympanic Default C. 37.	

2.3.4 Monitors

The following data records the type of monitors used during the surgery.

CheckBox	Type	Default	Comment
ECG	Boolean	False	
NIBP	Boolean	False	
Pulse Ox	Boolean	False	
Capnograph	Boolean	False	
Precordial Stethoscope	Boolean	False	
Temperature	Boolean	False	
Nerve Stimulator	Boolean	False	

2.3.5 IV

This section records data about IV – location, side and difficulty. Not mutually exclusive, there can be multiple IVs during surgery.

Name	Type/Range	Comment
Location	Enumeration: Hand, Wrist, Arm, ACF, Saph, Foot	
Side	Right, left, both	
Difficult	Boolean	

2.3.6 Fluid Totals

In this section, we display the cumulative fluid totals, as well as record EBL and Urine. Values are added on timeline as increments, here we show totals.

Name	Type/Range	Input or Output	Comment
Total	mls, 5 to 1000	Input	Automatically updated as other fluids recorded during surgery e.g., IV
EBL	mls, 5 to 100	Output	Estimated blood loss
Urine	mls, 5 to 100	Output	

2.3.7 Airway

Item	Values/Ranges
Nasal Cannula	Boolean
Mask	Boolean
Airway Needed?	Boolean
Ventilation Easy [] Difficult []	Enumeration Easy Difficult
Oral	Boolean
ETT	Boolean
Nasal	Enumeration Left Right Both None
Mouth Size	3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7, 7.5
Mouth Measurement @ cm	7 – 25 cm
Cuff	Boolean
Air	Boolean
LMA Size	1.5, 2, 2.5, 3, 4, 5
LMA Flex	Boolean
Laryngoscope blade: #	miller: 1, 1.5, 2, 3 mac: 1, 1.5, 2, 3, 4
Grade	I. II. III. IV
Blind	Boolean

Fiberoptic	Boolean
Magill	Boolean
Difficult	Boolean
Attempts	1, 2, 3, 4

2.3.8 Extubation

Field	Type	Comment
Extubation	Enumeration Asleep, Awake, N/A	

2.4 Post Surgery Data

2.4.1 Vital Signs

Vital signs consist of a set of time, name, and value tuples. For each type, the time recorded is HH:MM:SS UTC, and the vital sign and corresponding value are as defined in section 2.2.7.

2.4.2 Notes

Free form recovery notes are recorded for the patient. In addition, a boolean “Report given to recover personnel” is recorded, per-surgery.

2.4.3 Discharge Summary

The discharge summary consists of the following data.

Item	Type	Default Value
Awake, responsive and oriented	Boolean	False
Minimal/No PONV	Boolean	False
Instructions discussed: escort patient	Boolean	False
Received written post op instructions	Boolean	False
Heart Rate and BP WNL	Boolean	False
SpO2 > 94 or at pre-op value	Boolean	False
Post op pain controlled	Boolean	False

All questions answered prior to discharge	Boolean	False
Patient discharged from recovery area or PACU, Post Anesthetic Recovery Unit	Boolean	False
Discharged in care of name	String	“”

3. User Interface Requirements

3.1 Organization

This section describes the general organization of the Anesthesiology user interface.

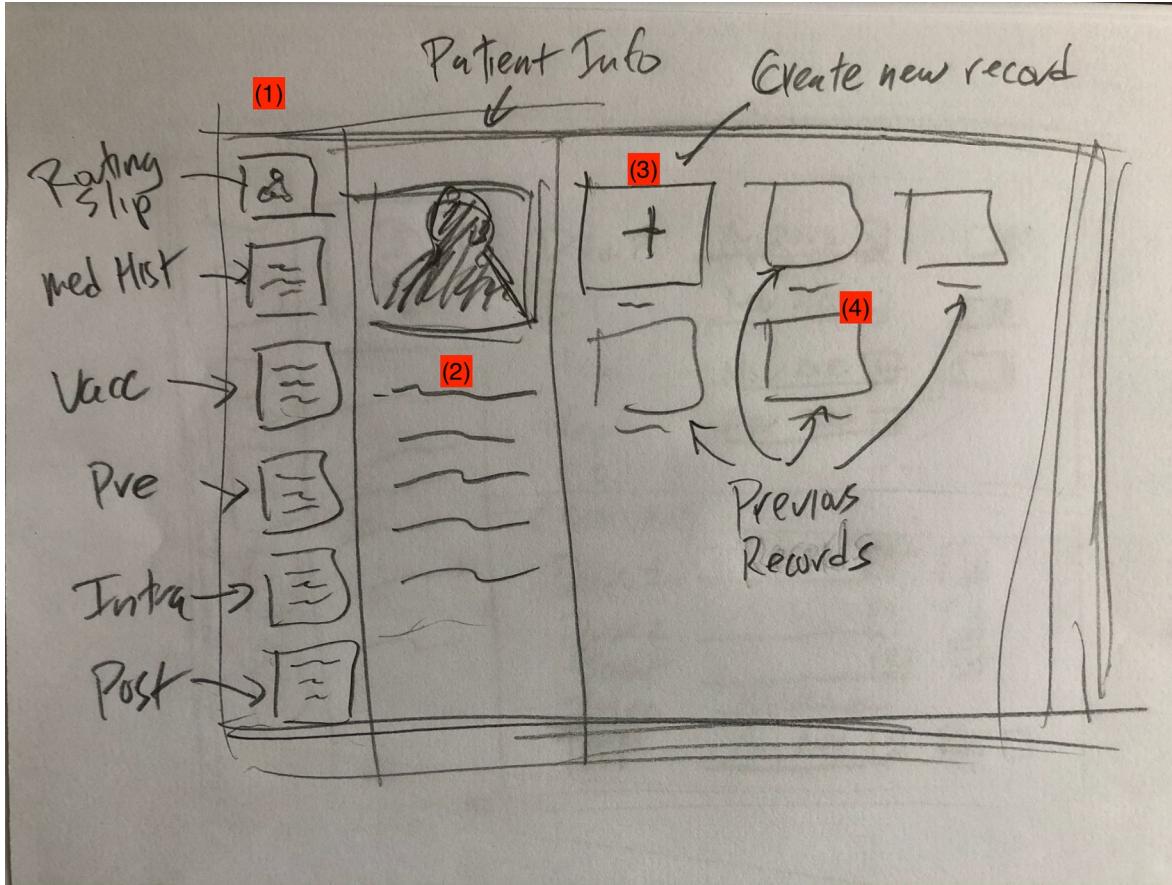


Figure 3.1.1 Main Anesthesiology Panel

Figure 3.1.1 illustrates the layout of the Anesthesiology panel. (1) provides access to the various portions of the chart relevant to the anesthesiologist. Clicking on these will take you to a panel where you can create a new record (3) or edit and view a record from a previous clinic for this patient (4). The record types correspond to the item selected in (1). For example, if Pre-op is selected in area (1), then (3) will let you create a pre-op record, and (4) will allow you to view or edit pre-op records from earlier clinics. A button (not shown) in the lower portion of the screen will allow you to checkout the patient. Area (2) contains the patient headshot and basic demographic info (name, DOB, etc..)

3.2 Vaccinations

In this section, we describe the vaccination user interface. Like medical history, vaccination information is collected from the patient at the time of registration. The anesthesiologist can refer to this data, and, if necessary modify it.

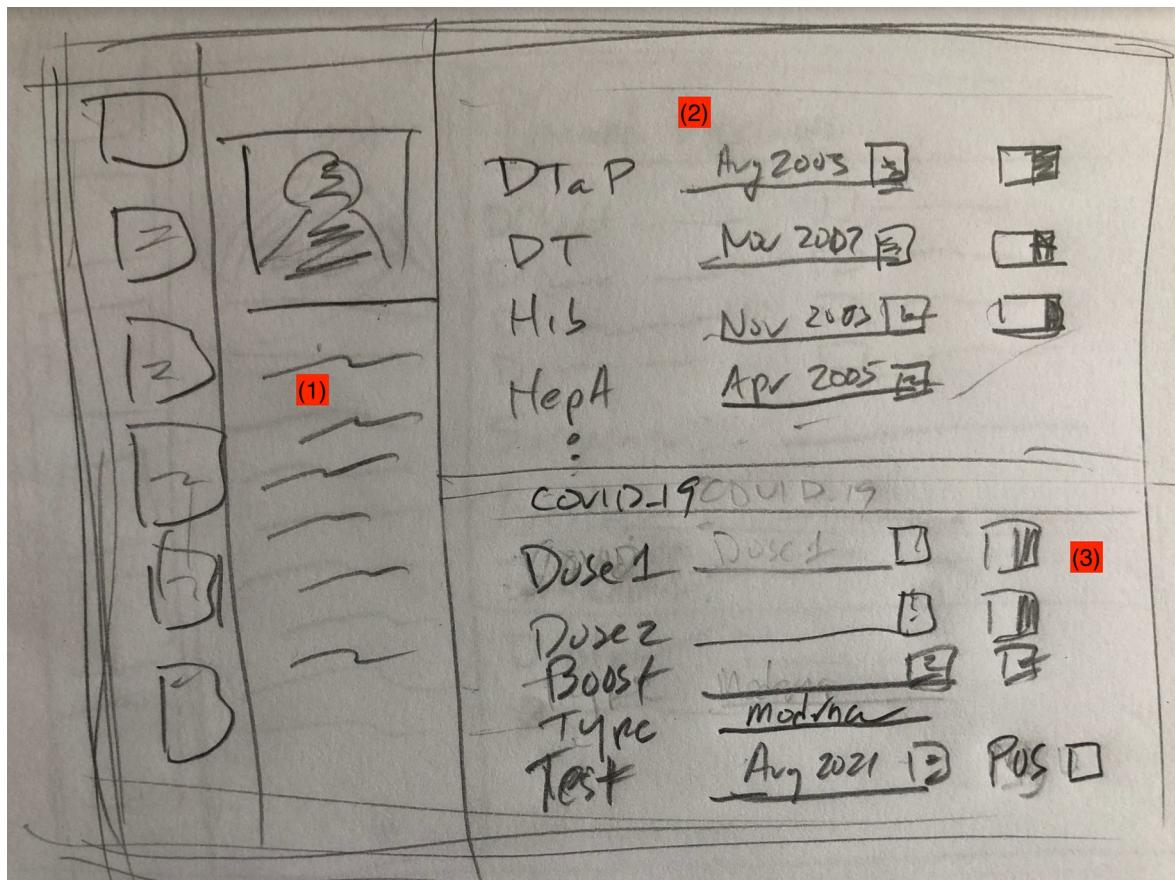


Figure 3.2.1 Vaccinations Page

The vaccinations page is identical to the vaccinations page in the registration application. Here, you can review and modify the vaccinations recorded at registration. Most vaccinations are depicted as shown in area (2), recording the month and year of the vaccination, with a radio button used to indicate if the vaccination was given or not. A special area (3) is used to record vaccination history for COVID-19, as well as date and result of the most recently administered COVID-19 test, if any.

3.3 Pre-Operative Summary

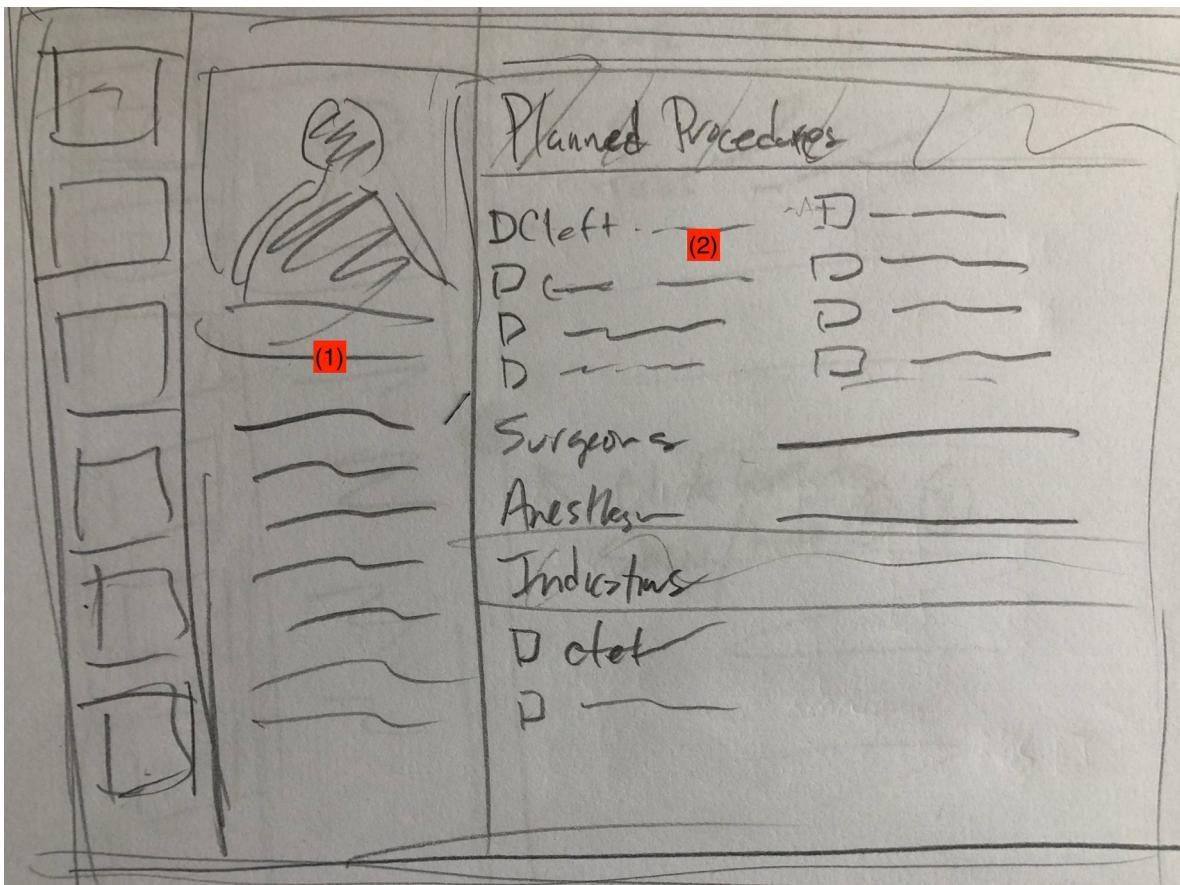


Figure 3.3.1 Pre-Operative Analysis

This screen is used to record the pre-op analysis for the patient. Area (1), as always, contains the patient headshot and info. Area (2) is used to record the data associated with the pre-operative analysis. See Section 2.3.1 of this document for details of what information is recorded in this panel. Note it may be the case that tabs are used to organize sub-sections of the data, given the large amount of data involved. This will be decided once a prototype is developed.

3.4 Intra-Op

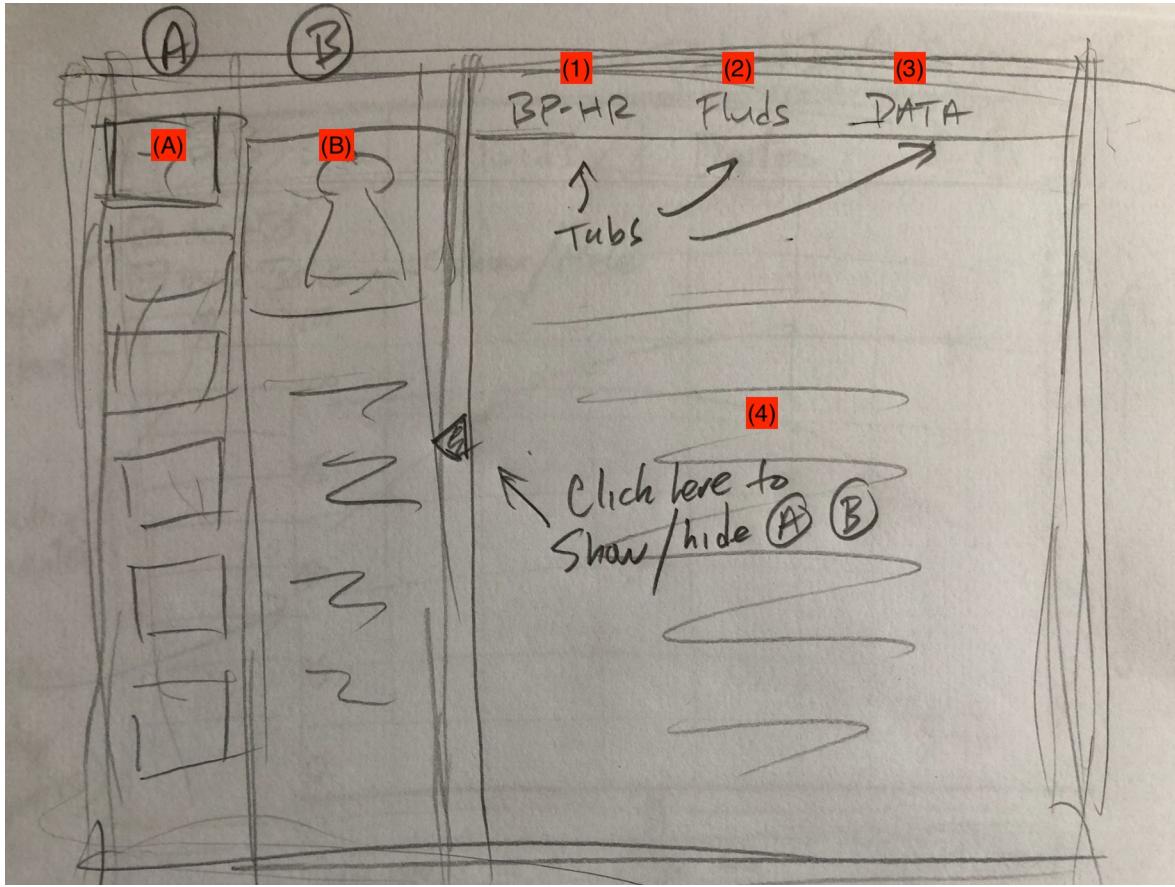


Figure 3.4.1 Overall Intra-op Screen Organization

The overall organization of the intra-op screen is shown in Figure 3.4.1. Area (A) contains buttons for accessing various parts of the anesthesiology chart, and area (B) contains the patient headshot and demographics. Tabs (1), (2), and (3) are used for accessing Blood Pressure/Heart Rate, Fluids, and data portions of the intra-surgery chart, respectively. Use (4) to show or area hide (A) and (B) and give more screen area for the display of data. Because of the layouts involved, you will want to use (4) to hide (A) and (B) when working with BP-HR (1) and Fluids (2) tabs. That same button can also be used to show (A) and (B) once hidden.

3.5 Fluids

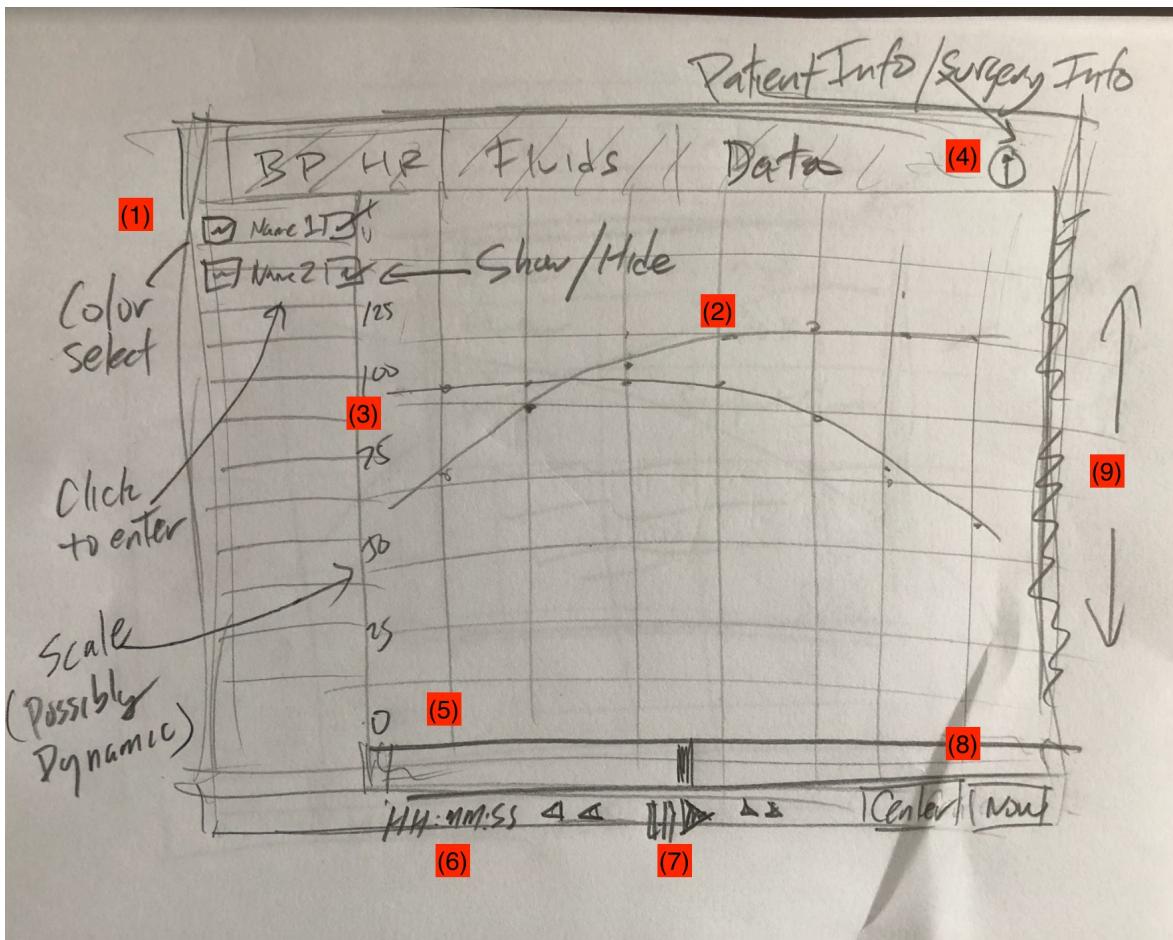


Figure 3.5.1 Fluids Tab

The Fluids tab is one of two graphical, time-series-based views in the anesthesiology chart.

Area (1) is a scrollable list of all recordable fluids. Area (2) displays a real-time plot of the values which are listed in Area (1). Item (4) is a button that can be used to display a summary of the patient and surgery (see Figure 3.5.2)

Clicking on an item in Area (1) brings up a dialog that allows you to enter a value (Figure 3.5.3). Swiping an item in Area (2) to the left will show a delete button, which when clicked will result in displaying a dialog with all data points recorded so far for that data type. That dialog can be used to delete one or more points, as depicted in Figure 3.5.4. For each item in Area (1) is a button that can be used to select the color and marker used in the plot for that data item. A dialog will be displayed allowing you to select a color and marker. A default set of colors will be assigned by the system.

Area (2) contains a real-time plot of all data recorded. This portion of the screen scrolls to the right as time progresses. When the data is based on an infusion, the last data point entered for that item will be added as time progresses. Each data item in Area (1) that has a data point recorded will be plotted. Any new data items added, or removed, will cause the graphic to refresh to account for the change.

The scale of the plot is show in Area (3). The scale will adjust depending on the vertical scroll position of the graphic, as well as the data displayed. The min and max values of the scale will be equal to the min and max values of the plotted data.

Area (5) is used to depict and modify the time scale of the plot. Area (8) is a movable progress bar that is scaled relative to the duration of the surgery, where far left is time zero (start of surgery) and far right is current time. The time associated with the position of the progress bar marker is shown in the form of HH::MM::SS in item (6). Item (7) consists of controls that can be used to move the time forward or backward, and to pause and resume the realtime scrolling of the graphic. Area (8) contains buttons, one which can be used to center the graphic vertically (scaled by data displayed), and the other which can be used to move it horizontally (move the progress bar to the extreme right to show current time).

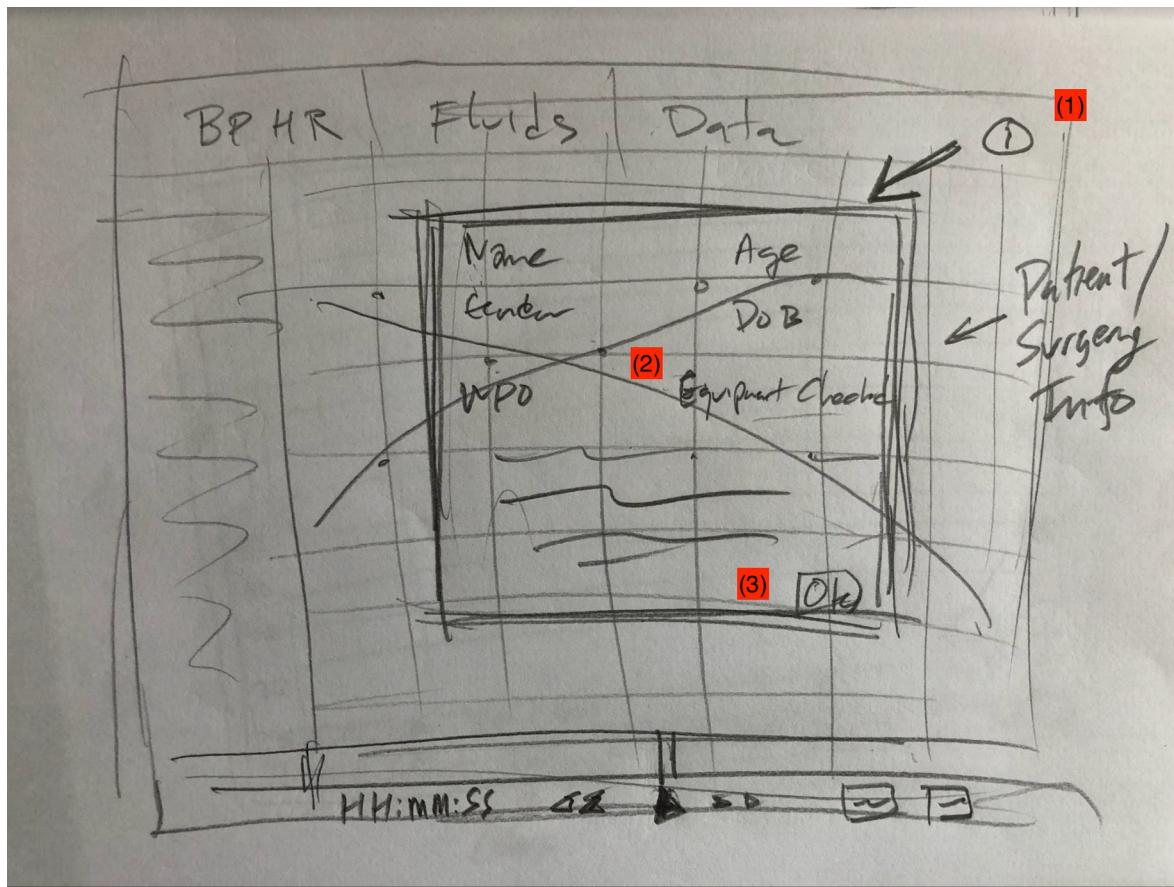


Figure 3.5.2 Patient and Surgery Summary Dialog

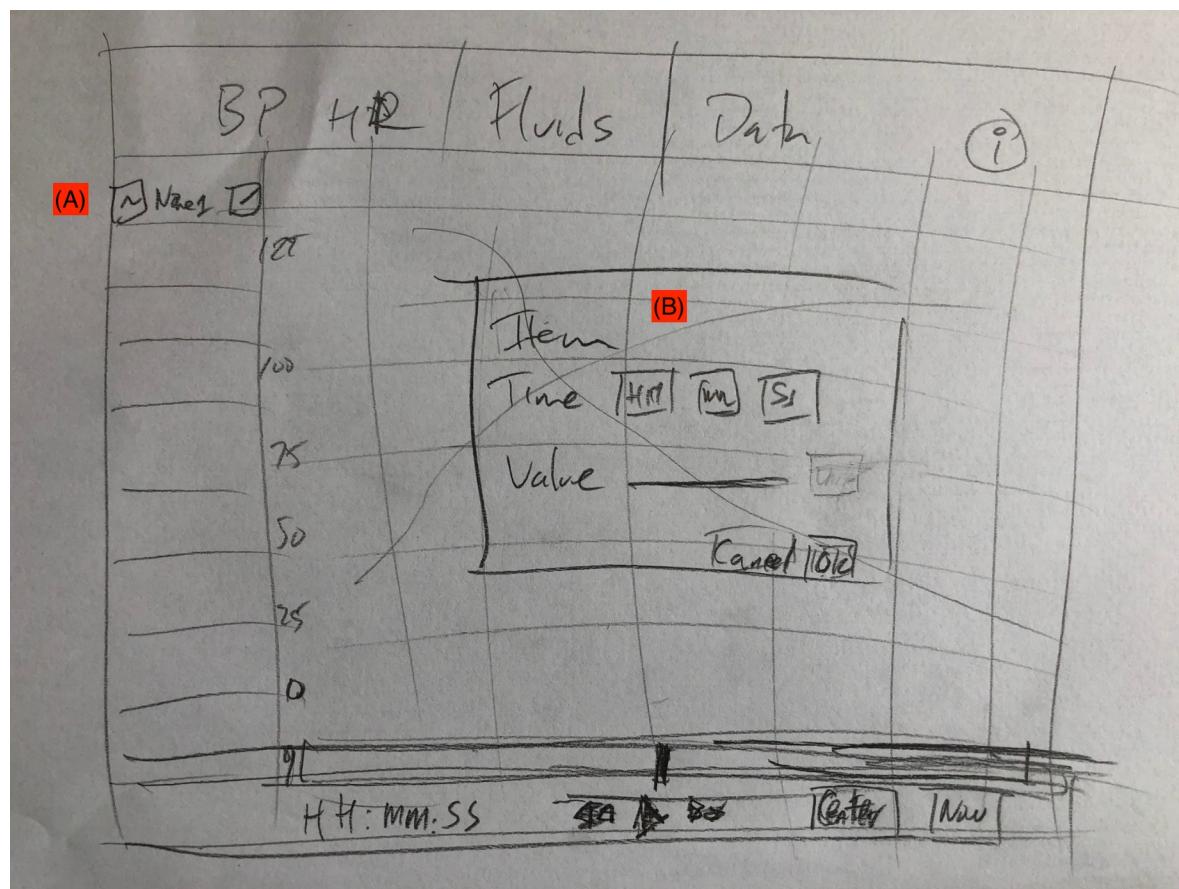


Figure 3.5.3 Adding a Fluid Data Point

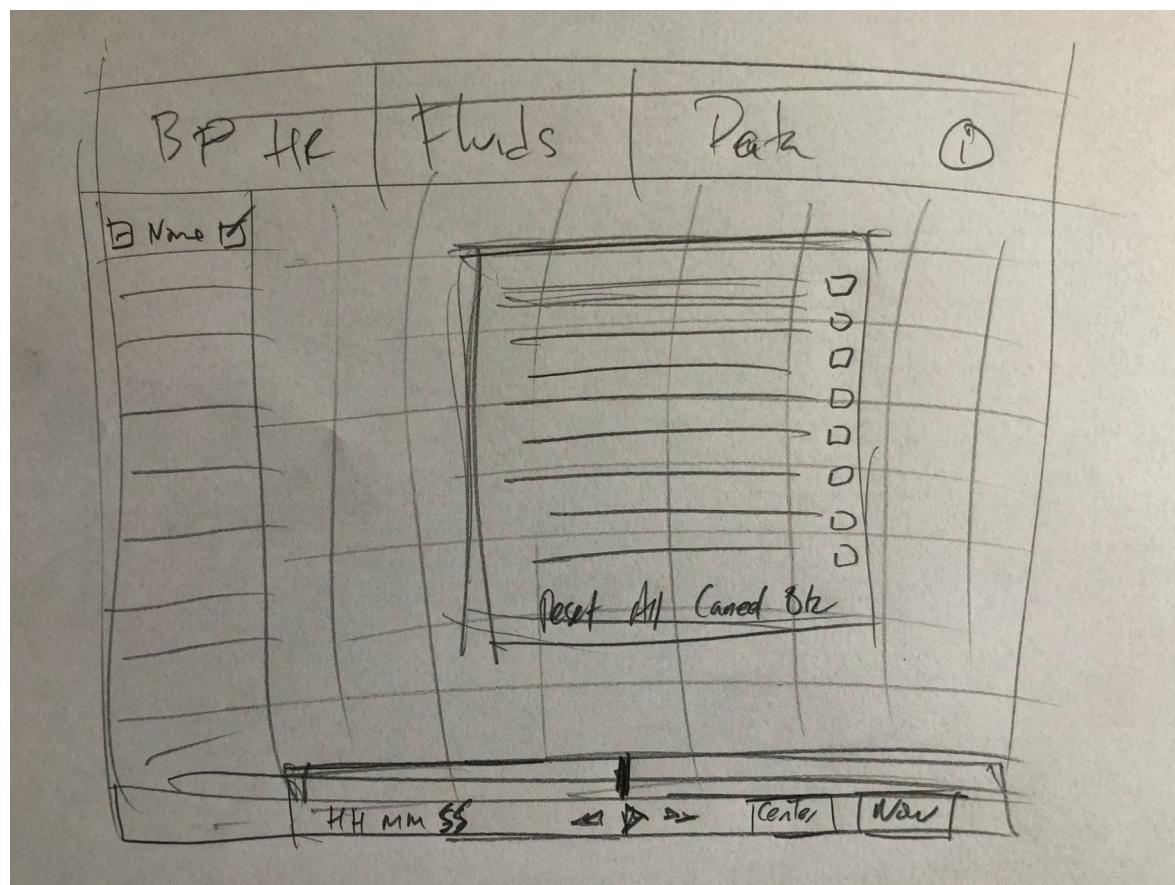


Figure 3.5.4 Deleting Data Points for a Specific Fluid

3.6 Blood Pressure/Heart Rate

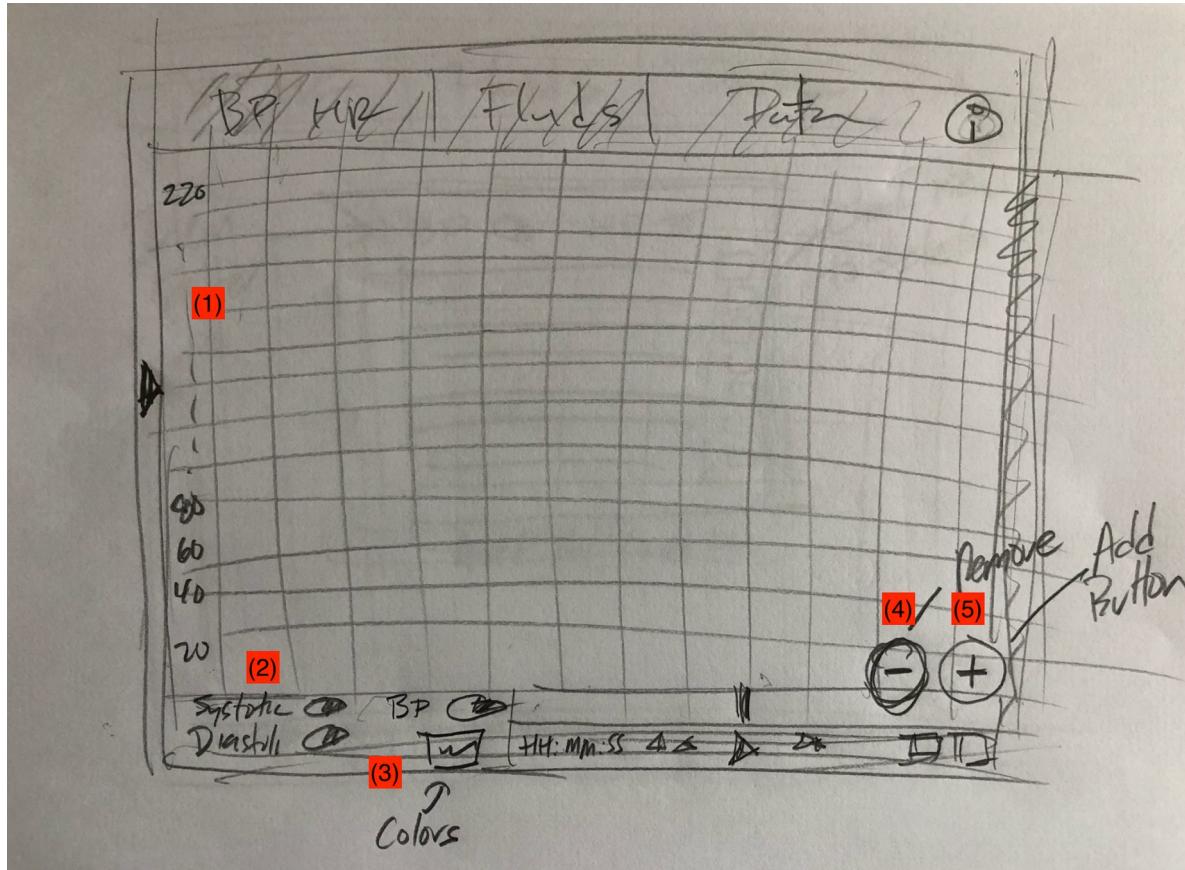


Figure 3.6.1 Blood Pressure/Heart Rate Tab Layout

Figure 3.6.1 depicts the blood pressure/heart rate view layout. It is similar to the Fluids tab. Area (1) is used to display the data entered so far in the surgery. Separate plots are displayed for systolic, diastolic, and heart rate. Area (2) can be used to show or hide the individual plots (e.g., turn off heart rate). A button (3) can be used to change the colors and markers for systolic, diastolic, and bp individually. Floating button (4) can be used to remove data points (see Figure 3.6.2), and (5) can be used to add a data point (Figure 3.6.3). Below that are time controls that can be used to control the time scale of the plot (these behave the same as in the Fluids tab, see (5), (6), (7) and (8) in Figure 3.5.1 for a detailed description).

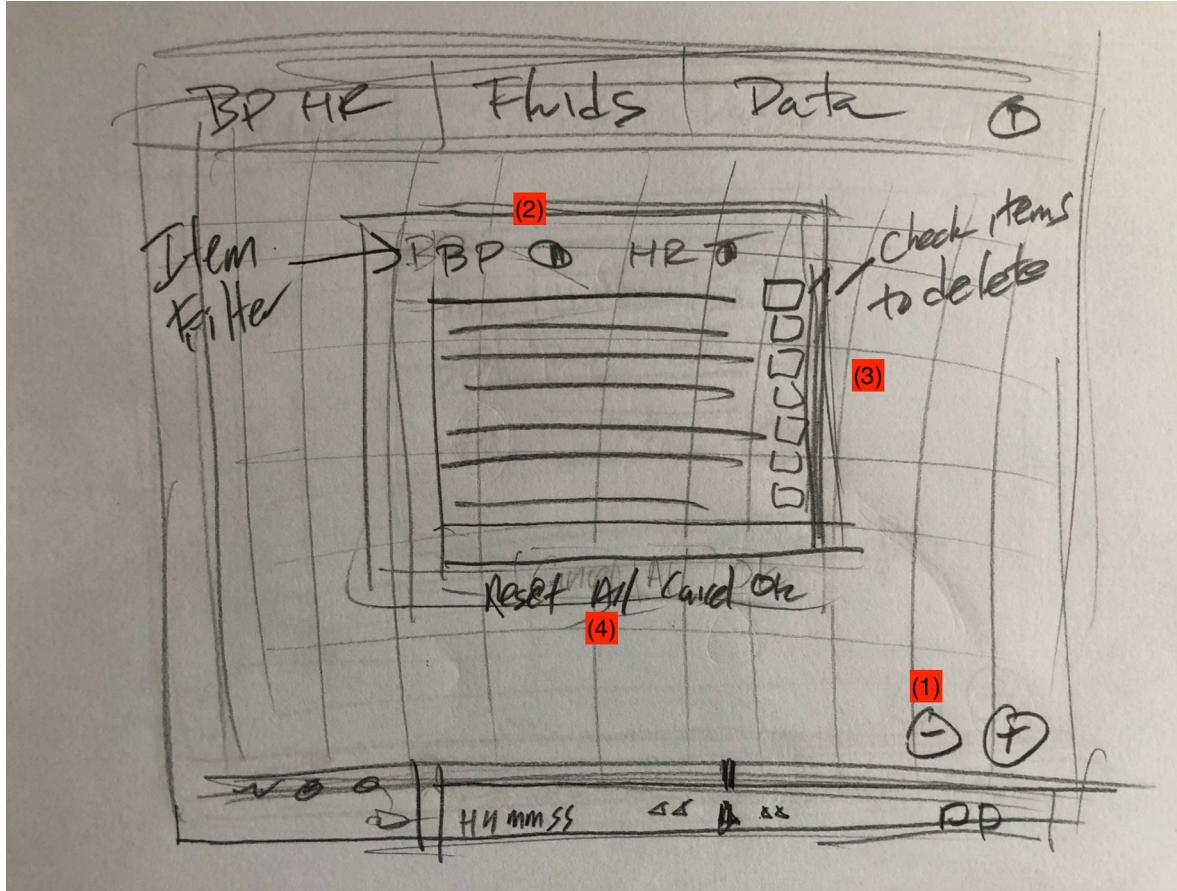


Figure 3.6.2 Remove BP/HR items

In Figure 3.6.2, a dialog is displayed when (1) is pressed which can be used to delete one or more data points associated with the BP/HR tab. Use (2) to filter among BP or HR items. Use (3) to select which items to delete. In (4) one finds buttons to reset or set all the checkboxes in (3). Use Cancel to cancel the operation, and OK to delete the selected data points from the dataset and graphic.

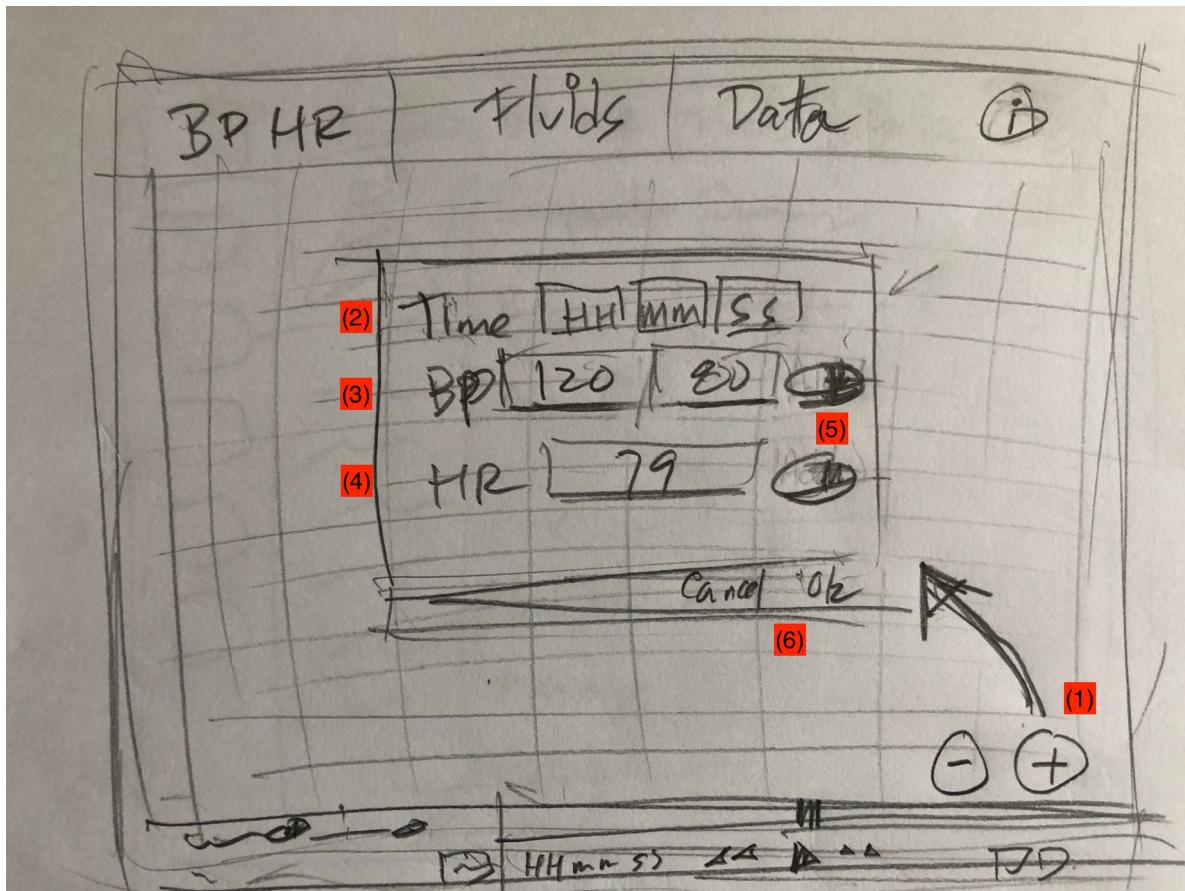


Figure 3.6.3 Adding a Data Point

Clicking (1) cause the add dialog to display. Use the control in (2) to set the wall clock time associated with the observation. Default is current time, change this if you are entering data for some other time, and it will be inserted in its proper sequence. Use (3) to enter BP data, and (4) to enter heart rate. The toggle buttons in Area (5) are associated with both BP and HR, and can be used to control whether or not BP, HR, or both data points are to be recorded. In Area (6), use cancel to return to the BP HR tab (no changes will be saved), and use OK to save your changes.

3.7 Data Tab

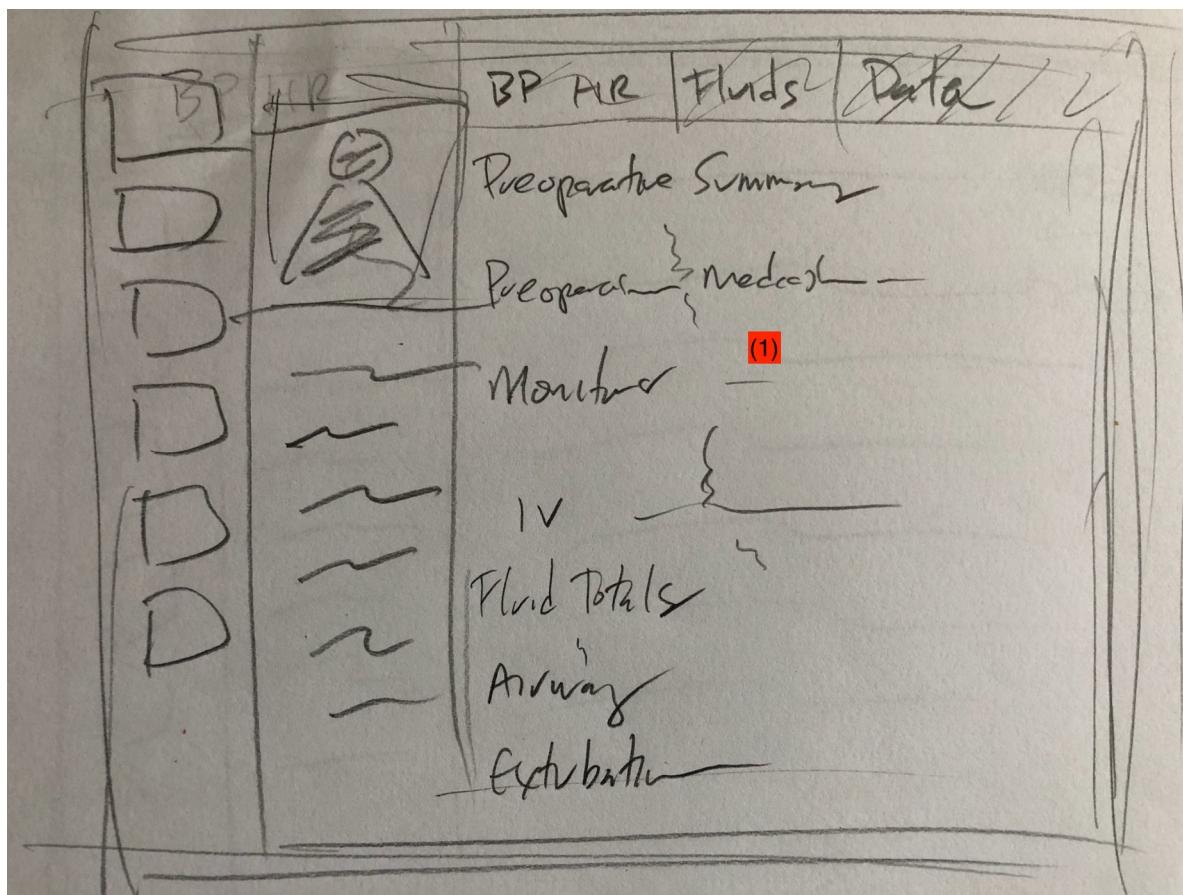


Figure 3.7.1 Data Tab

The data tab is used to record various intra-surgery data. See Sections 2.3.2 and 2.3.4 – 2.3.8 for details on the data displayed here.

3.8 Post Op

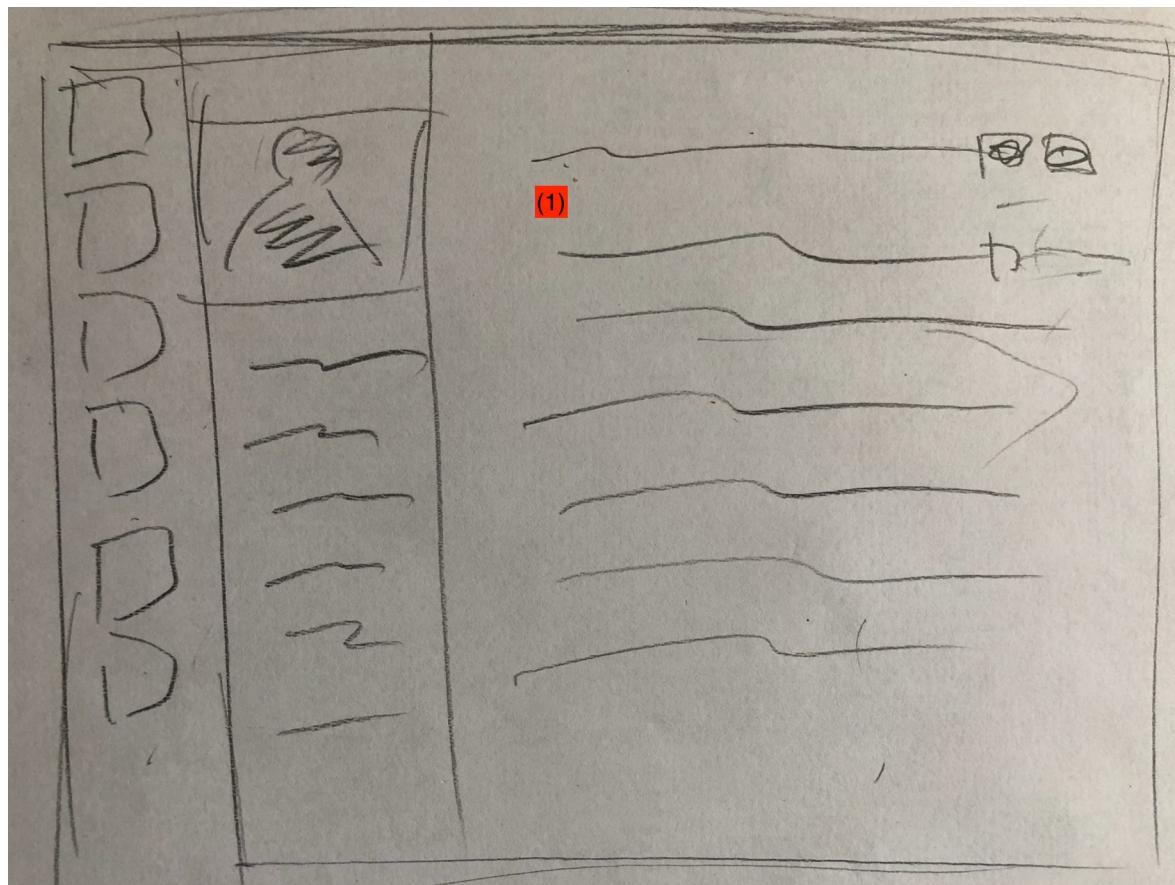


Figure 2.3.8 Post Op Data

See Section 2.4 for a description of the data that can be viewed or edited in this tab.

4. Other Nonfunctional Requirements

4.1 Performance Requirements

- The system should provide 99.9999% uptime during the clinic
- Search and access to the database should occur with a latency of no more than 5 seconds.

4.2 Safety Requirements

There are no specific safety requirements associated with this subsystem.

4.3 Security Requirements

We assume that the patient digital chart, and the anesthesiology sub-system in particular, does not need to adhere to HIPAA requirements, and does not require HIPAA certification. **Standard Official Mexicana NOM-024-SSA3-2010, which establishes the functional objectives and functions, must observe the products of Systems of Electronic Filing to ensure the interoperability, processing, interpretation, confidentiality, safety and use of standards and catalogues of the electronic records health information. An English translation of this standard is available, see References, above, for a link.**

The system communication on the day of the clinic will occur locally and not leave the local network.

Users of the system will have accounts and must authenticate prior to using the digital chart. The user names and their passwords are unique to this system and are not the same used by the volunteer system; only a subset of our volunteers should be granted access to patient data. The database itself is physically and administratively separate from the volunteer database. Passwords will be encrypted on the system, and logging will be used to track account creation, login, and logoff activity.

4.4 Software Quality Attributes

There are no specific SQA attributes associated with this subsystem.

4.5 Business Rules

Access to the system during the clinic will be limited to authenticated users. There are no specific rules associated with who can authenticate.

Between clinics, database access will be restricted to the administrator of the system for purposes of backup and maintenance only. The patient data, and user account information, will not be accessible on the Internet except for purposes of backup and maintenance.

5. Other Requirements

No additional requirements have been identified for this subsystem as of now.

Appendix 1: ICD-9-CM Diagnosis and Procedure Codes

Source: <https://www.cms.gov/Medicare/Coding/ICD9ProviderDiagnosticCodes/codes>

- 0001 Therapeutic ultrasound of vessels of head and neck
- 0002 Therapeutic ultrasound of heart
- 0003 Therapeutic ultrasound of peripheral vascular vessels
- 0009 Other therapeutic ultrasound
- 0010 Implantation of chemotherapeutic agent
- 0011 Infusion of drotrecogin alfa (activated)
- 0012 Administration of inhaled nitric oxide
- 0013 Injection or infusion of nesiritide
- 0014 Injection or infusion of oxazolidinone class of antibiotics
- 0015 High-dose infusion interleukin-2 [IL-2]
- 0016 Pressurized treatment of venous bypass graft [conduit] with pharmaceutical substance
- 0017 Infusion of vasopressor agent
- 0018 Infusion of immunosuppressive antibody therapy
- 0019 Disruption of blood brain barrier via infusion [BBBD]
- 0021 Intravascular imaging of extracranial cerebral vessels
- 0022 Intravascular imaging of intrathoracic vessels
- 0023 Intravascular imaging of peripheral vessels
- 0024 Intravascular imaging of coronary vessels
- 0025 Intravascular imaging of renal vessels
- 0028 Intravascular imaging, other specified vessel(s)
- 0029 Intravascular imaging, unspecified vessel(s)
- 0031 Computer assisted surgery with CT/CTA
- 0032 Computer assisted surgery with MR/MRA
- 0033 Computer assisted surgery with fluoroscopy
- 0034 Imageless computer assisted surgery
- 0035 Computer assisted surgery with multiple datasets
- 0039 Other computer assisted surgery
- 0040 Procedure on single vessel
- 0041 Procedure on two vessels

- 0042 Procedure on three vessels
- 0043 Procedure on four or more vessels
- 0044 Procedure on vessel bifurcation
- 0045 Insertion of one vascular stent
- 0046 Insertion of two vascular stents
- 0047 Insertion of three vascular stents
- 0048 Insertion of four or more vascular stents
- 0049 Supersaturated oxygen therapy
- 0050 Implantation of cardiac resynchronization pacemaker without mention of defibrillation, total system [CRT-P]
- 0051 Implantation of cardiac resynchronization defibrillator, total system [CRT-D]
- 0052 Implantation or replacement of transvenous lead [electrode] into left ventricular coronary venous system
- 0053 Implantation or replacement of cardiac resynchronization pacemaker pulse generator only [CRT-P]
- 0054 Implantation or replacement of cardiac resynchronization defibrillator pulse generator only [CRT-D]
- 0055 Insertion of drug-eluting stent(s) of other peripheral vessel(s)
- 0056 Insertion or replacement of implantable pressure sensor with lead for intracardiac or great vessel hemodynamic monitoring
- 0057 Implantation or replacement of subcutaneous device for intracardiac or great vessel hemodynamic monitoring
- 0058 Insertion of intra-aneurysm sac pressure monitoring device (intraoperative)
- 0059 Intravascular pressure measurement of coronary arteries
- 0060 Insertion of drug-eluting stent(s) of superficial femoral artery
- 0061 Percutaneous angioplasty of extracranial vessel(s)
- 0062 Percutaneous angioplasty of intracranial vessel(s)
- 0063 Percutaneous insertion of carotid artery stent(s)
- 0064 Percutaneous insertion of other extracranial artery stent(s)
- 0065 Percutaneous insertion of intracranial vascular stent(s)
- 0066 Percutaneous transluminal coronary angioplasty [PTCA]
- 0067 Intravascular pressure measurement of intrathoracic arteries
- 0068 Intravascular pressure measurement of peripheral arteries
- 0069 Intravascular pressure measurement, other specified and unspecified vessels
- 0070 Revision of hip replacement, both acetabular and femoral components
- 0071 Revision of hip replacement, acetabular component
- 0072 Revision of hip replacement, femoral component
- 0073 Revision of hip replacement, acetabular liner and/or femoral head only

- 0074 Hip bearing surface, metal-on-polyethylene
- 0075 Hip bearing surface, metal-on-metal
- 0076 Hip bearing surface, ceramic-on-ceramic
- 0077 Hip bearing surface, ceramic-on-polyethylene
- 0080 Revision of knee replacement, total (all components)
- 0081 Revision of knee replacement, tibial component
- 0082 Revision of knee replacement, femoral component
- 0083 Revision of knee replacement, patellar component
- 0084 Revision of total knee replacement, tibial insert (liner)
- 0085 Resurfacing hip, total, acetabulum and femoral head
- 0086 Resurfacing hip, partial, femoral head
- 0087 Resurfacing hip, partial, acetabulum
- 0091 Transplant from live related donor
- 0092 Transplant from live non-related donor
- 0093 Transplant from cadaver
- 0094 Intra-operative neurophysiologic monitoring
- 0095 Injection or infusion of glucarpidase
- 0096 Infusion of 4-Factor Prothrombin Complex Concentrate
- 0101 Cisternal puncture
- 0102 Ventriculopuncture through previously implanted catheter
- 0109 Other cranial puncture
- 0110 Intracranial pressure monitoring
- 0111 Closed [percutaneous] [needle] biopsy of cerebral meninges
- 0112 Open biopsy of cerebral meninges
- 0113 Closed [percutaneous] [needle] biopsy of brain
- 0114 Open biopsy of brain
- 0115 Biopsy of skull
- 0116 Intracranial oxygen monitoring
- 0117 Brain temperature monitoring
- 0118 Other diagnostic procedures on brain and cerebral meninges
- 0119 Other diagnostic procedures on skull
- 0120 Cranial implantation or replacement of neurostimulator pulse generator
- 0121 Incision and drainage of cranial sinus
- 0122 Removal of intracranial neurostimulator lead(s)
- 0123 Reopening of craniotomy site
- 0124 Other craniotomy

- 0125 Other craniectomy
- 0126 Insertion of catheter(s) into cranial cavity or tissue
- 0127 Removal of catheter(s) from cranial cavity or tissue
- 0128 Placement of intracerebral catheter(s) via burr hole(s)
- 0129 Removal of cranial neurostimulator pulse generator
- 0131 Incision of cerebral meninges
- 0132 Lobotomy and tractotomy
- 0139 Other incision of brain
- 0141 Operations on thalamus
- 0142 Operations on globus pallidus
- 0151 Excision of lesion or tissue of cerebral meninges
- 0152 Hemispherectomy
- 0153 Lobectomy of brain
- 0159 Other excision or destruction of lesion or tissue of brain
- 016 Excision of lesion of skull
- 0201 Opening of cranial suture
- 0202 Elevation of skull fracture fragments
- 0203 Formation of cranial bone flap
- 0204 Bone graft to skull
- 0205 Insertion of skull plate
- 0206 Other cranial osteoplasty
- 0207 Removal of skull plate
- 0211 Simple suture of dura mater of brain
- 0212 Other repair of cerebral meninges
- 0213 Ligation of meningeal vessel
- 0214 Choroid plexectomy
- 0221 Insertion or replacement of external ventricular drain [EVD]
- 0222 Intracranial ventricular shunt or anastomosis
- 0231 Ventricular shunt to structure in head and neck
- 0232 Ventricular shunt to circulatory system
- 0233 Ventricular shunt to thoracic cavity
- 0234 Ventricular shunt to abdominal cavity and organs
- 0235 Ventricular shunt to urinary system
- 0239 Ventricular shunt to extracranial site NEC
- 0241 Irrigation and exploration of ventricular shunt
- 0242 Replacement of ventricular shunt

- 0243 Removal of ventricular shunt
- 0291 Lysis of cortical adhesions
- 0292 Repair of brain
- 0293 Implantation or replacement of intracranial neurostimulator lead(s)
- 0294 Insertion or replacement of skull tongs or halo traction device
- 0295 Removal of skull tongs or halo traction device
- 0296 Insertion of sphenoidal electrodes
- 0299 Other operations on skull, brain, and cerebral meninges
- 0301 Removal of foreign body from spinal canal
- 0302 Reopening of laminectomy site
- 0309 Other exploration and decompression of spinal canal
- 031 Division of intraspinal nerve root
- 0321 Percutaneous chordotomy
- 0329 Other chordotomy
- 0331 Spinal tap
- 0332 Biopsy of spinal cord or spinal meninges
- 0339 Other diagnostic procedures on spinal cord and spinal canal structures
- 034 Excision or destruction of lesion of spinal cord or spinal meninges
- 0351 Repair of spinal meningocele
- 0352 Repair of spinal myelomeningocele
- 0353 Repair of vertebral fracture
- 0359 Other repair and plastic operations on spinal cord structures
- 036 Lysis of adhesions of spinal cord and nerve roots
- 0371 Spinal subarachnoid-peritoneal shunt
- 0372 Spinal subarachnoid-ureteral shunt
- 0379 Other shunt of spinal theca
- 038 Injection of destructive agent into spinal canal
- 0390 Insertion of catheter into spinal canal for infusion of therapeutic or palliative substances
- 0391 Injection of anesthetic into spinal canal for analgesia
- 0392 Injection of other agent into spinal canal
- 0393 Implantation or replacement of spinal neurostimulator lead(s)
- 0394 Removal of spinal neurostimulator lead(s)
- 0395 Spinal blood patch
- 0396 Percutaneous denervation of facet
- 0397 Revision of spinal thecal shunt
- 0398 Removal of spinal thecal shunt

- 0399 Other operations on spinal cord and spinal canal structures
- 0401 Excision of acoustic neuroma
- 0402 Division of trigeminal nerve
- 0403 Division or crushing of other cranial and peripheral nerves
- 0404 Other incision of cranial and peripheral nerves
- 0405 Gasserian ganglionectomy
- 0406 Other cranial or peripheral ganglionectomy
- 0407 Other excision or avulsion of cranial and peripheral nerves
- 0411 Closed [percutaneous] [needle] biopsy of cranial or peripheral nerve or ganglion
- 0412 Open biopsy of cranial or peripheral nerve or ganglion
- 0419 Other diagnostic procedures on cranial and peripheral nerves and ganglia
- 042 Destruction of cranial and peripheral nerves
- 043 Suture of cranial and peripheral nerves
- 0441 Decompression of trigeminal nerve root
- 0442 Other cranial nerve decompression
- 0443 Release of carpal tunnel
- 0444 Release of tarsal tunnel
- 0449 Other peripheral nerve or ganglion decompression or lysis of adhesions
- 045 Cranial or peripheral nerve graft
- 046 Transposition of cranial and peripheral nerves
- 0471 Hypoglossal-facial anastomosis
- 0472 Accessory-facial anastomosis
- 0473 Accessory-hypoglossal anastomosis
- 0474 Other anastomosis of cranial or peripheral nerve
- 0475 Revision of previous repair of cranial and peripheral nerves
- 0476 Repair of old traumatic injury of cranial and peripheral nerves
- 0479 Other neuroplasty
- 0480 Peripheral nerve injection, not otherwise specified
- 0481 Injection of anesthetic into peripheral nerve for analgesia
- 0489 Injection of other agent, except neurolytic
- 0491 Neurectasis
- 0492 Implantation or replacement of peripheral neurostimulator lead(s)
- 0493 Removal of peripheral neurostimulator lead(s)
- 0499 Other operations on cranial and peripheral nerves
- 050 Division of sympathetic nerve or ganglion
- 0511 Biopsy of sympathetic nerve or ganglion

- 0519 Other diagnostic procedures on sympathetic nerves or ganglia
- 0521 Sphenopalatine ganglionectomy
- 0522 Cervical sympathectomy
- 0523 Lumbar sympathectomy
- 0524 Presacral sympathectomy
- 0525 Periarterial sympathectomy
- 0529 Other sympathectomy and ganglionectomy
- 0531 Injection of anesthetic into sympathetic nerve for analgesia
- 0532 Injection of neurolytic agent into sympathetic nerve
- 0539 Other injection into sympathetic nerve or ganglion
- 0581 Repair of sympathetic nerve or ganglion
- 0589 Other operations on sympathetic nerves or ganglia
- 059 Other operations on nervous system
- 0601 Aspiration of thyroid field
- 0602 Reopening of wound of thyroid field
- 0609 Other incision of thyroid field
- 0611 Closed [percutaneous] [needle] biopsy of thyroid gland
- 0612 Open biopsy of thyroid gland
- 0613 Biopsy of parathyroid gland
- 0619 Other diagnostic procedures on thyroid and parathyroid glands
- 062 Unilateral thyroid lobectomy
- 0631 Excision of lesion of thyroid
- 0639 Other partial thyroidectomy
- 064 Complete thyroidectomy
- 0650 Substernal thyroidectomy, not otherwise specified
- 0651 Partial substernal thyroidectomy
- 0652 Complete substernal thyroidectomy
- 066 Excision of lingual thyroid
- 067 Excision of thyroglossal duct or tract
- 0681 Complete parathyroidectomy
- 0689 Other parathyroidectomy
- 0691 Division of thyroid isthmus
- 0692 Ligation of thyroid vessels
- 0693 Suture of thyroid gland
- 0694 Thyroid tissue reimplantation
- 0695 Parathyroid tissue reimplantation

- 0698 Other operations on thyroid glands
- 0699 Other operations on parathyroid glands
- 0700 Exploration of adrenal field, not otherwise specified
- 0701 Unilateral exploration of adrenal field
- 0702 Bilateral exploration of adrenal field
- 0711 Closed [percutaneous] [needle] biopsy of adrenal gland
- 0712 Open biopsy of adrenal gland
- 0713 Biopsy of pituitary gland, transfrontal approach
- 0714 Biopsy of pituitary gland, transsphenoidal approach
- 0715 Biopsy of pituitary gland, unspecified approach
- 0716 Biopsy of thymus
- 0717 Biopsy of pineal gland
- 0719 Other diagnostic procedures on adrenal glands, pituitary gland, pineal gland, and thymus
- 0721 Excision of lesion of adrenal gland
- 0722 Unilateral adrenalectomy
- 0729 Other partial adrenalectomy
- 073 Bilateral adrenalectomy
- 0741 Incision of adrenal gland
- 0742 Division of nerves to adrenal glands
- 0743 Ligation of adrenal vessels
- 0744 Repair of adrenal gland
- 0745 Reimplantation of adrenal tissue
- 0749 Other operations on adrenal glands, nerves, and vessels
- 0751 Exploration of pineal field
- 0752 Incision of pineal gland
- 0753 Partial excision of pineal gland
- 0754 Total excision of pineal gland
- 0759 Other operations on pineal gland
- 0761 Partial excision of pituitary gland, transfrontal approach
- 0762 Partial excision of pituitary gland, transsphenoidal approach
- 0763 Partial excision of pituitary gland, unspecified approach
- 0764 Total excision of pituitary gland, transfrontal approach
- 0765 Total excision of pituitary gland, transsphenoidal approach
- 0768 Total excision of pituitary gland, other specified approach
- 0769 Total excision of pituitary gland, unspecified approach
- 0771 Exploration of pituitary fossa

- 0772 Incision of pituitary gland
- 0779 Other operations on hypophysis
- 0780 Thymectomy, not otherwise specified
- 0781 Other partial excision of thymus
- 0782 Other total excision of thymus
- 0783 Thoracoscopic partial excision of thymus
- 0784 Thoracoscopic total excision of thymus
- 0791 Exploration of thymus field
- 0792 Other incision of thymus
- 0793 Repair of thymus
- 0794 Transplantation of thymus
- 0795 Thoracoscopic incision of thymus
- 0798 Other and unspecified thoracoscopic operations on thymus
- 0799 Other and unspecified operations on thymus
- 0801 Incision of lid margin
- 0802 Severing of blepharorrhaphy
- 0809 Other incision of eyelid
- 0811 Biopsy of eyelid
- 0819 Other diagnostic procedures on eyelid
- 0820 Removal of lesion of eyelid, not otherwise specified
- 0821 Excision of chalazion
- 0822 Excision of other minor lesion of eyelid
- 0823 Excision of major lesion of eyelid, partial-thickness
- 0824 Excision of major lesion of eyelid, full-thickness
- 0825 Destruction of lesion of eyelid
- 0831 Repair of blepharoptosis by frontalis muscle technique with suture
- 0832 Repair of blepharoptosis by frontalis muscle technique with fascial sling
- 0833 Repair of blepharoptosis by resection or advancement of levator muscle or aponeurosis
- 0834 Repair of blepharoptosis by other levator muscle techniques
- 0835 Repair of blepharoptosis by tarsal technique
- 0836 Repair of blepharoptosis by other techniques
- 0837 Reduction of overcorrection of ptosis
- 0838 Correction of lid retraction
- 0841 Repair of entropion or ectropion by thermocauterization
- 0842 Repair of entropion or ectropion by suture technique
- 0843 Repair of entropion or ectropion with wedge resection

- 0844 Repair of entropion or ectropion with lid reconstruction
- 0849 Other repair of entropion or ectropion
- 0851 Canthotomy
- 0852 Blepharorrhaphy
- 0859 Other adjustment of lid position
- 0861 Reconstruction of eyelid with skin flap or graft
- 0862 Reconstruction of eyelid with mucous membrane flap or graft
- 0863 Reconstruction of eyelid with hair follicle graft
- 0864 Reconstruction of eyelid with tarsoconjunctival flap
- 0869 Other reconstruction of eyelid with flaps or grafts
- 0870 Reconstruction of eyelid, not otherwise specified
- 0871 Reconstruction of eyelid involving lid margin, partial-thickness
- 0872 Other reconstruction of eyelid, partial-thickness
- 0873 Reconstruction of eyelid involving lid margin, full-thickness
- 0874 Other reconstruction of eyelid, full-thickness
- 0881 Linear repair of laceration of eyelid or eyebrow
- 0882 Repair of laceration involving lid margin, partial-thickness
- 0883 Other repair of laceration of eyelid, partial-thickness
- 0884 Repair of laceration involving lid margin, full-thickness
- 0885 Other repair of laceration of eyelid, full-thickness
- 0886 Lower eyelid rhytidectomy
- 0887 Upper eyelid rhytidectomy
- 0889 Other eyelid repair
- 0891 Electrosurgical epilation of eyelid
- 0892 Cryosurgical epilation of eyelid
- 0893 Other epilation of eyelid
- 0899 Other operations on eyelids
- 090 Incision of lacrimal gland
- 0911 Biopsy of lacrimal gland
- 0912 Biopsy of lacrimal sac
- 0919 Other diagnostic procedures on lacrimal system
- 0920 Excision of lacrimal gland, not otherwise specified
- 0921 Excision of lesion of lacrimal gland
- 0922 Other partial dacryoadenectomy
- 0923 Total dacryoadenectomy
- 093 Other operations on lacrimal gland

- 0941 Probing of lacrimal punctum
- 0942 Probing of lacrimal canaliculi
- 0943 Probing of nasolacrimal duct
- 0944 Intubation of nasolacrimal duct
- 0949 Other manipulation of lacrimal passage
- 0951 Incision of lacrimal punctum
- 0952 Incision of lacrimal canaliculi
- 0953 Incision of lacrimal sac
- 0959 Other incision of lacrimal passages
- 096 Excision of lacrimal sac and passage
- 0971 Correction of everted punctum
- 0972 Other repair of punctum
- 0973 Repair of canaliculus
- 0981 Dacryocystorhinostomy [DCR]
- 0982 Conjunctivocystorhinostomy
- 0983 Conjunctivorhinostomy with insertion of tube or stent
- 0991 Obliteration of lacrimal punctum
- 0999 Other operations on lacrimal system
- 100 Removal of embedded foreign body from conjunctiva by incision
- 101 Other incision of conjunctiva
- 1021 Biopsy of conjunctiva
- 1029 Other diagnostic procedures on conjunctiva
- 1031 Excision of lesion or tissue of conjunctiva
- 1032 Destruction of lesion of conjunctiva
- 1033 Other destructive procedures on conjunctiva
- 1041 Repair of symblepharon with free graft
- 1042 Reconstruction of conjunctival cul-de-sac with free graft
- 1043 Other reconstruction of conjunctival cul-de-sac
- 1044 Other free graft to conjunctiva
- 1049 Other conjunctivoplasty
- 105 Lysis of adhesions of conjunctiva and eyelid
- 106 Repair of laceration of conjunctiva
- 1091 Subconjunctival injection
- 1099 Other operations on conjunctiva
- 110 Magnetic removal of embedded foreign body from cornea
- 111 Incision of cornea

- 1121 Scraping of cornea for smear or culture
- 1122 Biopsy of cornea
- 1129 Other diagnostic procedures on cornea
- 1131 Transposition of pterygium
- 1132 Excision of pterygium with corneal graft
- 1139 Other excision of pterygium
- 1141 Mechanical removal of corneal epithelium
- 1142 Thermocauterization of corneal lesion
- 1143 Cryotherapy of corneal lesion
- 1149 Other removal or destruction of corneal lesion
- 1151 Suture of corneal laceration
- 1152 Repair of postoperative wound dehiscence of cornea
- 1153 Repair of corneal laceration or wound with conjunctival flap
- 1159 Other repair of cornea
- 1160 Corneal transplant, not otherwise specified
- 1161 Lamellar keratoplasty with autograft
- 1162 Other lamellar keratoplasty
- 1163 Penetrating keratoplasty with autograft
- 1164 Other penetrating keratoplasty
- 1169 Other corneal transplant
- 1171 Keratomileusis
- 1172 Keratophakia
- 1173 Keratoprosthesis
- 1174 Thermokeratoplasty
- 1175 Radial keratotomy
- 1176 Epikeratophakia
- 1179 Other reconstructive and refractive surgery on cornea
- 1191 Tattooing of cornea
- 1192 Removal of artificial implant from cornea
- 1199 Other operations on cornea
- 1200 Removal of intraocular foreign body from anterior segment of eye, not otherwise specified
- 1201 Removal of intraocular foreign body from anterior segment of eye with use of magnet
- 1202 Removal of intraocular foreign body from anterior segment of eye without use of magnet
- 1211 Iridotomy with transfixion
- 1212 Other iridotomy
- 1213 Excision of prolapsed iris

- 1214 Other iridectomy
- 1221 Diagnostic aspiration of anterior chamber of eye
- 1222 Biopsy of iris
- 1229 Other diagnostic procedures on iris, ciliary body, sclera, and anterior chamber
- 1231 Lysis of goniosynechiae
- 1232 Lysis of other anterior synechiae
- 1233 Lysis of posterior synechiae
- 1234 Lysis of corneovitreal adhesions
- 1235 Coreoplasty
- 1239 Other iridoplasty
- 1240 Removal of lesion of anterior segment of eye, not otherwise specified
- 1241 Destruction of lesion of iris, nonexcisional
- 1242 Excision of lesion of iris
- 1243 Destruction of lesion of ciliary body, nonexcisional
- 1244 Excision of lesion of ciliary body
- 1251 Goniopuncture without goniotomy
- 1252 Goniotomy without goniopuncture
- 1253 Goniotomy with goniopuncture
- 1254 Trabeculotomy ab externo
- 1255 Cyclodialysis
- 1259 Other facilitation of intraocular circulation
- 1261 Trephination of sclera with iridectomy
- 1262 Thermocauterization of sclera with iridectomy
- 1263 Iridencleisis and iridotasis
- 1264 Trabeculectomy ab externo
- 1265 Other scleral fistulization with iridectomy
- 1266 Postoperative revision of scleral fistulization procedure
- 1267 Insertion of aqueous drainage device
- 1269 Other scleral fistulizing procedure
- 1271 Cyclodiathermy
- 1272 Cyclocryotherapy
- 1273 Cyclophotocoagulation
- 1274 Diminution of ciliary body, not otherwise specified
- 1279 Other glaucoma procedures
- 1281 Suture of laceration of sclera
- 1282 Repair of scleral fistula

- 1283 Revision of operative wound of anterior segment, not elsewhere classified
- 1284 Excision or destruction of lesion of sclera
- 1285 Repair of scleral staphyloma with graft
- 1286 Other repair of scleral staphyloma
- 1287 Scleral reinforcement with graft
- 1288 Other scleral reinforcement
- 1289 Other operations on sclera
- 1291 Therapeutic evacuation of anterior chamber
- 1292 Injection into anterior chamber
- 1293 Removal or destruction of epithelial downgrowth from anterior chamber
- 1297 Other operations on iris
- 1298 Other operations on ciliary body
- 1299 Other operations on anterior chamber
- 1300 Removal of foreign body from lens, not otherwise specified
- 1301 Removal of foreign body from lens with use of magnet
- 1302 Removal of foreign body from lens without use of magnet
- 1311 Intracapsular extraction of lens by temporal inferior route
- 1319 Other intracapsular extraction of lens
- 132 Extracapsular extraction of lens by linear extraction technique
- 133 Extracapsular extraction of lens by simple aspiration (and irrigation) technique
- 1341 Phacoemulsification and aspiration of cataract
- 1342 Mechanical phacofragmentation and aspiration of cataract by posterior route
- 1343 Mechanical phacofragmentation and other aspiration of cataract
- 1351 Extracapsular extraction of lens by temporal inferior route
- 1359 Other extracapsular extraction of lens
- 1364 Discussion of secondary membrane [after cataract]
- 1365 Excision of secondary membrane [after cataract]
- 1366 Mechanical fragmentation of secondary membrane [after cataract]
- 1369 Other cataract extraction
- 1370 Insertion of pseudophakos, not otherwise specified
- 1371 Insertion of intraocular lens prosthesis at time of cataract extraction, one-stage
- 1372 Secondary insertion of intraocular lens prosthesis
- 138 Removal of implanted lens
- 1390 Operation on lens, not elsewhere classified
- 1391 Implantation of intraocular telescope prosthesis
- 1400 Removal of foreign body from posterior segment of eye, not otherwise specified

- 1401 Removal of foreign body from posterior segment of eye with use of magnet
- 1402 Removal of foreign body from posterior segment of eye without use of magnet
- 1411 Diagnostic aspiration of vitreous
- 1419 Other diagnostic procedures on retina, choroid, vitreous, and posterior chamber
- 1421 Destruction of chorioretinal lesion by diathermy
- 1422 Destruction of chorioretinal lesion by cryotherapy
- 1423 Destruction of chorioretinal lesion by xenon arc photocoagulation
- 1424 Destruction of chorioretinal lesion by laser photocoagulation
- 1425 Destruction of chorioretinal lesion by photocoagulation of unspecified type
- 1426 Destruction of chorioretinal lesion by radiation therapy
- 1427 Destruction of chorioretinal lesion by implantation of radiation source
- 1429 Other destruction of chorioretinal lesion
- 1431 Repair of retinal tear by diathermy
- 1432 Repair of retinal tear by cryotherapy
- 1433 Repair of retinal tear by xenon arc photocoagulation
- 1434 Repair of retinal tear by laser photocoagulation
- 1435 Repair of retinal tear by photocoagulation of unspecified type
- 1439 Other repair of retinal tear
- 1441 Scleral buckling with implant
- 1449 Other scleral buckling
- 1451 Repair of retinal detachment with diathermy
- 1452 Repair of retinal detachment with cryotherapy
- 1453 Repair of retinal detachment with xenon arc photocoagulation
- 1454 Repair of retinal detachment with laser photocoagulation
- 1455 Repair of retinal detachment with photocoagulation of unspecified type
- 1459 Other repair of retinal detachment
- 146 Removal of surgically implanted material from posterior segment of eye
- 1471 Removal of vitreous, anterior approach
- 1472 Other removal of vitreous
- 1473 Mechanical vitrectomy by anterior approach
- 1474 Other mechanical vitrectomy
- 1475 Injection of vitreous substitute
- 1479 Other operations on vitreous
- 1481 Implantation of epiretinal visual prosthesis
- 1482 Removal of epiretinal visual prosthesis
- 1483 Revision or replacement of epiretinal visual prosthesis

- 149 Other operations on retina, choroid, and posterior chamber
- 1501 Biopsy of extraocular muscle or tendon
- 1509 Other diagnostic procedures on extraocular muscles and tendons
- 1511 Recession of one extraocular muscle
- 1512 Advancement of one extraocular muscle
- 1513 Resection of one extraocular muscle
- 1519 Other operations on one extraocular muscle involving temporary detachment from globe
- 1521 Lengthening procedure on one extraocular muscle
- 1522 Shortening procedure on one extraocular muscle
- 1529 Other operations on one extraocular muscle
- 153 Operations on two or more extraocular muscles involving temporary detachment from globe, one or both eyes
- 154 Other operations on two or more extraocular muscles, one or both eyes
- 155 Transposition of extraocular muscles
- 156 Revision of extraocular muscle surgery
- 157 Repair of injury of extraocular muscle
- 159 Other operations on extraocular muscles and tendons
- 1601 Orbitotomy with bone flap
- 1602 Orbitotomy with insertion of orbital implant
- 1609 Other orbitotomy
- 161 Removal of penetrating foreign body from eye, not otherwise specified
- 1621 Ophthalmoscopy
- 1622 Diagnostic aspiration of orbit
- 1623 Biopsy of eyeball and orbit
- 1629 Other diagnostic procedures on orbit and eyeball
- 1631 Removal of ocular contents with synchronous implant into scleral shell
- 1639 Other evisceration of eyeball
- 1641 Enucleation of eyeball with synchronous implant into Tenon's capsule with attachment of muscles
- 1642 Enucleation of eyeball with other synchronous implant
- 1649 Other enucleation of eyeball
- 1651 Exenteration of orbit with removal of adjacent structures
- 1652 Exenteration of orbit with therapeutic removal of orbital bone
- 1659 Other exenteration of orbit
- 1661 Secondary insertion of ocular implant
- 1662 Revision and reinsertion of ocular implant
- 1663 Revision of enucleation socket with graft

- 1664 Other revision of enucleation socket
- 1665 Secondary graft to exenteration cavity
- 1666 Other revision of exenteration cavity
- 1669 Other secondary procedures after removal of eyeball
- 1671 Removal of ocular implant
- 1672 Removal of orbital implant
- 1681 Repair of wound of orbit
- 1682 Repair of rupture of eyeball
- 1689 Other repair of injury of eyeball or orbit
- 1691 Retrobulbar injection of therapeutic agent
- 1692 Excision of lesion of orbit
- 1693 Excision of lesion of eye, unspecified structure
- 1698 Other operations on orbit
- 1699 Other operations on eyeball
- 1711 Laparoscopic repair of direct inguinal hernia with graft or prosthesis
- 1712 Laparoscopic repair of indirect inguinal hernia with graft or prosthesis
- 1713 Laparoscopic repair of inguinal hernia with graft or prosthesis, not otherwise specified
- 1721 Laparoscopic bilateral repair of direct inguinal hernia with graft or prosthesis
- 1722 Laparoscopic bilateral repair of indirect inguinal hernia with graft or prosthesis
- 1723 Laparoscopic bilateral repair of inguinal hernia, one direct and one indirect, with graft or prosthesis
- 1724 Laparoscopic bilateral repair of inguinal hernia with graft or prosthesis, not otherwise specified
- 1731 Laparoscopic multiple segmental resection of large intestine
- 1732 Laparoscopic cecectomy
- 1733 Laparoscopic right hemicolectomy
- 1734 Laparoscopic resection of transverse colon
- 1735 Laparoscopic left hemicolectomy
- 1736 Laparoscopic sigmoidectomy
- 1739 Other laparoscopic partial excision of large intestine
- 1741 Open robotic assisted procedure
- 1742 Laparoscopic robotic assisted procedure
- 1743 Percutaneous robotic assisted procedure
- 1744 Endoscopic robotic assisted procedure
- 1745 Thoracoscopic robotic assisted procedure
- 1749 Other and unspecified robotic assisted procedure
- 1751 Implantation of rechargeable cardiac contractility modulation [CCM], total system

- 1752 Implantation or replacement of cardiac contractility modulation [CCM] rechargeable pulse generator only
- 1753 Percutaneous atherectomy of extracranial vessel(s)
- 1754 Percutaneous atherectomy of intracranial vessel(s)
- 1755 Transluminal coronary atherectomy
- 1756 Atherectomy of other non-coronary vessel(s)
- 1761 Laser interstitial thermal therapy [LITT] of lesion or tissue of brain under guidance
- 1762 Laser interstitial thermal therapy [LITT] of lesion or tissue of head and neck under guidance
- 1763 Laser interstitial thermal therapy [LITT] of lesion or tissue of liver under guidance
- 1769 Laser interstitial thermal therapy [LITT] of lesion or tissue of other and unspecified site under guidance
- 1770 Intravenous infusion of clofarabine
- 1771 Non-coronary intra-operative fluorescence vascular angiography [IFVA]
- 1781 Insertion of antimicrobial envelope
- 1801 Piercing of ear lobe
- 1802 Incision of external auditory canal
- 1809 Other incision of external ear
- 1811 Otoscopy
- 1812 Biopsy of external ear
- 1819 Other diagnostic procedures on external ear
- 1821 Excision of preauricular sinus
- 1829 Excision or destruction of other lesion of external ear
- 1831 Radical excision of lesion of external ear
- 1839 Other excision of external ear
- 184 Suture of laceration of external ear
- 185 Surgical correction of prominent ear
- 186 Reconstruction of external auditory canal
- 1871 Construction of auricle of ear
- 1872 Reattachment of amputated ear
- 1879 Other plastic repair of external ear
- 189 Other operations on external ear
- 190 Stapes mobilization
- 1911 Stapedectomy with incus replacement
- 1919 Other stapedectomy
- 1921 Revision of stapedectomy with incus replacement
- 1929 Other revision of stapedectomy
- 193 Other operations on ossicular chain

- 194 Myringoplasty
- 1952 Type II tympanoplasty
- 1953 Type III tympanoplasty
- 1954 Type IV tympanoplasty
- 1955 Type V tympanoplasty
- 196 Revision of tympanoplasty
- 199 Other repair of middle ear
- 2001 Myringotomy with insertion of tube
- 2009 Other myringotomy
- 201 Removal of tympanostomy tube
- 2021 Incision of mastoid
- 2022 Incision of petrous pyramid air cells
- 2023 Incision of middle ear
- 2031 Electrocochleography
- 2032 Biopsy of middle and inner ear
- 2039 Other diagnostic procedures on middle and inner ear
- 2041 Simple mastoidectomy
- 2042 Radical mastoidectomy
- 2049 Other mastoidectomy
- 2051 Excision of lesion of middle ear
- 2059 Other excision of middle ear
- 2061 Fenestration of inner ear (initial)
- 2062 Revision of fenestration of inner ear
- 2071 Endolymphatic shunt
- 2072 Injection into inner ear
- 2079 Other incision, excision, and destruction of inner ear
- 208 Operations on eustachian tube
- 2091 Tympanosympathectomy
- 2092 Revision of mastoidectomy
- 2093 Repair of oval and round windows
- 2094 Injection of tympanum
- 2095 Implantation of electromagnetic hearing device
- 2096 Implantation or replacement of cochlear prosthetic device, not otherwise specified
- 2097 Implantation or replacement of cochlear prosthetic device, single channel
- 2098 Implantation or replacement of cochlear prosthetic device, multiple channel
- 2099 Other operations on middle and inner ear

- 2100 Control of epistaxis, not otherwise specified
- 2101 Control of epistaxis by anterior nasal packing
- 2102 Control of epistaxis by posterior (and anterior) packing
- 2103 Control of epistaxis by cauterization (and packing)
- 2104 Control of epistaxis by ligation of ethmoidal arteries
- 2105 Control of epistaxis by (transantral) ligation of the maxillary artery
- 2106 Control of epistaxis by ligation of the external carotid artery
- 2107 Control of epistaxis by excision of nasal mucosa and skin grafting of septum and lateral nasal wall
- 2109 Control of epistaxis by other means
- 211 Incision of nose
- 2121 Rhinoscopy
- 2122 Biopsy of nose
- 2129 Other diagnostic procedures on nose
- 2130 Excision or destruction of lesion of nose, not otherwise specified
- 2131 Local excision or destruction of intranasal lesion
- 2132 Local excision or destruction of other lesion of nose
- 214 Resection of nose
- 215 Submucous resection of nasal septum
- 2161 Turbinectomy by diathermy or cryosurgery
- 2162 Fracture of the turbinates
- 2169 Other turbinectomy
- 2171 Closed reduction of nasal fracture
- 2172 Open reduction of nasal fracture
- 2181 Suture of laceration of nose
- 2182 Closure of nasal fistula
- 2183 Total nasal reconstruction
- 2184 Revision rhinoplasty
- 2185 Augmentation rhinoplasty
- 2186 Limited rhinoplasty
- 2187 Other rhinoplasty
- 2188 Other septoplasty
- 2189 Other repair and plastic operations on nose
- 2191 Lysis of adhesions of nose
- 2199 Other operations on nose
- 2200 Aspiration and lavage of nasal sinus, not otherwise specified

- 2201 Puncture of nasal sinus for aspiration or lavage
- 2202 Aspiration or lavage of nasal sinus through natural ostium
- 2211 Closed [endoscopic] [needle] biopsy of nasal sinus
- 2212 Open biopsy of nasal sinus
- 2219 Other diagnostic procedures on nasal sinuses
- 222 Intranasal antrotomy
- 2231 Radical maxillary antrotomy
- 2239 Other external maxillary antrotomy
- 2241 Frontal sinusotomy
- 2242 Frontal sinusectomy
- 2250 Sinusotomy, not otherwise specified
- 2251 Ethmoidotomy
- 2252 Sphenoidotomy
- 2253 Incision of multiple nasal sinuses
- 2260 Sinusectomy, not otherwise specified
- 2261 Excision of lesion of maxillary sinus with Caldwell-Luc approach
- 2262 Excision of lesion of maxillary sinus with other approach
- 2263 Ethmoidectomy
- 2264 Sphenoidectomy
- 2271 Closure of nasal sinus fistula
- 2279 Other repair of nasal sinus
- 229 Other operations on nasal sinuses
- 2301 Extraction of deciduous tooth
- 2309 Extraction of other tooth
- 2311 Removal of residual root
- 2319 Other surgical extraction of tooth
- 232 Restoration of tooth by filling
- 233 Restoration of tooth by inlay
- 2341 Application of crown
- 2342 Insertion of fixed bridge
- 2343 Insertion of removable bridge
- 2349 Other dental restoration
- 235 Implantation of tooth
- 236 Prosthetic dental implant
- 2370 Root canal, not otherwise specified
- 2371 Root canal therapy with irrigation

- 2372 Root canal therapy with apicoectomy
- 2373 Apicoectomy
- 240 Incision of gum or alveolar bone
- 2411 Biopsy of gum
- 2412 Biopsy of alveolus
- 2419 Other diagnostic procedures on teeth, gums, and alveoli
- 242 Gingivoplasty
- 2431 Excision of lesion or tissue of gum
- 2432 Suture of laceration of gum
- 2439 Other operations on gum
- 244 Excision of dental lesion of jaw
- 245 Alveoloplasty
- 246 Exposure of tooth
- 247 Application of orthodontic appliance
- 248 Other orthodontic operation
- 2491 Extension or deepening of buccolabial or lingual sulcus
- 2499 Other dental operations
- 2501 Closed [needle] biopsy of tongue
- 2502 Open biopsy of tongue
- 2509 Other diagnostic procedures on tongue
- 251 Excision or destruction of lesion or tissue of tongue
- 252 Partial glossectomy
- 253 Complete glossectomy
- 254 Radical glossectomy
- 2551 Suture of laceration of tongue
- 2559 Other repair and plastic operations on tongue
- 2591 Lingual frenotomy
- 2592 Lingual frenectomy
- 2593 Lysis of adhesions of tongue
- 2594 Other glossotomy
- 2599 Other operations on tongue
- 260 Incision of salivary gland or duct
- 2611 Closed [needle] biopsy of salivary gland or duct
- 2612 Open biopsy of salivary gland or duct
- 2619 Other diagnostic procedures on salivary glands and ducts
- 2621 Marsupialization of salivary gland cyst

- 2629 Other excision of salivary gland lesion
- 2630 Sialoadenectomy, not otherwise specified
- 2631 Partial sialoadenectomy
- 2632 Complete sialoadenectomy
- 2641 Suture of laceration of salivary gland
- 2642 Closure of salivary fistula
- 2649 Other repair and plastic operations on salivary gland or duct
- 2691 Probing of salivary duct
- 2699 Other operations on salivary gland or duct
- 270 Drainage of face and floor of mouth
- 271 Incision of palate
- 2721 Biopsy of bony palate
- 2722 Biopsy of uvula and soft palate
- 2723 Biopsy of lip
- 2724 Biopsy of mouth, unspecified structure
- 2729 Other diagnostic procedures on oral cavity
- 2731 Local excision or destruction of lesion or tissue of bony palate
- 2732 Wide excision or destruction of lesion or tissue of bony palate
- 2741 Labial frenectomy
- 2742 Wide excision of lesion of lip
- 2743 Other excision of lesion or tissue of lip
- 2749 Other excision of mouth
- 2751 Suture of laceration of lip
- 2752 Suture of laceration of other part of mouth
- 2753 Closure of fistula of mouth
- 2754 Repair of cleft lip
- 2755 Full-thickness skin graft to lip and mouth
- 2756 Other skin graft to lip and mouth
- 2757 Attachment of pedicle or flap graft to lip and mouth
- 2759 Other plastic repair of mouth
- 2761 Suture of laceration of palate
- 2762 Correction of cleft palate
- 2763 Revision of cleft palate repair
- 2764 Insertion of palatal implant
- 2769 Other plastic repair of palate
- 2771 Incision of uvula

- 2772 Excision of uvula
- 2773 Repair of uvula
- 2779 Other operations on uvula
- 2791 Labial frenotomy
- 2792 Incision of mouth, unspecified structure
- 2799 Other operations on oral cavity
- 280 Incision and drainage of tonsil and peritonsillar structures
- 2811 Biopsy of tonsils and adenoids
- 2819 Other diagnostic procedures on tonsils and adenoids
- 282 Tonsillectomy without adenoidectomy
- 283 Tonsillectomy with adenoidectomy
- 284 Excision of tonsil tag
- 285 Excision of lingual tonsil
- 286 Adenoidectomy without tonsillectomy
- 287 Control of hemorrhage after tonsillectomy and adenoidectomy
- 2891 Removal of foreign body from tonsil and adenoid by incision
- 2892 Excision of lesion of tonsil and adenoid
- 2899 Other operations on tonsils and adenoids
- 290 Pharyngotomy
- 2911 Pharyngoscopy
- 2912 Pharyngeal biopsy
- 2919 Other diagnostic procedures on pharynx
- 292 Excision of branchial cleft cyst or vestige
- 2931 Cricopharyngeal myotomy
- 2932 Pharyngeal diverticulectomy
- 2933 Pharyngectomy (partial)
- 2939 Other excision or destruction of lesion or tissue of pharynx
- 294 Plastic operation on pharynx
- 2951 Suture of laceration of pharynx
- 2952 Closure of branchial cleft fistula
- 2953 Closure of other fistula of pharynx
- 2954 Lysis of pharyngeal adhesions
- 2959 Other repair of pharynx
- 2991 Dilation of pharynx
- 2992 Division of glossopharyngeal nerve
- 2999 Other operations on pharynx

- 3001 Marsupialization of laryngeal cyst
- 3009 Other excision or destruction of lesion or tissue of larynx
- 301 Hemilaryngectomy
- 3021 Epiglottidectomy
- 3022 Vocal cordectomy
- 3029 Other partial laryngectomy
- 303 Complete laryngectomy
- 304 Radical laryngectomy
- 310 Injection of larynx
- 311 Temporary tracheostomy
- 3121 Mediastinal tracheostomy
- 3129 Other permanent tracheostomy
- 313 Other incision of larynx or trachea
- 3141 Tracheoscopy through artificial stoma
- 3142 Laryngoscopy and other tracheoscopy
- 3143 Closed [endoscopic] biopsy of larynx
- 3144 Closed [endoscopic] biopsy of trachea
- 3145 Open biopsy of larynx or trachea
- 3148 Other diagnostic procedures on larynx
- 3149 Other diagnostic procedures on trachea
- 315 Local excision or destruction of lesion or tissue of trachea
- 3161 Suture of laceration of larynx
- 3162 Closure of fistula of larynx
- 3163 Revision of laryngostomy
- 3164 Repair of laryngeal fracture
- 3169 Other repair of larynx
- 3171 Suture of laceration of trachea
- 3172 Closure of external fistula of trachea
- 3173 Closure of other fistula of trachea
- 3174 Revision of tracheostomy
- 3175 Reconstruction of trachea and construction of artificial larynx
- 3179 Other repair and plastic operations on trachea
- 3191 Division of laryngeal nerve
- 3192 Lysis of adhesions of trachea or larynx
- 3193 Replacement of laryngeal or tracheal stent
- 3194 Injection of locally-acting therapeutic substance into trachea

- 3195 Tracheoesophageal fistulization
- 3198 Other operations on larynx
- 3199 Other operations on trachea
- 3201 Endoscopic excision or destruction of lesion or tissue of bronchus
- 3209 Other local excision or destruction of lesion or tissue of bronchus
- 321 Other excision of bronchus
- 3220 Thoracoscopic excision of lesion or tissue of lung
- 3221 Plication of emphysematous bleb
- 3222 Lung volume reduction surgery
- 3223 Open ablation of lung lesion or tissue
- 3224 Percutaneous ablation of lung lesion or tissue
- 3225 Thoracoscopic ablation of lung lesion or tissue
- 3226 Other and unspecified ablation of lung lesion or tissue
- 3227 Bronchoscopic bronchial thermoplasty, ablation of airway smooth muscle
- 3228 Endoscopic excision or destruction of lesion or tissue of lung
- 3229 Other local excision or destruction of lesion or tissue of lung
- 3230 Thoracoscopic segmental resection of lung
- 3239 Other and unspecified segmental resection of lung
- 3241 Thoracoscopic lobectomy of lung
- 3249 Other lobectomy of lung
- 3250 Thoracoscopic pneumonectomy
- 3259 Other and unspecified pneumonectomy
- 326 Radical dissection of thoracic structures
- 329 Other excision of lung
- 330 Incision of bronchus
- 331 Incision of lung
- 3320 Thoracoscopic lung biopsy
- 3321 Bronchoscopy through artificial stoma
- 3322 Fiber-optic bronchoscopy
- 3323 Other bronchoscopy
- 3324 Closed [endoscopic] biopsy of bronchus
- 3325 Open biopsy of bronchus
- 3326 Closed [percutaneous] [needle] biopsy of lung
- 3327 Closed endoscopic biopsy of lung
- 3328 Open biopsy of lung
- 3329 Other diagnostic procedures on lung or bronchus

- 3331 Destruction of phrenic nerve for collapse of lung
- 3332 Artificial pneumothorax for collapse of lung
- 3333 Pneumoperitoneum for collapse of lung
- 3334 Thoracoplasty
- 3339 Other surgical collapse of lung
- 3341 Suture of laceration of bronchus
- 3342 Closure of bronchial fistula
- 3343 Closure of laceration of lung
- 3348 Other repair and plastic operations on bronchus
- 3349 Other repair and plastic operations on lung
- 3350 Lung transplantation, not otherwise specified
- 3351 Unilateral lung transplantation
- 3352 Bilateral lung transplantation
- 336 Combined heart-lung transplantation
- 3371 Endoscopic insertion or replacement of bronchial valve(s), single lobe
- 3372 Endoscopic pulmonary airway flow measurement
- 3373 Endoscopic insertion or replacement of bronchial valve(s), multiple lobes
- 3378 Endoscopic removal of bronchial device(s) or substances
- 3379 Endoscopic insertion of other bronchial device or substances
- 3391 Bronchial dilation
- 3392 Ligation of bronchus
- 3393 Puncture of lung
- 3398 Other operations on bronchus
- 3399 Other operations on lung
- 3401 Incision of chest wall
- 3402 Exploratory thoracotomy
- 3403 Reopening of recent thoracotomy site
- 3404 Insertion of intercostal catheter for drainage
- 3405 Creation of pleuroperitoneal shunt
- 3406 Thoracoscopic drainage of pleural cavity
- 3409 Other incision of pleura
- 341 Incision of mediastinum
- 3420 Thoracoscopic pleural biopsy
- 3421 Transpleural thoracoscopy
- 3422 Mediastinoscopy
- 3423 Biopsy of chest wall

- 3424 Other pleural biopsy
- 3425 Closed [percutaneous] [needle] biopsy of mediastinum
- 3426 Open mediastinal biopsy
- 3427 Biopsy of diaphragm
- 3428 Other diagnostic procedures on chest wall, pleura, and diaphragm
- 3429 Other diagnostic procedures on mediastinum
- 343 Excision or destruction of lesion or tissue of mediastinum
- 344 Excision or destruction of lesion of chest wall
- 3451 Decortication of lung
- 3452 Thoracoscopic decortication of lung
- 3459 Other excision of pleura
- 346 Scarification of pleura
- 3471 Suture of laceration of chest wall
- 3472 Closure of thoracostomy
- 3473 Closure of other fistula of thorax
- 3474 Repair of pectus deformity
- 3479 Other repair of chest wall
- 3481 Excision of lesion or tissue of diaphragm
- 3482 Suture of laceration of diaphragm
- 3483 Closure of fistula of diaphragm
- 3484 Other repair of diaphragm
- 3485 Implantation of diaphragmatic pacemaker
- 3489 Other operations on diaphragm
- 3491 Thoracentesis
- 3492 Injection into thoracic cavity
- 3493 Repair of pleura
- 3499 Other operations on thorax
- 3500 Closed heart valvotomy, unspecified valve
- 3501 Closed heart valvotomy, aortic valve
- 3502 Closed heart valvotomy, mitral valve
- 3503 Closed heart valvotomy, pulmonary valve
- 3504 Closed heart valvotomy, tricuspid valve
- 3505 Endovascular replacement of aortic valve
- 3506 Transapical replacement of aortic valve
- 3507 Endovascular replacement of pulmonary valve
- 3508 Transapical replacement of pulmonary valve

- 3509 Endovascular replacement of unspecified heart valve
- 3510 Open heart valvuloplasty without replacement, unspecified valve
- 3511 Open heart valvuloplasty of aortic valve without replacement
- 3512 Open heart valvuloplasty of mitral valve without replacement
- 3513 Open heart valvuloplasty of pulmonary valve without replacement
- 3514 Open heart valvuloplasty of tricuspid valve without replacement
- 3520 Open and other replacement of unspecified heart valve
- 3521 Open and other replacement of aortic valve with tissue graft
- 3522 Open and other replacement of aortic valve
- 3523 Open and other replacement of mitral valve with tissue graft
- 3524 Open and other replacement of mitral valve
- 3525 Open and other replacement of pulmonary valve with tissue graft
- 3526 Open and other replacement of pulmonary valve
- 3527 Open and other replacement of tricuspid valve with tissue graft
- 3528 Open and other replacement of tricuspid valve
- 3531 Operations on papillary muscle
- 3532 Operations on chordae tendineae
- 3533 Annuloplasty
- 3534 Infundibectomy
- 3535 Operations on trabeculae carneae cordis
- 3539 Operations on other structures adjacent to valves of heart
- 3541 Enlargement of existing atrial septal defect
- 3542 Creation of septal defect in heart
- 3550 Repair of unspecified septal defect of heart with prosthesis
- 3551 Repair of atrial septal defect with prosthesis, open technique
- 3552 Repair of atrial septal defect with prosthesis, closed technique
- 3553 Repair of ventricular septal defect with prosthesis, open technique
- 3554 Repair of endocardial cushion defect with prosthesis
- 3555 Repair of ventricular septal defect with prosthesis, closed technique
- 3560 Repair of unspecified septal defect of heart with tissue graft
- 3561 Repair of atrial septal defect with tissue graft
- 3562 Repair of ventricular septal defect with tissue graft
- 3563 Repair of endocardial cushion defect with tissue graft
- 3570 Other and unspecified repair of unspecified septal defect of heart
- 3571 Other and unspecified repair of atrial septal defect
- 3572 Other and unspecified repair of ventricular septal defect

- 3573 Other and unspecified repair of endocardial cushion defect
- 3581 Total repair of tetralogy of fallot
- 3582 Total repair of total anomalous pulmonary venous connection
- 3583 Total repair of truncus arteriosus
- 3584 Total correction of transposition of great vessels, not elsewhere classified
- 3591 Interatrial transposition of venous return
- 3592 Creation of conduit between right ventricle and pulmonary artery
- 3593 Creation of conduit between left ventricle and aorta
- 3594 Creation of conduit between atrium and pulmonary artery
- 3595 Revision of corrective procedure on heart
- 3596 Percutaneous balloon valvuloplasty
- 3597 Percutaneous mitral valve repair with implant
- 3598 Other operations on septa of heart
- 3599 Other operations on valves of heart
- 3603 Open chest coronary artery angioplasty
- 3604 Intracoronary artery thrombolytic infusion
- 3606 Insertion of non-drug-eluting coronary artery stent(s)
- 3607 Insertion of drug-eluting coronary artery stent(s)
- 3609 Other removal of coronary artery obstruction
- 3610 Aortocoronary bypass for heart revascularization, not otherwise specified
- 3611 (Aorto)coronary bypass of one coronary artery
- 3612 (Aorto)coronary bypass of two coronary arteries
- 3613 (Aorto)coronary bypass of three coronary arteries
- 3614 (Aorto)coronary bypass of four or more coronary arteries
- 3615 Single internal mammary-coronary artery bypass
- 3616 Double internal mammary-coronary artery bypass
- 3617 Abdominal-coronary artery bypass
- 3619 Other bypass anastomosis for heart revascularization
- 362 Heart revascularization by arterial implant
- 3631 Open chest transmyocardial revascularization
- 3632 Other transmyocardial revascularization
- 3633 Endoscopic transmyocardial revascularization
- 3634 Percutaneous transmyocardial revascularization
- 3639 Other heart revascularization
- 3691 Repair of aneurysm of coronary vessel
- 3699 Other operations on vessels of heart

- 370 Pericardiocentesis
- 3710 Incision of heart, not otherwise specified
- 3711 Cardiotomy
- 3712 Pericardiotomy
- 3720 Noninvasive programmed electrical stimulation [NIPS]
- 3721 Right heart cardiac catheterization
- 3722 Left heart cardiac catheterization
- 3723 Combined right and left heart cardiac catheterization
- 3724 Biopsy of pericardium
- 3725 Biopsy of heart
- 3726 Catheter based invasive electrophysiologic testing
- 3727 Cardiac mapping
- 3728 Intracardiac echocardiography
- 3729 Other diagnostic procedures on heart and pericardium
- 3731 Pericardectomy
- 3732 Excision of aneurysm of heart
- 3733 Excision or destruction of other lesion or tissue of heart, open approach
- 3734 Excision or destruction of other lesion or tissue of heart, endovascular approach
- 3735 Partial ventriculectomy
- 3736 Excision, destruction, or exclusion of left atrial appendage (LAA)
- 3737 Excision or destruction of other lesion or tissue of heart, thoracoscopic approach
- 3741 Implantation of prosthetic cardiac support device around the heart
- 3749 Other repair of heart and pericardium
- 3751 Heart transplantation
- 3752 Implantation of total internal biventricular heart replacement system
- 3753 Replacement or repair of thoracic unit of (total) replacement heart system
- 3754 Replacement or repair of other implantable component of (total) replacement heart system
- 3755 Removal of internal biventricular heart replacement system
- 3760 Implantation or insertion of biventricular external heart assist system
- 3761 Implant of pulsation balloon
- 3762 Insertion of temporary non-implantable extracorporeal circulatory assist device
- 3763 Repair of heart assist system
- 3764 Removal of external heart assist system(s) or device(s)
- 3765 Implant of single ventricular (extracorporeal) external heart assist system
- 3766 Insertion of implantable heart assist system
- 3767 Implantation of cardiomyostimulation system

- 3768 Insertion of percutaneous external heart assist device
- 3770 Initial insertion of lead [electrode], not otherwise specified
- 3771 Initial insertion of transvenous lead [electrode] into ventricle
- 3772 Initial insertion of transvenous leads [electrodes] into atrium and ventricle
- 3773 Initial insertion of transvenous lead [electrode] into atrium
- 3774 Insertion or replacement of epicardial lead [electrode] into epicardium
- 3775 Revision of lead [electrode]
- 3776 Replacement of transvenous atrial and/or ventricular lead(s) [electrode]
- 3777 Removal of lead(s) [electrode] without replacement
- 3778 Insertion of temporary transvenous pacemaker system
- 3779 Revision or relocation of cardiac device pocket
- 3780 Insertion of permanent pacemaker, initial or replacement, type of device not specified
- 3781 Initial insertion of single-chamber device, not specified as rate responsive
- 3782 Initial insertion of single-chamber device, rate responsive
- 3783 Initial insertion of dual-chamber device
- 3785 Replacement of any type pacemaker device with single-chamber device, not specified as rate responsive
- 3786 Replacement of any type of pacemaker device with single-chamber device, rate responsive
- 3787 Replacement of any type pacemaker device with dual-chamber device
- 3789 Revision or removal of pacemaker device
- 3790 Insertion of left atrial appendage device
- 3791 Open chest cardiac massage
- 3792 Injection of therapeutic substance into heart
- 3793 Injection of therapeutic substance into pericardium
- 3794 Implantation or replacement of automatic cardioverter/defibrillator, total system [AICD]
- 3795 Implantation of automatic cardioverter/defibrillator lead(s) only
- 3796 Implantation of automatic cardioverter/defibrillator pulse generator only
- 3797 Replacement of automatic cardioverter/defibrillator lead(s) only
- 3798 Replacement of automatic cardioverter/defibrillator pulse generator only
- 3799 Other operations on heart and pericardium
- 3800 Incision of vessel, unspecified site
- 3801 Incision of vessel, intracranial vessels
- 3802 Incision of vessel, other vessels of head and neck
- 3803 Incision of vessel, upper limb vessels
- 3804 Incision of vessel, aorta
- 3805 Incision of vessel, other thoracic vessels

- 3806 Incision of vessel, abdominal arteries
- 3807 Incision of vessel, abdominal veins
- 3808 Incision of vessel, lower limb arteries
- 3809 Incision of vessel, lower limb veins
- 3810 Endarterectomy, unspecified site
- 3811 Endarterectomy, intracranial vessels
- 3812 Endarterectomy, other vessels of head and neck
- 3813 Endarterectomy, upper limb vessels
- 3814 Endarterectomy, aorta
- 3815 Endarterectomy, other thoracic vessels
- 3816 Endarterectomy, abdominal arteries
- 3818 Endarterectomy, lower limb arteries
- 3821 Biopsy of blood vessel
- 3822 Percutaneous angioscopy
- 3823 Intravascular spectroscopy
- 3824 Intravascular imaging of coronary vessel(s) by optical coherence tomography [OCT]
- 3825 Intravascular imaging of non-coronary vessel(s) by optical coherence tomography [OCT]
- 3826 Insertion of implantable pressure sensor without lead for intracardiac or great vessel hemodynamic monitoring
- 3829 Other diagnostic procedures on blood vessels
- 3830 Resection of vessel with anastomosis, unspecified site
- 3831 Resection of vessel with anastomosis, intracranial vessels
- 3832 Resection of vessel with anastomosis, other vessels of head and neck
- 3833 Resection of vessel with anastomosis, upper limb vessels
- 3834 Resection of vessel with anastomosis, aorta
- 3835 Resection of vessel with anastomosis, other thoracic vessels
- 3836 Resection of vessel with anastomosis, abdominal arteries
- 3837 Resection of vessel with anastomosis, abdominal veins
- 3838 Resection of vessel with anastomosis, lower limb arteries
- 3839 Resection of vessel with anastomosis, lower limb veins
- 3840 Resection of vessel with replacement, unspecified site
- 3841 Resection of vessel with replacement, intracranial vessels
- 3842 Resection of vessel with replacement, other vessels of head and neck
- 3843 Resection of vessel with replacement, upper limb vessels
- 3844 Resection of vessel with replacement, aorta, abdominal
- 3845 Resection of vessel with replacement, thoracic vessels

- 3846 Resection of vessel with replacement, abdominal arteries
- 3847 Resection of vessel with replacement, abdominal veins
- 3848 Resection of vessel with replacement, lower limb arteries
- 3849 Resection of vessel with replacement, lower limb veins
- 3850 Ligation and stripping of varicose veins, unspecified site
- 3851 Ligation and stripping of varicose veins, intracranial vessels
- 3852 Ligation and stripping of varicose veins, other vessels of head and neck
- 3853 Ligation and stripping of varicose veins, upper limb vessels
- 3855 Ligation and stripping of varicose veins, other thoracic vessels
- 3857 Ligation and stripping of varicose veins, abdominal veins
- 3859 Ligation and stripping of varicose veins, lower limb veins
- 3860 Other excision of vessels, unspecified site
- 3861 Other excision of vessels, intracranial vessels
- 3862 Other excision of vessels, other vessels of head and neck
- 3863 Other excision of vessels, upper limb vessels
- 3864 Other excision of vessels, aorta, abdominal
- 3865 Other excision of vessels, thoracic vessels
- 3866 Other excision of vessels, abdominal arteries
- 3867 Other excision of vessels, abdominal veins
- 3868 Other excision of vessels, lower limb arteries
- 3869 Other excision of vessels, lower limb veins
- 387 Interruption of the vena cava
- 3880 Other surgical occlusion of vessels, unspecified site
- 3881 Other surgical occlusion of vessels, intracranial vessels
- 3882 Other surgical occlusion of vessels, other vessels of head and neck
- 3883 Other surgical occlusion of vessels, upper limb vessels
- 3884 Other surgical occlusion of vessels, aorta, abdominal
- 3885 Other surgical occlusion of vessels, thoracic vessels
- 3886 Other surgical occlusion of vessels, abdominal arteries
- 3887 Other surgical occlusion of vessels, abdominal veins
- 3888 Other surgical occlusion of vessels, lower limb arteries
- 3889 Other surgical occlusion of vessels, lower limb veins
- 3891 Arterial catheterization
- 3892 Umbilical vein catheterization
- 3893 Venous catheterization, not elsewhere classified
- 3894 Venous cutdown

- 3895 Venous catheterization for renal dialysis
- 3897 Central venous catheter placement with guidance
- 3898 Other puncture of artery
- 3899 Other puncture of vein
- 390 Systemic to pulmonary artery shunt
- 391 Intra-abdominal venous shunt
- 3921 Caval-pulmonary artery anastomosis
- 3922 Aorta-subclavian-carotid bypass
- 3923 Other intrathoracic vascular shunt or bypass
- 3924 Aorta-renal bypass
- 3925 Aorta-iliac-femoral bypass
- 3926 Other intra-abdominal vascular shunt or bypass
- 3927 Arteriovenostomy for renal dialysis
- 3928 Extracranial-intracranial (EC-IC) vascular bypass
- 3929 Other (peripheral) vascular shunt or bypass
- 3930 Suture of unspecified blood vessel
- 3931 Suture of artery
- 3932 Suture of vein
- 3941 Control of hemorrhage following vascular surgery
- 3942 Revision of arteriovenous shunt for renal dialysis
- 3943 Removal of arteriovenous shunt for renal dialysis
- 3949 Other revision of vascular procedure
- 3950 Angioplasty of other non-coronary vessel(s)
- 3951 Clipping of aneurysm
- 3952 Other repair of aneurysm
- 3953 Repair of arteriovenous fistula
- 3954 Re-entry operation (aorta)
- 3955 Reimplantation of aberrant renal vessel
- 3956 Repair of blood vessel with tissue patch graft
- 3957 Repair of blood vessel with synthetic patch graft
- 3958 Repair of blood vessel with unspecified type of patch graft
- 3959 Other repair of vessel
- 3961 Extracorporeal circulation auxiliary to open heart surgery
- 3962 Hypothermia (systemic) incidental to open heart surgery
- 3963 Cardioplegia
- 3964 Intraoperative cardiac pacemaker

- 3965 Extracorporeal membrane oxygenation [ECMO]
- 3966 Percutaneous cardiopulmonary bypass
- 3971 Endovascular implantation of other graft in abdominal aorta
- 3972 Endovascular (total) embolization or occlusion of head and neck vessels
- 3973 Endovascular implantation of graft in thoracic aorta
- 3974 Endovascular removal of obstruction from head and neck vessel(s)
- 3975 Endovascular embolization or occlusion of vessel(s) of head or neck using bare coils
- 3976 Endovascular embolization or occlusion of vessel(s) of head or neck using bioactive coils
- 3977 Temporary (partial) therapeutic endovascular occlusion of vessel
- 3978 Endovascular implantation of branching or fenestrated graft(s) in aorta
- 3979 Other endovascular procedures on other vessels
- 3981 Implantation or replacement of carotid sinus stimulation device, total system
- 3982 Implantation or replacement of carotid sinus stimulation lead(s) only
- 3983 Implantation or replacement of carotid sinus stimulation pulse generator only
- 3984 Revision of carotid sinus stimulation lead(s) only
- 3985 Revision of carotid sinus stimulation pulse generator
- 3986 Removal of carotid sinus stimulation device, total system
- 3987 Removal of carotid sinus stimulation lead(s) only
- 3988 Removal of carotid sinus stimulation pulse generator only
- 3989 Other operations on carotid body , carotid sinus and other vascular bodies
- 3990 Insertion of non-drug-eluting peripheral (non-coronary) vessel stent(s)
- 3991 Freeing of vessel
- 3992 Injection of sclerosing agent into vein
- 3993 Insertion of vessel-to-vessel cannula
- 3994 Replacement of vessel-to-vessel cannula
- 3995 Hemodialysis
- 3996 Total body perfusion
- 3997 Other perfusion
- 3998 Control of hemorrhage, not otherwise specified
- 3999 Other operations on vessels
- 400 Incision of lymphatic structures
- 4011 Biopsy of lymphatic structure
- 4019 Other diagnostic procedures on lymphatic structures
- 4021 Excision of deep cervical lymph node
- 4022 Excision of internal mammary lymph node
- 4023 Excision of axillary lymph node

- 4024 Excision of inguinal lymph node
- 4029 Simple excision of other lymphatic structure
- 403 Regional lymph node excision
- 4040 Radical neck dissection, not otherwise specified
- 4041 Radical neck dissection, unilateral
- 4042 Radical neck dissection, bilateral
- 4050 Radical excision of lymph nodes, not otherwise specified
- 4051 Radical excision of axillary lymph nodes
- 4052 Radical excision of periaortic lymph nodes
- 4053 Radical excision of iliac lymph nodes
- 4054 Radical groin dissection
- 4059 Radical excision of other lymph nodes
- 4061 Cannulation of thoracic duct
- 4062 Fistulization of thoracic duct
- 4063 Closure of fistula of thoracic duct
- 4064 Ligation of thoracic duct
- 4069 Other operations on thoracic duct
- 409 Other operations on lymphatic structures
- 4100 Bone marrow transplant, not otherwise specified
- 4101 Autologous bone marrow transplant without purging
- 4102 Allogeneic bone marrow transplant with purging
- 4103 Allogeneic bone marrow transplant without purging
- 4104 Autologous hematopoietic stem cell transplant without purging
- 4105 Allogeneic hematopoietic stem cell transpant without purging
- 4106 Cord blood stem cell transplant
- 4107 Autologous hematopoietic stem cell transplant with purging
- 4108 Allogeneic hematopoietic stem cell transplant with purging
- 4109 Autologous bone marrow transplant with purging
- 411 Puncture of spleen
- 412 Splenotomy
- 4131 Biopsy of bone marrow
- 4132 Closed [aspiration] [percutaneous] biopsy of spleen
- 4133 Open biopsy of spleen
- 4138 Other diagnostic procedures on bone marrow
- 4139 Other diagnostic procedures on spleen
- 4141 Marsupialization of splenic cyst

- 4142 Excision of lesion or tissue of spleen
- 4143 Partial splenectomy
- 415 Total splenectomy
- 4191 Aspiration of bone marrow from donor for transplant
- 4192 Injection into bone marrow
- 4193 Excision of accessory spleen
- 4194 Transplantation of spleen
- 4195 Repair and plastic operations on spleen
- 4198 Other operations on bone marrow
- 4199 Other operations on spleen
- 4201 Incision of esophageal web
- 4209 Other incision of esophagus
- 4210 Esophagostomy, not otherwise specified
- 4211 Cervical esophagostomy
- 4212 Exteriorization of esophageal pouch
- 4219 Other external fistulization of esophagus
- 4221 Operative esophagoscopy by incision
- 4222 Esophagoscopy through artificial stoma
- 4223 Other esophagoscopy
- 4224 Closed [endoscopic] biopsy of esophagus
- 4225 Open biopsy of esophagus
- 4229 Other diagnostic procedures on esophagus
- 4231 Local excision of esophageal diverticulum
- 4232 Local excision of other lesion or tissue of esophagus
- 4233 Endoscopic excision or destruction of lesion or tissue of esophagus
- 4239 Other destruction of lesion or tissue of esophagus
- 4240 Esophagectomy, not otherwise specified
- 4241 Partial esophagectomy
- 4242 Total esophagectomy
- 4251 Intrathoracic esophagoesophagostomy
- 4252 Intrathoracic esophagogastrostomy
- 4253 Intrathoracic esophageal anastomosis with interposition of small bowel
- 4254 Other intrathoracic esophagoenterostomy
- 4255 Intrathoracic esophageal anastomosis with interposition of colon
- 4256 Other intrathoracic esophagocolostomy
- 4258 Intrathoracic esophageal anastomosis with other interposition

- 4259 Other intrathoracic anastomosis of esophagus
- 4261 Antesternal esophagoesophagostomy
- 4262 Antesternal esophagogastrostomy
- 4263 Antesternal esophageal anastomosis with interposition of small bowel
- 4264 Other antesternal esophagoenterostomy
- 4265 Antesternal esophageal anastomosis with interposition of colon
- 4266 Other antesternal esophagocolostomy
- 4268 Other antesternal esophageal anastomosis with interposition
- 4269 Other antesternal anastomosis of esophagus
- 427 Esophagomyotomy
- 4281 Insertion of permanent tube into esophagus
- 4282 Suture of laceration of esophagus
- 4283 Closure of esophagostomy
- 4284 Repair of esophageal fistula, not elsewhere classified
- 4285 Repair of esophageal stricture
- 4286 Production of subcutaneous tunnel without esophageal anastomosis
- 4287 Other graft of esophagus
- 4289 Other repair of esophagus
- 4291 Ligation of esophageal varices
- 4292 Dilation of esophagus
- 4299 Other operations on esophagus
- 430 Gastrotomy
- 4311 Percutaneous [endoscopic] gastrostomy [PEG]
- 4319 Other gastrostomy
- 433 Pyloromyotomy
- 4341 Endoscopic excision or destruction of lesion or tissue of stomach
- 4342 Local excision of other lesion or tissue of stomach
- 4349 Other destruction of lesion or tissue of stomach
- 435 Partial gastrectomy with anastomosis to esophagus
- 436 Partial gastrectomy with anastomosis to duodenum
- 437 Partial gastrectomy with anastomosis to jejunum
- 4381 Partial gastrectomy with jejunal transposition
- 4382 Laparoscopic vertical (sleeve) gastrectomy
- 4389 Open and other partial gastrectomy
- 4391 Total gastrectomy with intestinal interposition
- 4399 Other total gastrectomy

- 4400 Vagotomy, not otherwise specified
- 4401 Truncal vagotomy
- 4402 Highly selective vagotomy
- 4403 Other selective vagotomy
- 4411 Transabdominal gastroscopy
- 4412 Gastroscopy through artificial stoma
- 4413 Other gastroscopy
- 4414 Closed [endoscopic] biopsy of stomach
- 4415 Open biopsy of stomach
- 4419 Other diagnostic procedures on stomach
- 4421 Dilation of pylorus by incision
- 4422 Endoscopic dilation of pylorus
- 4429 Other pyloroplasty
- 4431 High gastric bypass
- 4432 Percutaneous [endoscopic] gastrojejunostomy
- 4438 Laparoscopic gastroenterostomy
- 4439 Other gastroenterostomy without gastrectomy
- 4440 Suture of peptic ulcer, not otherwise specified
- 4441 Suture of gastric ulcer site
- 4442 Suture of duodenal ulcer site
- 4443 Endoscopic control of gastric or duodenal bleeding
- 4444 Transcatheter embolization for gastric or duodenal bleeding
- 4449 Other control of hemorrhage of stomach or duodenum
- 445 Revision of gastric anastomosis
- 4461 Suture of laceration of stomach
- 4462 Closure of gastrostomy
- 4463 Closure of other gastric fistula
- 4464 Gastropexy
- 4465 Esophagogastropasty
- 4466 Other procedures for creation of esophagogastric sphincteric competence
- 4467 Laparoscopic procedures for creation of esophagogastric sphincteric competence
- 4468 Laparoscopic gastroplasty
- 4469 Other repair of stomach
- 4491 Ligation of gastric varices
- 4492 Intraoperative manipulation of stomach
- 4493 Insertion of gastric bubble (balloon)

- 4494 Removal of gastric bubble (balloon)
- 4495 Laparoscopic gastric restrictive procedure
- 4496 Laparoscopic revision of gastric restrictive procedure
- 4497 Laparoscopic removal of gastric restrictive device(s)
- 4498 (Laparoscopic) adjustment of size of adjustable gastric restrictive device
- 4499 Other operations on stomach
- 4500 Incision of intestine, not otherwise specified
- 4501 Incision of duodenum
- 4502 Other incision of small intestine
- 4503 Incision of large intestine
- 4511 Transabdominal endoscopy of small intestine
- 4512 Endoscopy of small intestine through artificial stoma
- 4513 Other endoscopy of small intestine
- 4514 Closed [endoscopic] biopsy of small intestine
- 4515 Open biopsy of small intestine
- 4516 Esophagogastroduodenoscopy [EGD] with closed biopsy
- 4519 Other diagnostic procedures on small intestine
- 4521 Transabdominal endoscopy of large intestine
- 4522 Endoscopy of large intestine through artificial stoma
- 4523 Colonoscopy
- 4524 Flexible sigmoidoscopy
- 4525 Closed [endoscopic] biopsy of large intestine
- 4526 Open biopsy of large intestine
- 4527 Intestinal biopsy, site unspecified
- 4528 Other diagnostic procedures on large intestine
- 4529 Other diagnostic procedures on intestine, site unspecified
- 4530 Endoscopic excision or destruction of lesion of duodenum
- 4531 Other local excision of lesion of duodenum
- 4532 Other destruction of lesion of duodenum
- 4533 Local excision of lesion or tissue of small intestine, except duodenum
- 4534 Other destruction of lesion of small intestine, except duodenum
- 4541 Excision of lesion or tissue of large intestine
- 4542 Endoscopic polypectomy of large intestine
- 4543 Endoscopic destruction of other lesion or tissue of large intestine
- 4549 Other destruction of lesion of large intestine
- 4550 Isolation of intestinal segment, not otherwise specified

- 4551 Isolation of segment of small intestine
- 4552 Isolation of segment of large intestine
- 4561 Multiple segmental resection of small intestine
- 4562 Other partial resection of small intestine
- 4563 Total removal of small intestine
- 4571 Open and other multiple segmental resection of large intestine
- 4572 Open and other cecectomy
- 4573 Open and other right hemicolectomy
- 4574 Open and other resection of transverse colon
- 4575 Open and other left hemicolectomy
- 4576 Open and other sigmoidectomy
- 4579 Other and unspecified partial excision of large intestine
- 4581 Laparoscopic total intra-abdominal colectomy
- 4582 Open total intra-abdominal colectomy
- 4583 Other and unspecified total intra-abdominal colectomy
- 4590 Intestinal anastomosis, not otherwise specified
- 4591 Small-to-small intestinal anastomosis
- 4592 Anastomosis of small intestine to rectal stump
- 4593 Other small-to-large intestinal anastomosis
- 4594 Large-to-large intestinal anastomosis
- 4595 Anastomosis to anus
- 4601 Exteriorization of small intestine
- 4602 Resection of exteriorized segment of small intestine
- 4603 Exteriorization of large intestine
- 4604 Resection of exteriorized segment of large intestine
- 4610 Colostomy, not otherwise specified
- 4611 Temporary colostomy
- 4613 Permanent colostomy
- 4614 Delayed opening of colostomy
- 4620 Ileostomy, not otherwise specified
- 4621 Temporary ileostomy
- 4622 Continent ileostomy
- 4623 Other permanent ileostomy
- 4624 Delayed opening of ileostomy
- 4631 Delayed opening of other enterostomy
- 4632 Percutaneous (endoscopic) jejunostomy [PEJ]

- 4639 Other enterostomy
- 4640 Revision of intestinal stoma, not otherwise specified
- 4641 Revision of stoma of small intestine
- 4642 Repair of pericolostomy hernia
- 4643 Other revision of stoma of large intestine
- 4650 Closure of intestinal stoma, not otherwise specified
- 4651 Closure of stoma of small intestine
- 4652 Closure of stoma of large intestine
- 4660 Fixation of intestine, not otherwise specified
- 4661 Fixation of small intestine to abdominal wall
- 4662 Other fixation of small intestine
- 4663 Fixation of large intestine to abdominal wall
- 4664 Other fixation of large intestine
- 4671 Suture of laceration of duodenum
- 4672 Closure of fistula of duodenum
- 4673 Suture of laceration of small intestine, except duodenum
- 4674 Closure of fistula of small intestine, except duodenum
- 4675 Suture of laceration of large intestine
- 4676 Closure of fistula of large intestine
- 4679 Other repair of intestine
- 4680 Intra-abdominal manipulation of intestine, not otherwise specified
- 4681 Intra-abdominal manipulation of small intestine
- 4682 Intra-abdominal manipulation of large intestine
- 4685 Dilation of intestine
- 4686 Endoscopic insertion of colonic stent(s)
- 4687 Other insertion of colonic stent(s)
- 4691 Myotomy of sigmoid colon
- 4692 Myotomy of other parts of colon
- 4693 Revision of anastomosis of small intestine
- 4694 Revision of anastomosis of large intestine
- 4695 Local perfusion of small intestine
- 4696 Local perfusion of large intestine
- 4697 Transplant of intestine
- 4699 Other operations on intestines
- 4701 Laparoscopic appendectomy
- 4709 Other appendectomy

- 4711 Laparoscopic incidental appendectomy
- 4719 Other incidental appendectomy
- 472 Drainage of appendiceal abscess
- 4791 Appendicostomy
- 4792 Closure of appendiceal fistula
- 4799 Other operations on appendix
- 480 Proctotomy
- 481 Proctostomy
- 4821 Transabdominal proctosigmoidoscopy
- 4822 Proctosigmoidoscopy through artificial stoma
- 4823 Rigid proctosigmoidoscopy
- 4824 Closed [endoscopic] biopsy of rectum
- 4825 Open biopsy of rectum
- 4826 Biopsy of perirectal tissue
- 4829 Other diagnostic procedures on rectum, rectosigmoid and perirectal tissue
- 4831 Radical electrocoagulation of rectal lesion or tissue
- 4832 Other electrocoagulation of rectal lesion or tissue
- 4833 Destruction of rectal lesion or tissue by laser
- 4834 Destruction of rectal lesion or tissue by cryosurgery
- 4835 Local excision of rectal lesion or tissue
- 4836 [Endoscopic] polypectomy of rectum
- 4840 Pull-through resection of rectum, not otherwise specified
- 4841 Soave submucosal resection of rectum
- 4842 Laparoscopic pull-through resection of rectum
- 4843 Open pull-through resection of rectum
- 4849 Other pull-through resection of rectum
- 4850 Abdominoperineal resection of the rectum, not otherwise specified
- 4851 Laparoscopic abdominoperineal resection of the rectum
- 4852 Open abdominoperineal resection of the rectum
- 4859 Other abdominoperineal resection of the rectum
- 4861 Transsacral rectosigmoidectomy
- 4862 Anterior resection of rectum with synchronous colostomy
- 4863 Other anterior resection of rectum
- 4864 Posterior resection of rectum
- 4865 Duhamel resection of rectum
- 4869 Other resection of rectum

- 4871 Suture of laceration of rectum
- 4872 Closure of proctostomy
- 4873 Closure of other rectal fistula
- 4874 Rectorectostomy
- 4875 Abdominal proctopexy
- 4876 Other proctopexy
- 4879 Other repair of rectum
- 4881 Incision of perirectal tissue
- 4882 Excision of perirectal tissue
- 4891 Incision of rectal stricture
- 4892 Anorectal myectomy
- 4893 Repair of perirectal fistula
- 4899 Other operations on rectum and perirectal tissue
- 4901 Incision of perianal abscess
- 4902 Other incision of perianal tissue
- 4903 Excision of perianal skin tags
- 4904 Other excision of perianal tissue
- 4911 Anal fistulotomy
- 4912 Anal fistulectomy
- 4921 Anoscopy
- 4922 Biopsy of perianal tissue
- 4923 Biopsy of anus
- 4929 Other diagnostic procedures on anus and perianal tissue
- 4931 Endoscopic excision or destruction of lesion or tissue of anus
- 4939 Other local excision or destruction of lesion or tissue of anus
- 4941 Reduction of hemorrhoids
- 4942 Injection of hemorrhoids
- 4943 Cauterization of hemorrhoids
- 4944 Destruction of hemorrhoids by cryotherapy
- 4945 Ligation of hemorrhoids
- 4946 Excision of hemorrhoids
- 4947 Evacuation of thrombosed hemorrhoids
- 4949 Other procedures on hemorrhoids
- 4951 Left lateral anal sphincterotomy
- 4952 Posterior anal sphincterotomy
- 4959 Other anal sphincterotomy

- 496 Excision of anus
- 4971 Suture of laceration of anus
- 4972 Anal cerclage
- 4973 Closure of anal fistula
- 4974 Gracilis muscle transplant for anal incontinence
- 4975 Implantation or revision of artificial anal sphincter
- 4976 Removal of artificial anal sphincter
- 4979 Other repair of anal sphincter
- 4991 Incision of anal septum
- 4992 Insertion of subcutaneous electrical anal stimulator
- 4993 Other incision of anus
- 4994 Reduction of anal prolapse
- 4995 Control of (postoperative) hemorrhage of anus
- 4999 Other operations on anus
- 500 Hepatotomy
 - 5011 Closed (percutaneous) [needle] biopsy of liver
 - 5012 Open biopsy of liver
 - 5013 Transjugular liver biopsy
 - 5014 Laparoscopic liver biopsy
 - 5019 Other diagnostic procedures on liver
 - 5021 Marsupialization of lesion of liver
 - 5022 Partial hepatectomy
 - 5023 Open ablation of liver lesion or tissue
 - 5024 Percutaneous ablation of liver lesion or tissue
 - 5025 Laparoscopic ablation of liver lesion or tissue
 - 5026 Other and unspecified ablation of liver lesion or tissue
 - 5029 Other destruction of lesion of liver
 - 503 Lobectomy of liver
 - 504 Total hepatectomy
 - 5051 Auxiliary liver transplant
 - 5059 Other transplant of liver
 - 5061 Closure of laceration of liver
 - 5069 Other repair of liver
 - 5091 Percutaneous aspiration of liver
 - 5092 Extracorporeal hepatic assistance
 - 5093 Localized perfusion of liver

- 5094 Other injection of therapeutic substance into liver
- 5099 Other operations on liver
- 5101 Percutaneous aspiration of gallbladder
- 5102 Trocar cholecystostomy
- 5103 Other cholecystostomy
- 5104 Other cholecystotomy
- 5110 Endoscopic retrograde cholangiopancreatography [ERCP]
- 5111 Endoscopic retrograde cholangiography [ERC]
- 5112 Percutaneous biopsy of gallbladder or bile ducts
- 5113 Open biopsy of gallbladder or bile ducts
- 5114 Other closed [endoscopic] biopsy of biliary duct or sphincter of Oddi
- 5115 Pressure measurement of sphincter of Oddi
- 5119 Other diagnostic procedures on biliary tract
- 5121 Other partial cholecystectomy
- 5122 Cholecystectomy
- 5123 Laparoscopic cholecystectomy
- 5124 Laparoscopic partial cholecystectomy
- 5131 Anastomosis of gallbladder to hepatic ducts
- 5132 Anastomosis of gallbladder to intestine
- 5133 Anastomosis of gallbladder to pancreas
- 5134 Anastomosis of gallbladder to stomach
- 5135 Other gallbladder anastomosis
- 5136 Choledochoenterostomy
- 5137 Anastomosis of hepatic duct to gastrointestinal tract
- 5139 Other bile duct anastomosis
- 5141 Common duct exploration for removal of calculus
- 5142 Common duct exploration for relief of other obstruction
- 5143 Insertion of choledochohepatic tube for decompression
- 5149 Incision of other bile ducts for relief of obstruction
- 5151 Exploration of common duct
- 5159 Other incision of other bile duct
- 5161 Excision of cystic duct remnant
- 5162 Excision of ampulla of Vater (with reimplantation of common duct)
- 5163 Other excision of common duct
- 5164 Endoscopic excision or destruction of lesion of biliary ducts or sphincter of Oddi
- 5169 Excision of other bile duct

- 5171 Simple suture of common bile duct
- 5172 Choledochoplasty
- 5179 Repair of other bile ducts
- 5181 Dilatation of sphincter of Oddi
- 5182 Pancreatic sphincterotomy
- 5183 Pancreatic sphincteroplasty
- 5184 Endoscopic dilation of ampulla and biliary duct
- 5185 Endoscopic sphincterotomy and papillotomy
- 5186 Endoscopic insertion of nasobiliary drainage tube
- 5187 Endoscopic insertion of stent (tube) into bile duct
- 5188 Endoscopic removal of stone(s) from biliary tract
- 5189 Other operations on sphincter of Oddi
- 5191 Repair of laceration of gallbladder
- 5192 Closure of cholecystostomy
- 5193 Closure of other biliary fistula
- 5194 Revision of anastomosis of biliary tract
- 5195 Removal of prosthetic device from bile duct
- 5196 Percutaneous extraction of common duct stones
- 5198 Other percutaneous procedures on biliary tract
- 5199 Other operations on biliary tract
- 5201 Drainage of pancreatic cyst by catheter
- 5209 Other pancreatectomy
- 5211 Closed [aspiration] [needle] [percutaneous] biopsy of pancreas
- 5212 Open biopsy of pancreas
- 5213 Endoscopic retrograde pancreatography [ERP]
- 5214 Closed [endoscopic] biopsy of pancreatic duct
- 5219 Other diagnostic procedures on pancreas
- 5221 Endoscopic excision or destruction of lesion or tissue of pancreatic duct
- 5222 Other excision or destruction of lesion or tissue of pancreas or pancreatic duct
- 523 Marsupialization of pancreatic cyst
- 524 Internal drainage of pancreatic cyst
- 5251 Proximal pancreatectomy
- 5252 Distal pancreatectomy
- 5253 Radical subtotal pancreatectomy
- 5259 Other partial pancreatectomy
- 526 Total pancreatectomy

- 527 Radical pancreaticoduodenectomy
- 5280 Pancreatic transplant, not otherwise specified
- 5281 Reimplantation of pancreatic tissue
- 5282 Homotransplant of pancreas
- 5283 Heterotransplant of pancreas
- 5284 Autotransplantation of cells of Islets of Langerhans
- 5285 Allotransplantation of cells of Islets of Langerhans
- 5286 Transplantation of cells of Islets of Langerhans, not otherwise specified
- 5292 Cannulation of pancreatic duct
- 5293 Endoscopic insertion of stent (tube) into pancreatic duct
- 5294 Endoscopic removal of stone(s) from pancreatic duct
- 5295 Other repair of pancreas
- 5296 Anastomosis of pancreas
- 5297 Endoscopic insertion of nasopancreatic drainage tube
- 5298 Endoscopic dilation of pancreatic duct
- 5299 Other operations on pancreas
- 5300 Unilateral repair of inguinal hernia, not otherwise specified
- 5301 Other and open repair of direct inguinal hernia
- 5302 Other and open repair of indirect inguinal hernia
- 5303 Other and open repair of direct inguinal hernia with graft or prosthesis
- 5304 Other and open repair of indirect inguinal hernia with graft or prosthesis
- 5305 Repair of inguinal hernia with graft or prosthesis, not otherwise specified
- 5310 Bilateral repair of inguinal hernia, not otherwise specified
- 5311 Other and open bilateral repair of direct inguinal hernia
- 5312 Other and open bilateral repair of indirect inguinal hernia
- 5313 Other and open bilateral repair of inguinal hernia, one direct and one indirect
- 5314 Other and open bilateral repair of direct inguinal hernia with graft or prosthesis
- 5315 Other and open bilateral repair of indirect inguinal hernia with graft or prosthesis
- 5316 Other and open bilateral repair of inguinal hernia, one direct and one indirect, with graft or prosthesis
- 5317 Bilateral inguinal hernia repair with graft or prosthesis, not otherwise specified
- 5321 Unilateral repair of femoral hernia with graft or prosthesis
- 5329 Other unilateral femoral herniorrhaphy
- 5331 Bilateral repair of femoral hernia with graft or prosthesis
- 5339 Other bilateral femoral herniorrhaphy
- 5341 Other and open repair of umbilical hernia with graft or prosthesis

- 5342 Laparoscopic repair of umbilical hernia with graft or prosthesis
- 5343 Other laparoscopic umbilical herniorrhaphy
- 5349 Other open umbilical herniorrhaphy
- 5351 Incisional hernia repair
- 5359 Repair of other hernia of anterior abdominal wall
- 5361 Other open incisional hernia repair with graft or prosthesis
- 5362 Laparoscopic incisional hernia repair with graft or prosthesis
- 5363 Other laparoscopic repair of other hernia of anterior abdominal wall with graft or prosthesis
- 5369 Other and open repair of other hernia of anterior abdominal wall with graft or prosthesis
- 5371 Laparoscopic repair of diaphragmatic hernia, abdominal approach
- 5372 Other and open repair of diaphragmatic hernia, abdominal approach
- 5375 Repair of diaphragmatic hernia, abdominal approach, not otherwise specified
- 5380 Repair of diaphragmatic hernia with thoracic approach, not otherwise specified
- 5381 Plication of the diaphragm
- 5382 Repair of parasternal hernia
- 5383 Laparoscopic repair of diaphragmatic hernia, with thoracic approach
- 5384 Other and open repair of diaphragmatic hernia, with thoracic approach
- 539 Other hernia repair
- 540 Incision of abdominal wall
- 5411 Exploratory laparotomy
- 5412 Reopening of recent laparotomy site
- 5419 Other laparotomy
- 5421 Laparoscopy
- 5422 Biopsy of abdominal wall or umbilicus
- 5423 Biopsy of peritoneum
- 5424 Closed [percutaneous] [needle] biopsy of intra-abdominal mass
- 5425 Peritoneal lavage
- 5429 Other diagnostic procedures on abdominal region
- 543 Excision or destruction of lesion or tissue of abdominal wall or umbilicus
- 544 Excision or destruction of peritoneal tissue
- 5451 Laparoscopic lysis of peritoneal adhesions
- 5459 Other lysis of peritoneal adhesions
- 5461 Reclosure of postoperative disruption of abdominal wall
- 5462 Delayed closure of granulating abdominal wound
- 5463 Other suture of abdominal wall
- 5464 Suture of peritoneum

- 5471 Repair of gastroschisis
- 5472 Other repair of abdominal wall
- 5473 Other repair of peritoneum
- 5474 Other repair of omentum
- 5475 Other repair of mesentery
- 5491 Percutaneous abdominal drainage
- 5492 Removal of foreign body from peritoneal cavity
- 5493 Creation of cutaneoperitoneal fistula
- 5494 Creation of peritoneovascular shunt
- 5495 Incision of peritoneum
- 5496 Injection of air into peritoneal cavity
- 5497 Injection of locally-acting therapeutic substance into peritoneal cavity
- 5498 Peritoneal dialysis
- 5499 Other operations of abdominal region
- 5501 Nephrotomy
- 5502 Nephrostomy
- 5503 Percutaneous nephrostomy without fragmentation
- 5504 Percutaneous nephrostomy with fragmentation
- 5511 Pyelotomy
- 5512 Pyelostomy
- 5521 Nephroscopy
- 5522 Pyeloscopy
- 5523 Closed [percutaneous] [needle] biopsy of kidney
- 5524 Open biopsy of kidney
- 5529 Other diagnostic procedures on kidney
- 5531 Marsupialization of kidney lesion
- 5532 Open ablation of renal lesion or tissue
- 5533 Percutaneous ablation of renal lesion or tissue
- 5534 Laparoscopic ablation of renal lesion or tissue
- 5535 Other and unspecified ablation of renal lesion or tissue
- 5539 Other local destruction or excision of renal lesion or tissue
- 554 Partial nephrectomy
- 5551 Nephroureterectomy
- 5552 Nephrectomy of remaining kidney
- 5553 Removal of transplanted or rejected kidney
- 5554 Bilateral nephrectomy

- 5561 Renal autotransplantation
- 5569 Other kidney transplantation
- 557 Nephropexy
- 5581 Suture of laceration of kidney
- 5582 Closure of nephrostomy and pyelostomy
- 5583 Closure of other fistula of kidney
- 5584 Reduction of torsion of renal pedicle
- 5585 Symphysiotomy for horseshoe kidney
- 5586 Anastomosis of kidney
- 5587 Correction of ureteropelvic junction
- 5589 Other repair of kidney
- 5591 Decapsulation of kidney
- 5592 Percutaneous aspiration of kidney (pelvis)
- 5593 Replacement of nephrostomy tube
- 5594 Replacement of pyelostomy tube
- 5595 Local perfusion of kidney
- 5596 Other injection of therapeutic substance into kidney
- 5597 Implantation or replacement of mechanical kidney
- 5598 Removal of mechanical kidney
- 5599 Other operations on kidney
- 560 Transurethral removal of obstruction from ureter and renal pelvis
- 561 Ureteral meatotomy
- 562 Ureterotomy
- 5631 Ureteroscopy
- 5632 Closed percutaneous biopsy of ureter
- 5633 Closed endoscopic biopsy of ureter
- 5634 Open biopsy of ureter
- 5635 Endoscopy (cystoscopy) (looposcopy) of ileal conduit
- 5639 Other diagnostic procedures on ureter
- 5640 Ureterectomy, not otherwise specified
- 5641 Partial ureterectomy
- 5642 Total ureterectomy
- 5651 Formation of cutaneous uretero-ileostomy
- 5652 Revision of cutaneous uretero-ileostomy
- 5661 Formation of other cutaneous ureterostomy
- 5662 Revision of other cutaneous ureterostomy

- 5671 Urinary diversion to intestine
- 5672 Revision of ureterointestinal anastomosis
- 5673 Nephrocystanastomosis, not otherwise specified
- 5674 Ureteroneocystostomy
- 5675 Transureteroureterostomy
- 5679 Other anastomosis or bypass of ureter
- 5681 Lysis of intraluminal adhesions of ureter
- 5682 Suture of laceration of ureter
- 5683 Closure of ureterostomy
- 5684 Closure of other fistula of ureter
- 5685 Ureteropexy
- 5686 Removal of ligature from ureter
- 5689 Other repair of ureter
- 5691 Dilation of ureteral meatus
- 5692 Implantation of electronic ureteral stimulator
- 5693 Replacement of electronic ureteral stimulator
- 5694 Removal of electronic ureteral stimulator
- 5695 Ligation of ureter
- 5699 Other operations on ureter
- 570 Transurethral clearance of bladder
- 5711 Percutaneous aspiration of bladder
- 5712 Lysis of intraluminal adhesions with incision into bladder
- 5717 Percutaneous cystostomy
- 5718 Other suprapubic cystostomy
- 5719 Other cystotomy
- 5721 Vesicostomy
- 5722 Revision or closure of vesicostomy
- 5731 Cystoscopy through artificial stoma
- 5732 Other cystoscopy
- 5733 Closed [transurethral] biopsy of bladder
- 5734 Open biopsy of bladder
- 5739 Other diagnostic procedures on bladder
- 5741 Transurethral lysis of intraluminal adhesions
- 5749 Other transurethral excision or destruction of lesion or tissue of bladder
- 5751 Excision of urachus
- 5759 Open excision or destruction of other lesion or tissue of bladder

- 576 Partial cystectomy
- 5771 Radical cystectomy
- 5779 Other total cystectomy
- 5781 Suture of laceration of bladder
- 5782 Closure of cystostomy
- 5783 Repair of fistula involving bladder and intestine
- 5784 Repair of other fistula of bladder
- 5785 Cystourethroplasty and plastic repair of bladder neck
- 5786 Repair of bladder exstrophy
- 5787 Reconstruction of urinary bladder
- 5788 Other anastomosis of bladder
- 5789 Other repair of bladder
- 5791 Sphincterotomy of bladder
- 5792 Dilation of bladder neck
- 5793 Control of (postoperative) hemorrhage of bladder
- 5794 Insertion of indwelling urinary catheter
- 5795 Replacement of indwelling urinary catheter
- 5796 Implantation of electronic bladder stimulator
- 5797 Replacement of electronic bladder stimulator
- 5798 Removal of electronic bladder stimulator
- 5799 Other operations on bladder
- 580 Urethrotomy
- 581 Urethral meatotomy
- 5821 Perineal urethroscopy
- 5822 Other urethroscopy
- 5823 Biopsy of urethra
- 5824 Biopsy of periurethral tissue
- 5829 Other diagnostic procedures on urethra and periurethral tissue
- 5831 Endoscopic excision or destruction of lesion or tissue of urethra
- 5839 Other local excision or destruction of lesion or tissue of urethra
- 5841 Suture of laceration of urethra
- 5842 Closure of urethrostomy
- 5843 Closure of other fistula of urethra
- 5844 Reanastomosis of urethra
- 5845 Repair of hypospadias or epispadias
- 5846 Other reconstruction of urethra

- 5847 Urethral meatoplasty
- 5849 Other repair of urethra
- 585 Release of urethral stricture
- 586 Dilation of urethra
- 5891 Incision of periurethral tissue
- 5892 Excision of periurethral tissue
- 5893 Implantation of artificial urinary sphincter [AUS]
- 5899 Other operations on urethra and periurethral tissue
- 5900 Retroperitoneal dissection, not otherwise specified
- 5902 Other lysis of perirenal or periureteral adhesions
- 5903 Laparoscopic lysis of perirenal or periureteral adhesions
- 5909 Other incision of perirenal or periureteral tissue
- 5911 Other lysis of perivesical adhesions
- 5912 Laparoscopic lysis of perivesical adhesions
- 5919 Other incision of perivesical tissue
- 5921 Biopsy of perirenal or perivesical tissue
- 5929 Other diagnostic procedures on perirenal tissue, perivesical tissue, and retroperitoneum
- 593 Plication of urethrovesical junction
- 594 Suprapubic sling operation
- 595 Retropubic urethral suspension
- 596 Paraurethral suspension
- 5971 Levator muscle operation for urethrovesical suspension
- 5972 Injection of implant into urethra and/or bladder neck
- 5979 Other repair of urinary stress incontinence
- 598 Ureteral catheterization
- 5991 Excision of perirenal or perivesical tissue
- 5992 Other operations on perirenal or perivesical tissue
- 5993 Replacement of ureterostomy tube
- 5994 Replacement of cystostomy tube
- 5995 Ultrasonic fragmentation of urinary stones
- 5999 Other operations on urinary system
- 600 Incision of prostate
- 6011 Closed [percutaneous] [needle] biopsy of prostate
- 6012 Open biopsy of prostate
- 6013 Closed [percutaneous] biopsy of seminal vesicles
- 6014 Open biopsy of seminal vesicles

- 6015 Biopsy of periprostatic tissue
- 6018 Other diagnostic procedures on prostate and periprostatic tissue
- 6019 Other diagnostic procedures on seminal vesicles
- 6021 Transurethral (ultrasound) guided laser induced prostatectomy (TULIP)
- 6029 Other transurethral prostatectomy
- 603 Suprapubic prostatectomy
- 604 Retropubic prostatectomy
- 605 Radical prostatectomy
- 6061 Local excision of lesion of prostate
- 6062 Perineal prostatectomy
- 6069 Other prostatectomy
- 6071 Percutaneous aspiration of seminal vesicle
- 6072 Incision of seminal vesicle
- 6073 Excision of seminal vesicle
- 6079 Other operations on seminal vesicles
- 6081 Incision of periprostatic tissue
- 6082 Excision of periprostatic tissue
- 6091 Percutaneous aspiration of prostate
- 6092 Injection into prostate
- 6093 Repair of prostate
- 6094 Control of (postoperative) hemorrhage of prostate
- 6095 Transurethral balloon dilation of the prostatic urethra
- 6096 Transurethral destruction of prostate tissue by microwave thermotherapy
- 6097 Other transurethral destruction of prostate tissue by other thermotherapy
- 6099 Other operations on prostate
- 610 Incision and drainage of scrotum and tunica vaginalis
- 6111 Biopsy of scrotum or tunica vaginalis
- 6119 Other diagnostic procedures on scrotum and tunica vaginalis
- 612 Excision of hydrocele (of tunica vaginalis)
- 613 Excision or destruction of lesion or tissue of scrotum
- 6141 Suture of laceration of scrotum and tunica vaginalis
- 6142 Repair of scrotal fistula
- 6149 Other repair of scrotum and tunica vaginalis
- 6191 Percutaneous aspiration of tunica vaginalis
- 6192 Excision of lesion of tunica vaginalis other than hydrocele
- 6199 Other operations on scrotum and tunica vaginalis

- 620 Incision of testis
- 6211 Closed [percutaneous] [needle] biopsy of testis
- 6212 Open biopsy of testis
- 6219 Other diagnostic procedures on testes
- 622 Excision or destruction of testicular lesion
- 623 Unilateral orchietomy
- 6241 Removal of both testes at same operative episode
- 6242 Removal of remaining testis
- 625 Orchiopexy
- 6261 Suture of laceration of testis
- 6269 Other repair of testis
- 627 Insertion of testicular prosthesis
- 6291 Aspiration of testis
- 6292 Injection of therapeutic substance into testis
- 6299 Other operations on testes
- 6301 Biopsy of spermatic cord, epididymis, or vas deferens
- 6309 Other diagnostic procedures on spermatic cord, epididymis, and vas deferens
- 631 Excision of varicocele and hydrocele of spermatic cord
- 632 Excision of cyst of epididymis
- 633 Excision of other lesion or tissue of spermatic cord and epididymis
- 634 Epididymectomy
- 6351 Suture of laceration of spermatic cord and epididymis
- 6352 Reduction of torsion of testis or spermatic cord
- 6353 Transplantation of spermatic cord
- 6359 Other repair of spermatic cord and epididymis
- 636 Vasotomy
- 6370 Male sterilization procedure, not otherwise specified
- 6371 Ligation of vas deferens
- 6372 Ligation of spermatic cord
- 6373 Vasectomy
- 6381 Suture of laceration of vas deferens and epididymis
- 6382 Reconstruction of surgically divided vas deferens
- 6383 Epididymovasostomy
- 6384 Removal of ligature from vas deferens
- 6385 Removal of valve from vas deferens
- 6389 Other repair of vas deferens and epididymis

- 6391 Aspiration of spermatocele
- 6392 Epididymotomy
- 6393 Incision of spermatic cord
- 6394 Lysis of adhesions of spermatic cord
- 6395 Insertion of valve in vas deferens
- 6399 Other operations on spermatic card, epididymis, and vas deferens
- 640 Circumcision
- 6411 Biopsy of penis
- 6419 Other diagnostic procedures on penis
- 642 Local excision or destruction of lesion of penis
- 643 Amputation of penis
- 6441 Suture of laceration of penis
- 6442 Release of chordee
- 6443 Construction of penis
- 6444 Reconstruction of penis
- 6445 Replantation of penis
- 6449 Other repair of penis
- 645 Operations for sex transformation, not elsewhere classified
- 6491 Dorsal or lateral slit of prepuce
- 6492 Incision of penis
- 6493 Division of penile adhesions
- 6494 Fitting of external prosthesis of penis
- 6495 Insertion or replacement of non-inflatable penile prosthesis
- 6496 Removal of internal prosthesis of penis
- 6497 Insertion or replacement of inflatable penile prosthesis
- 6498 Other operations on penis
- 6499 Other operations on male genital organs
- 6501 Laparoscopic oophorotomy
- 6509 Other oophorotomy
- 6511 Aspiration biopsy of ovary
- 6512 Other biopsy of ovary
- 6513 Laparoscopic biopsy of ovary
- 6514 Other laparoscopic diagnostic procedures on ovaries
- 6519 Other diagnostic procedures on ovaries
- 6521 Marsupialization of ovarian cyst
- 6522 Wedge resection of ovary

- 6523 Laparoscopic marsupialization of ovarian cyst
- 6524 Laparoscopic wedge resection of ovary
- 6525 Other laparoscopic local excision or destruction of ovary
- 6529 Other local excision or destruction of ovary
- 6531 Laparoscopic unilateral oophorectomy
- 6539 Other unilateral oophorectomy
- 6541 Laparoscopic unilateral salpingo-oophorectomy
- 6549 Other unilateral salpingo-oophorectomy
- 6551 Other removal of both ovaries at same operative episode
- 6552 Other removal of remaining ovary
- 6553 Laparoscopic removal of both ovaries at same operative episode
- 6554 Laparoscopic removal of remaining ovary
- 6561 Other removal of both ovaries and tubes at same operative episode
- 6562 Other removal of remaining ovary and tube
- 6563 Laparoscopic removal of both ovaries and tubes at same operative episode
- 6564 Laparoscopic removal of remaining ovary and tube
- 6571 Other simple suture of ovary
- 6572 Other reimplantation of ovary
- 6573 Other salpingo-oophoroplasty
- 6574 Laparoscopic simple suture of ovary
- 6575 Laparoscopic reimplantation of ovary
- 6576 Laparoscopic salpingo-oophoroplasty
- 6579 Other repair of ovary
- 6581 Laparoscopic lysis of adhesions of ovary and fallopian tube
- 6589 Other lysis of adhesions of ovary and fallopian tube
- 6591 Aspiration of ovary
- 6592 Transplantation of ovary
- 6593 Manual rupture of ovarian cyst
- 6594 Ovarian denervation
- 6595 Release of torsion of ovary
- 6599 Other operations on ovary
- 6601 Salpingotomy
- 6602 Salpingostomy
- 6611 Biopsy of fallopian tube
- 6619 Other diagnostic procedures on fallopian tubes
- 6621 Bilateral endoscopic ligation and crushing of fallopian tubes

- 6622 Bilateral endoscopic ligation and division of fallopian tubes
- 6629 Other bilateral endoscopic destruction or occlusion of fallopian tubes
- 6631 Other bilateral ligation and crushing of fallopian tubes
- 6632 Other bilateral ligation and division of fallopian tubes
- 6639 Other bilateral destruction or occlusion of fallopian tubes
- 664 Total unilateral salpingectomy
- 6651 Removal of both fallopian tubes at same operative episode
- 6652 Removal of remaining fallopian tube
- 6661 Excision or destruction of lesion of fallopian tube
- 6662 Salpingectomy with removal of tubal pregnancy
- 6663 Bilateral partial salpingectomy, not otherwise specified
- 6669 Other partial salpingectomy
- 6671 Simple suture of fallopian tube
- 6672 Salpingo-oophorostomy
- 6673 Salpingo-salpingostomy
- 6674 Salpingo-uterostomy
- 6679 Other repair of fallopian tube
- 668 Insufflation of fallopian tube
- 6691 Aspiration of fallopian tube
- 6692 Unilateral destruction or occlusion of fallopian tube
- 6693 Implantation or replacement of prosthesis of fallopian tube
- 6694 Removal of prosthesis of fallopian tube
- 6695 Insufflation of therapeutic agent into fallopian tubes
- 6696 Dilation of fallopian tube
- 6697 Burying of fimbriae in uterine wall
- 6699 Other operations on fallopian tubes
- 670 Dilation of cervical canal
- 6711 Endocervical biopsy
- 6712 Other cervical biopsy
- 6719 Other diagnostic procedures on cervix
- 672 Conization of cervix
- 6731 Marsupialization of cervical cyst
- 6732 Destruction of lesion of cervix by cauterization
- 6733 Destruction of lesion of cervix by cryosurgery
- 6739 Other excision or destruction of lesion or tissue of cervix
- 674 Amputation of cervix

- 6751 Transabdominal cerclage of cervix
- 6759 Other repair of internal cervical os
- 6761 Suture of laceration of cervix
- 6762 Repair of fistula of cervix
- 6769 Other repair of cervix
- 680 Hysterotomy
- 6811 Digital examination of uterus
- 6812 Hysteroscopy
- 6813 Open biopsy of uterus
- 6814 Open biopsy of uterine ligaments
- 6815 Closed biopsy of uterine ligaments
- 6816 Closed biopsy of uterus
- 6819 Other diagnostic procedures on uterus and supporting structures
- 6821 Division of endometrial synechiae
- 6822 Incision or excision of congenital septum of uterus
- 6823 Endometrial ablation
- 6824 Uterine artery embolization [UAE] with coils
- 6825 Uterine artery embolization [UAE] without coils
- 6829 Other excision or destruction of lesion of uterus
- 6831 Laparoscopic supracervical hysterectomy [LSH]
- 6839 Other and unspecified subtotal abdominal hysterectomy
- 6841 Laparoscopic total abdominal hysterectomy
- 6849 Other and unspecified total abdominal hysterectomy
- 6851 Laparoscopically assisted vaginal hysterectomy (LAVH)
- 6859 Other and unspecified vaginal hysterectomy
- 6861 Laparoscopic radical abdominal hysterectomy
- 6869 Other and unspecified radical abdominal hysterectomy
- 6871 Laparoscopic radical vaginal hysterectomy [LRVH]
- 6879 Other and unspecified radical vaginal hysterectomy
- 688 Pelvic evisceration
- 689 Other and unspecified hysterectomy
- 6901 Dilation and curettage for termination of pregnancy
- 6902 Dilation and curettage following delivery or abortion
- 6909 Other dilation and curettage
- 6919 Other excision or destruction of uterus and supporting structures
- 6921 Interposition operation

- 6922 Other uterine suspension
- 6923 Vaginal repair of chronic inversion of uterus
- 6929 Other repair of uterus and supporting structures
- 693 Paracervical uterine denervation
- 6941 Suture of laceration of uterus
- 6942 Closure of fistula of uterus
- 6949 Other repair of uterus
- 6951 Aspiration curettage of uterus for termination of pregnancy
- 6952 Aspiration curettage following delivery or abortion
- 6959 Other aspiration curettage of uterus
- 696 Menstrual extraction or regulation
- 697 Insertion of intrauterine contraceptive device
- 6991 Insertion of therapeutic device into uterus
- 6992 Artificial insemination
- 6993 Insertion of laminaria
- 6994 Manual replacement of inverted uterus
- 6995 Incision of cervix
- 6996 Removal of cerclage material from cervix
- 6997 Removal of other penetrating foreign body from cervix
- 6998 Other operations on supporting structures of uterus
- 6999 Other operations on cervix and uterus
- 700 Culdocentesis
- 7011 Hymenotomy
- 7012 Culdotomy
- 7013 Lysis of intraluminal adhesions of vagina
- 7014 Other vaginotomy
- 7021 Vaginoscopy
- 7022 Culdoscopy
- 7023 Biopsy of cul-de-sac
- 7024 Vaginal biopsy
- 7029 Other diagnostic procedures on vagina and cul-de-sac
- 7031 Hymenectomy
- 7032 Excision or destruction of lesion of cul-de-sac
- 7033 Excision or destruction of lesion of vagina
- 704 Obliteration and total excision of vagina
- 7050 Repair of cystocele and rectocele

- 7051 Repair of cystocele
- 7052 Repair of rectocele
- 7053 Repair of cystocele and rectocele with graft or prosthesis
- 7054 Repair of cystocele with graft or prosthesis
- 7055 Repair of rectocele with graft or prosthesis
- 7061 Vaginal construction
- 7062 Vaginal reconstruction
- 7063 Vaginal construction with graft or prosthesis
- 7064 Vaginal reconstruction with graft or prosthesis
- 7071 Suture of laceration of vagina
- 7072 Repair of colovaginal fistula
- 7073 Repair of rectovaginal fistula
- 7074 Repair of other vaginoenteric fistula
- 7075 Repair of other fistula of vagina
- 7076 Hymenorrhaphy
- 7077 Vaginal suspension and fixation
- 7078 Vaginal suspension and fixation with graft or prosthesis
- 7079 Other repair of vagina
- 708 Obliteration of vaginal vault
- 7091 Other operations on vagina
- 7092 Other operations on cul-de-sac
- 7093 Other operations on cul-de-sac with graft or prosthesis
- 7094 Insertion of biological graft
- 7095 Insertion of synthetic graft or prosthesis
- 7101 Lysis of vulvar adhesions
- 7109 Other incision of vulva and perineum
- 7111 Biopsy of vulva
- 7119 Other diagnostic procedures on vulva
- 7121 Percutaneous aspiration of Bartholin's gland (cyst)
- 7122 Incision of Bartholin's gland (cyst)
- 7123 Marsupialization of Bartholin's gland (cyst)
- 7124 Excision or other destruction of Bartholin's gland (cyst)
- 7129 Other operations on Bartholin's gland
- 713 Other local excision or destruction of vulva and perineum
- 714 Operations on clitoris
- 715 Radical vulvectomy

- 7161 Unilateral vulvectomy
- 7162 Bilateral vulvectomy
- 7171 Suture of laceration of vulva or perineum
- 7172 Repair of fistula of vulva or perineum
- 7179 Other repair of vulva and perineum
- 718 Other operations on vulva
- 719 Other operations on female genital organs
- 720 Low forceps operation
- 721 Low forceps operation with episiotomy
- 7221 Mid forceps operation with episiotomy
- 7229 Other mid forceps operation
- 7231 High forceps operation with episiotomy
- 7239 Other high forceps operation
- 724 Forceps rotation of fetal head
- 7251 Partial breech extraction with forceps to aftercoming head
- 7252 Other partial breech extraction
- 7253 Total breech extraction with forceps to aftercoming head
- 7254 Other total breech extraction
- 726 Forceps application to aftercoming head
- 7271 Vacuum extraction with episiotomy
- 7279 Other vacuum extraction
- 728 Other specified instrumental delivery
- 729 Unspecified instrumental delivery
- 7301 Induction of labor by artificial rupture of membranes
- 7309 Other artificial rupture of membranes
- 731 Other surgical induction of labor
- 7321 Internal and combined version without extraction
- 7322 Internal and combined version with extraction
- 733 Failed forceps
- 734 Medical induction of labor
- 7351 Manual rotation of fetal head
- 7359 Other manually assisted delivery
- 736 Episiotomy
- 738 Operations on fetus to facilitate delivery
- 7391 External version assisting delivery
- 7392 Replacement of prolapsed umbilical cord

- 7393 Incision of cervix to assist delivery
- 7394 Pubiotomy to assist delivery
- 7399 Other operations assisting delivery
- 740 Classical cesarean section
- 741 Low cervical cesarean section
- 742 Extraperitoneal cesarean section
- 743 Removal of extratubal ectopic pregnancy
- 744 Cesarean section of other specified type
- 7491 Hysterotomy to terminate pregnancy
- 7499 Other cesarean section of unspecified type
- 750 Intra-amniotic injection for abortion
- 751 Diagnostic amniocentesis
- 752 Intrauterine transfusion
- 7531 Amnioscopy
- 7532 Fetal EKG (scalp)
- 7533 Fetal blood sampling and biopsy
- 7534 Other fetal monitoring
- 7535 Other diagnostic procedures on fetus and amnion
- 7536 Correction of fetal defect
- 7537 Amnioinfusion
- 7538 Fetal pulse oximetry
- 754 Manual removal of retained placenta
- 7550 Repair of current obstetric laceration of uterus, not otherwise specified
- 7551 Repair of current obstetric laceration of cervix
- 7552 Repair of current obstetric laceration of corpus uteri
- 7561 Repair of current obstetric laceration of bladder and urethra
- 7562 Repair of current obstetric laceration of rectum and sphincter ani
- 7569 Repair of other current obstetric laceration
- 757 Manual exploration of uterine cavity, postpartum
- 758 Obstetric tamponade of uterus or vagina
- 7591 Evacuation of obstetrical incisional hematoma of perineum
- 7592 Evacuation of other hematoma of vulva or vagina
- 7593 Surgical correction of inverted uterus
- 7594 Immediate postpartum manual replacement of inverted uterus
- 7599 Other obstetric operations
- 7601 Sequestrectomy of facial bone

- 7609 Other incision of facial bone
- 7611 Biopsy of facial bone
- 7619 Other diagnostic procedures on facial bones and joints
- 762 Local excision or destruction of lesion of facial bone
- 7631 Partial mandibulectomy
- 7639 Partial ostectomy of other facial bone
- 7641 Total mandibulectomy with synchronous reconstruction
- 7642 Other total mandibulectomy
- 7643 Other reconstruction of mandible
- 7644 Total ostectomy of other facial bone with synchronous reconstruction
- 7645 Other total ostectomy of other facial bone
- 7646 Other reconstruction of other facial bone
- 765 Temporomandibular arthroplasty
- 7661 Closed osteoplasty [osteotomy] of mandibular ramus
- 7662 Open osteoplasty [osteotomy] of mandibular ramus
- 7663 Osteoplasty [osteotomy] of body of mandible
- 7664 Other orthognathic surgery on mandible
- 7665 Segmental osteoplasty [osteotomy] of maxilla
- 7666 Total osteoplasty [osteotomy] of maxilla
- 7667 Reduction genioplasty
- 7668 Augmentation genioplasty
- 7669 Other facial bone repair
- 7670 Reduction of facial fracture, not otherwise specified
- 7671 Closed reduction of malar and zygomatic fracture
- 7672 Open reduction of malar and zygomatic fracture
- 7673 Closed reduction of maxillary fracture
- 7674 Open reduction of maxillary fracture
- 7675 Closed reduction of mandibular fracture
- 7676 Open reduction of mandibular fracture
- 7677 Open reduction of alveolar fracture
- 7678 Other closed reduction of facial fracture
- 7679 Other open reduction of facial fracture
- 7691 Bone graft to facial bone
- 7692 Insertion of synthetic implant in facial bone
- 7693 Closed reduction of temporomandibular dislocation
- 7694 Open reduction of temporomandibular dislocation

- 7695 Other manipulation of temporomandibular joint
- 7696 Injection of therapeutic substance into temporomandibular joint
- 7697 Removal of internal fixation device from facial bone
- 7699 Other operations on facial bones and joints
- 7700 Sequestrectomy, unspecified site
- 7701 Sequestrectomy, scapula, clavicle, and thorax [ribs and sternum]
- 7702 Sequestrectomy, humerus
- 7703 Sequestrectomy, radius and ulna
- 7704 Sequestrectomy, carpals and metacarpals
- 7705 Sequestrectomy, femur
- 7706 Sequestrectomy, patella
- 7707 Sequestrectomy, tibia and fibula
- 7708 Sequestrectomy, tarsals and metatarsals
- 7709 Sequestrectomy, other bones
- 7710 Other incision of bone without division, unspecified site
- 7711 Other incision of bone without division, scapula, clavicle, and thorax [ribs and sternum]
- 7712 Other incision of bone without division, humerus
- 7713 Other incision of bone without division, radius and ulna
- 7714 Other incision of bone without division, carpals and metacarpals
- 7715 Other incision of bone without division, femur
- 7716 Other incision of bone without division, patella
- 7717 Other incision of bone without division, tibia and fibula
- 7718 Other incision of bone without division, tarsals and metatarsals
- 7719 Other incision of bone without division, other bones
- 7720 Wedge osteotomy, unspecified site
- 7721 Wedge osteotomy, scapula, clavicle, and thorax [ribs and sternum]
- 7722 Wedge osteotomy, humerus
- 7723 Wedge osteotomy, radius and ulna
- 7724 Wedge osteotomy, carpals and metacarpals
- 7725 Wedge osteotomy, femur
- 7726 Wedge osteotomy, patella
- 7727 Wedge osteotomy, tibia and fibula
- 7728 Wedge osteotomy, tarsals and metatarsals
- 7729 Wedge osteotomy, other bones
- 7730 Other division of bone, unspecified site
- 7731 Other division of bone, scapula, clavicle, and thorax [ribs and sternum]

- 7732 Other division of bone, humerus
- 7733 Other division of bone, radius and ulna
- 7734 Other division of bone, carpals and metacarpals
- 7735 Other division of bone, femur
- 7736 Other division of bone, patella
- 7737 Other division of bone, tibia and fibula
- 7738 Other division of bone, tarsals and metatarsals
- 7739 Other division of bone, other bones
- 7740 Biopsy of bone, unspecified site
- 7741 Biopsy of bone, scapula, clavicle, and thorax [ribs and sternum]
- 7742 Biopsy of bone, humerus
- 7743 Biopsy of bone, radius and ulna
- 7744 Biopsy of bone, carpals and metacarpals
- 7745 Biopsy of bone, femur
- 7746 Biopsy of bone, patella
- 7747 Biopsy of bone, tibia and fibula
- 7748 Biopsy of bone, tarsals and metatarsals
- 7749 Biopsy of bone, other bones
- 7751 Bunionectomy with soft tissue correction and osteotomy of the first metatarsal
- 7752 Bunionectomy with soft tissue correction and arthrodesis
- 7753 Other bunionectomy with soft tissue correction
- 7754 Excision or correction of bunionette
- 7756 Repair of hammer toe
- 7757 Repair of claw toe
- 7758 Other excision, fusion and repair of toes
- 7759 Other bunionectomy
- 7760 Local excision of lesion or tissue of bone, unspecified site
- 7761 Local excision of lesion or tissue of bone, scapula, clavicle, and thorax [ribs and sternum]
- 7762 Local excision of lesion or tissue of bone, humerus
- 7763 Local excision of lesion or tissue of bone, radius and ulna
- 7764 Local excision of lesion or tissue of bone, carpals and metacarpals
- 7765 Local excision of lesion or tissue of bone, femur
- 7766 Local excision of lesion or tissue of bone, patella
- 7767 Local excision of lesion or tissue of bone, tibia and fibula
- 7768 Local excision of lesion or tissue of bone, tarsals and metatarsals
- 7769 Local excision of lesion or tissue of bone, other bones

- 7770 Excision of bone for graft, unspecified site
- 7771 Excision of bone for graft, scapula, clavicle, and thorax [ribs and sternum]
- 7772 Excision of bone for graft, humerus
- 7773 Excision of bone for graft, radius and ulna
- 7774 Excision of bone for graft, carpals and metacarpals
- 7775 Excision of bone for graft, femur
- 7776 Excision of bone for graft, patella
- 7777 Excision of bone for graft, tibia and fibula
- 7778 Excision of bone for graft, tarsals and metatarsals
- 7779 Excision of bone for graft, other bones
- 7780 Other partial ostectomy, unspecified site
- 7781 Other partial ostectomy, scapula, clavicle, and thorax [ribs and sternum]
- 7782 Other partial ostectomy, humerus
- 7783 Other partial ostectomy, radius and ulna
- 7784 Other partial ostectomy, carpals and metacarpals
- 7785 Other partial ostectomy, femur
- 7786 Other partial ostectomy, patella
- 7787 Other partial ostectomy, tibia and fibula
- 7788 Other partial ostectomy, tarsals and metatarsals
- 7789 Other partial ostectomy, other bones
- 7790 Total ostectomy, unspecified site
- 7791 Total ostectomy, scapula, clavicle, and thorax [ribs and sternum]
- 7792 Total ostectomy, humerus
- 7793 Total ostectomy, radius and ulna
- 7794 Total ostectomy, carpals and metacarpals
- 7795 Total ostectomy, femur
- 7796 Total ostectomy, patella
- 7797 Total ostectomy, tibia and fibula
- 7798 Total ostectomy, tarsals and metatarsals
- 7799 Total ostectomy, other bones
- 7800 Bone graft, unspecified site
- 7801 Bone graft, scapula, clavicle, and thorax [ribs and sternum]
- 7802 Bone graft, humerus
- 7803 Bone graft, radius and ulna
- 7804 Bone graft, carpals and metacarpals
- 7805 Bone graft, femur

- 7806 Bone graft, patella
- 7807 Bone graft, tibia and fibula
- 7808 Bone graft, tarsals and metatarsals
- 7809 Bone graft, other bones
- 7810 Application of external fixator device, unspecified site
- 7811 Application of external fixator device, scapula, clavicle, and thorax [ribs and sternum]
- 7812 Application of external fixator device, humerus
- 7813 Application of external fixator device, radius and ulna
- 7814 Application of external fixator device, carpals and metacarpals
- 7815 Application of external fixator device, femur
- 7816 Application of external fixator device, patella
- 7817 Application of external fixator device, tibia and fibula
- 7818 Application of external fixator device, tarsals and metatarsals
- 7819 Application of external fixator device, other bones
- 7820 Limb shortening procedures, unspecified site
- 7822 Limb shortening procedures, humerus
- 7823 Limb shortening procedures, radius and ulna
- 7824 Limb shortening procedures, carpals and metacarpals
- 7825 Limb shortening procedures, femur
- 7827 Limb shortening procedures, tibia and fibula
- 7828 Limb shortening procedures, tarsals and metatarsals
- 7829 Limb shortening procedures, other bones
- 7830 Limb lengthening procedures, unspecified site
- 7832 Limb lengthening procedures, humerus
- 7833 Limb lengthening procedures, radius and ulna
- 7834 Limb lengthening procedures, carpals and metacarpals
- 7835 Limb lengthening procedures, femur
- 7837 Limb lengthening procedures, tibia and fibula
- 7838 Limb lengthening procedures, tarsals and metatarsals
- 7839 Limb lengthening procedures, other bones
- 7840 Other repair or plastic operations on bone, unspecified site
- 7841 Other repair or plastic operations on bone, scapula, clavicle, and thorax [ribs and sternum]
- 7842 Other repair or plastic operations on bone, humerus
- 7843 Other repair or plastic operations on bone, radius and ulna
- 7844 Other repair or plastic operations on bone, carpals and metacarpals
- 7845 Other repair or plastic operations on bone, femur

- 7846 Other repair or plastic operations on bone, patella
- 7847 Other repair or plastic operations on bone, tibia and fibula
- 7848 Other repair or plastic operations on bone, tarsals and metatarsals
- 7849 Other repair or plastic operations on bone, other bones
- 7850 Internal fixation of bone without fracture reduction, unspecified site
- 7851 Internal fixation of bone without fracture reduction, scapula, clavicle, and thorax [ribs and sternum]
- 7852 Internal fixation of bone without fracture reduction, humerus
- 7853 Internal fixation of bone without fracture reduction, radius and ulna
- 7854 Internal fixation of bone without fracture reduction, carpals and metacarpals
- 7855 Internal fixation of bone without fracture reduction, femur
- 7856 Internal fixation of bone without fracture reduction, patella
- 7857 Internal fixation of bone without fracture reduction, tibia and fibula
- 7858 Internal fixation of bone without fracture reduction, tarsals and metatarsals
- 7859 Internal fixation of bone without fracture reduction, other bones
- 7860 Removal of implanted devices from bone, unspecified site
- 7861 Removal of implanted devices from bone, scapula, clavicle, and thorax [ribs and sternum]
- 7862 Removal of implanted devices from bone, humerus
- 7863 Removal of implanted devices from bone, radius and ulna
- 7864 Removal of implanted devices from bone, carpals and metacarpals
- 7865 Removal of implanted devices from bone, femur
- 7866 Removal of implanted devices from bone, patella
- 7867 Removal of implanted devices from bone, tibia and fibula
- 7868 Removal of implanted devices from bone, tarsals and metatarsals
- 7869 Removal of implanted devices from bone, other bones
- 7870 Osteoclasis, unspecified site
- 7871 Osteoclasis, scapula, clavicle, and thorax [ribs and sternum]
- 7872 Osteoclasis, humerus
- 7873 Osteoclasis, radius and ulna
- 7874 Osteoclasis, carpals and metacarpals
- 7875 Osteoclasis, femur
- 7876 Osteoclasis, patella
- 7877 Osteoclasis, tibia and fibula
- 7878 Osteoclasis, tarsals and metatarsals
- 7879 Osteoclasis, other bones
- 7880 Diagnostic procedures on bone, not elsewhere classified, unspecified site

- 7881 Diagnostic procedures on bone, not elsewhere classified, scapula, clavicle, and thorax [ribs and sternum]
- 7882 Diagnostic procedures on bone, not elsewhere classified, humerus
- 7883 Diagnostic procedures on bone, not elsewhere classified, radius and ulna
- 7884 Diagnostic procedures on bone, not elsewhere classified, carpals and metacarpals
- 7885 Diagnostic procedures on bone, not elsewhere classified, femur
- 7886 Diagnostic procedures on bone, not elsewhere classified, patella
- 7887 Diagnostic procedures on bone, not elsewhere classified, tibia and fibula
- 7888 Diagnostic procedures on bone, not elsewhere classified, tarsals and metatarsals
- 7889 Diagnostic procedures on bone, not elsewhere classified, other bones
- 7890 Insertion of bone growth stimulator, unspecified site
- 7891 Insertion of bone growth stimulator, scapula, clavicle and thorax [ribs and sternum]
- 7892 Insertion of bone growth stimulator, humerus
- 7893 Insertion of bone growth stimulator, radius and ulna
- 7894 Insertion of bone growth stimulator, carpals and metacarpals
- 7895 Insertion of bone growth stimulator, femur
- 7896 Insertion of bone growth stimulator, patella
- 7897 Insertion of bone growth stimulator, tibia and fibula
- 7898 Insertion of bone growth stimulator, tarsals and metatarsals
- 7899 Insertion of bone growth stimulator, other bones
- 7900 Closed reduction of fracture without internal fixation, unspecified site
- 7901 Closed reduction of fracture without internal fixation, humerus
- 7902 Closed reduction of fracture without internal fixation, radius and ulna
- 7903 Closed reduction of fracture without internal fixation, carpals and metacarpals
- 7904 Closed reduction of fracture without internal fixation, phalanges of hand
- 7905 Closed reduction of fracture without internal fixation, femur
- 7906 Closed reduction of fracture without internal fixation, tibia and fibula
- 7907 Closed reduction of fracture without internal fixation, tarsals and metatarsals
- 7908 Closed reduction of fracture without internal fixation, phalanges of foot
- 7909 Closed reduction of fracture without internal fixation, other specified bone
- 7910 Closed reduction of fracture with internal fixation, unspecified site
- 7911 Closed reduction of fracture with internal fixation, humerus
- 7912 Closed reduction of fracture with internal fixation, radius and ulna
- 7913 Closed reduction of fracture with internal fixation, carpals and metacarpals
- 7914 Closed reduction of fracture with internal fixation, phalanges of hand
- 7915 Closed reduction of fracture with internal fixation, femur

- 7916 Closed reduction of fracture with internal fixation, tibia and fibula
- 7917 Closed reduction of fracture with internal fixation, tarsals and metatarsals
- 7918 Closed reduction of fracture with internal fixation, phalanges of foot
- 7919 Closed reduction of fracture with internal fixation, other specified bone
- 7920 Open reduction of fracture without internal fixation, unspecified site
- 7921 Open reduction of fracture without internal fixation, humerus
- 7922 Open reduction of fracture without internal fixation, radius and ulna
- 7923 Open reduction of fracture without internal fixation, carpals and metacarpals
- 7924 Open reduction of fracture without internal fixation, phalanges of hand
- 7925 Open reduction of fracture without internal fixation, femur
- 7926 Open reduction of fracture without internal fixation, tibia and fibula
- 7927 Open reduction of fracture without internal fixation, tarsals and metatarsals
- 7928 Open reduction of fracture without internal fixation, phalanges of foot
- 7929 Open reduction of fracture without internal fixation, other specified bone
- 7930 Open reduction of fracture with internal fixation, unspecified site
- 7931 Open reduction of fracture with internal fixation, humerus
- 7932 Open reduction of fracture with internal fixation, radius and ulna
- 7933 Open reduction of fracture with internal fixation, carpals and metacarpals
- 7934 Open reduction of fracture with internal fixation, phalanges of hand
- 7935 Open reduction of fracture with internal fixation, femur
- 7936 Open reduction of fracture with internal fixation, tibia and fibula
- 7937 Open reduction of fracture with internal fixation, tarsals and metatarsals
- 7938 Open reduction of fracture with internal fixation, phalanges of foot
- 7939 Open reduction of fracture with internal fixation, other specified bone
- 7940 Closed reduction of separated epiphysis, unspecified site
- 7941 Closed reduction of separated epiphysis, humerus
- 7942 Closed reduction of separated epiphysis, radius and ulna
- 7945 Closed reduction of separated epiphysis, femur
- 7946 Closed reduction of separated epiphysis, tibia and fibula
- 7949 Closed reduction of separated epiphysis, other specified bone
- 7950 Open reduction of separated epiphysis, unspecified site
- 7951 Open reduction of separated epiphysis, humerus
- 7952 Open reduction of separated epiphysis, radius and ulna
- 7955 Open reduction of separated epiphysis, femur
- 7956 Open reduction of separated epiphysis, tibia and fibula
- 7959 Open reduction of separated epiphysis, other specified bone

- 7960 Debridement of open fracture, unspecified site
- 7961 Debridement of open fracture site, humerus
- 7962 Debridement of open fracture site, radius and ulna
- 7963 Debridement of open fracture site, carpals and metacarpals
- 7964 Debridement of open fracture site, phalanges of hand
- 7965 Debridement of open fracture site, femur
- 7966 Debridement of open fracture site, tibia and fibula
- 7967 Debridement of open fracture site, tarsals and metatarsals
- 7968 Debridement of open fracture site, phalanges of foot
- 7969 Debridement of open fracture site, other specified bone
- 7970 Closed reduction of dislocation of unspecified site
- 7971 Closed reduction of dislocation of shoulder
- 7972 Closed reduction of dislocation of elbow
- 7973 Closed reduction of dislocation of wrist
- 7974 Closed reduction of dislocation of hand and finger
- 7975 Closed reduction of dislocation of hip
- 7976 Closed reduction of dislocation of knee
- 7977 Closed reduction of dislocation of ankle
- 7978 Closed reduction of dislocation of foot and toe
- 7979 Closed reduction of dislocation of other specified sites
- 7980 Open reduction of dislocation of unspecified site
- 7981 Open reduction of dislocation of shoulder
- 7982 Open reduction of dislocation of elbow
- 7983 Open reduction of dislocation of wrist
- 7984 Open reduction of dislocation of hand and finger
- 7985 Open reduction of dislocation of hip
- 7986 Open reduction of dislocation of knee
- 7987 Open reduction of dislocation of ankle
- 7988 Open reduction of dislocation of foot and toe
- 7989 Open reduction of dislocation of other specified sites
- 7990 Unspecified operation on bone injury, unspecified site
- 7991 Unspecified operation on bone injury, humerus
- 7992 Unspecified operation on bone injury, radius and ulna
- 7993 Unspecified operation on bone injury, carpals and metacarpals
- 7994 Unspecified operation on bone injury, phalanges of hand
- 7995 Unspecified operation on bone injury, femur

- 7996 Unspecified operation on bone injury, tibia and fibula
- 7997 Unspecified operation on bone injury, tarsals and metatarsals
- 7998 Unspecified operation on bone injury, phalanges of foot
- 7999 Unspecified operation on bone injury, other specified bone
- 8000 Arthrotomy for removal of prosthesis without replacement, unspecified site
- 8001 Arthrotomy for removal of prosthesis without replacement, shoulder
- 8002 Arthrotomy for removal of prosthesis without replacement, elbow
- 8003 Arthrotomy for removal of prosthesis without replacement, wrist
- 8004 Arthrotomy for removal of prosthesis without replacement, hand and finger
- 8005 Arthrotomy for removal of prosthesis without replacement, hip
- 8006 Arthrotomy for removal of prosthesis without replacement, knee
- 8007 Arthrotomy for removal of prosthesis without replacement, ankle
- 8008 Arthrotomy for removal of prosthesis without replacement, foot and toe
- 8009 Arthrotomy for removal of prosthesis without replacement, other specified sites
- 8010 Other arthrotomy, unspecified site
- 8011 Other arthrotomy, shoulder
- 8012 Other arthrotomy, elbow
- 8013 Other arthrotomy, wrist
- 8014 Other arthrotomy, hand and finger
- 8015 Other arthrotomy, hip
- 8016 Other arthrotomy, knee
- 8017 Other arthrotomy, ankle
- 8018 Other arthrotomy, foot and toe
- 8019 Other arthrotomy, other specified sites
- 8020 Arthroscopy, unspecified site
- 8021 Arthroscopy, shoulder
- 8022 Arthroscopy, elbow
- 8023 Arthroscopy, wrist
- 8024 Arthroscopy, hand and finger
- 8025 Arthroscopy, hip
- 8026 Arthroscopy, knee
- 8027 Arthroscopy, ankle
- 8028 Arthroscopy, foot and toe
- 8029 Arthroscopy, other specified sites
- 8030 Biopsy of joint structure, unspecified site
- 8031 Biopsy of joint structure, shoulder

- 8032 Biopsy of joint structure, elbow
- 8033 Biopsy of joint structure, wrist
- 8034 Biopsy of joint structure, hand and finger
- 8035 Biopsy of joint structure, hip
- 8036 Biopsy of joint structure, knee
- 8037 Biopsy of joint structure, ankle
- 8038 Biopsy of joint structure, foot and toe
- 8039 Biopsy of joint structure, other specified sites
- 8040 Division of joint capsule, ligament, or cartilage, unspecified site
- 8041 Division of joint capsule, ligament, or cartilage, shoulder
- 8042 Division of joint capsule, ligament, or cartilage, elbow
- 8043 Division of joint capsule, ligament, or cartilage, wrist
- 8044 Division of joint capsule, ligament, or cartilage, hand and finger
- 8045 Division of joint capsule, ligament, or cartilage, hip
- 8046 Division of joint capsule, ligament, or cartilage, knee
- 8047 Division of joint capsule, ligament, or cartilage, ankle
- 8048 Division of joint capsule, ligament, or cartilage, foot and toe
- 8049 Division of joint capsule, ligament, or cartilage, other specified sites
- 8050 Excision or destruction of intervertebral disc, unspecified
- 8051 Excision of intervertebral disc
- 8052 Intervertebral chemonucleolysis
- 8053 Repair of the anulus fibrosus with graft or prosthesis
- 8054 Other and unspecified repair of the anulus fibrosus
- 8059 Other destruction of intervertebral disc
- 806 Excision of semilunar cartilage of knee
- 8070 Synovectomy, unspecified site
- 8071 Synovectomy, shoulder
- 8072 Synovectomy, elbow
- 8073 Synovectomy, wrist
- 8074 Synovectomy, hand and finger
- 8075 Synovectomy, hip
- 8076 Synovectomy, knee
- 8077 Synovectomy, ankle
- 8078 Synovectomy, foot and toe
- 8079 Synovectomy, other specified sites
- 8080 Other local excision or destruction of lesion of joint, unspecified site

- 8081 Other local excision or destruction of lesion of joint, shoulder
- 8082 Other local excision or destruction of lesion of joint, elbow
- 8083 Other local excision or destruction of lesion of joint, wrist
- 8084 Other local excision or destruction of lesion of joint, hand and finger
- 8085 Other local excision or destruction of lesion of joint, hip
- 8086 Other local excision or destruction of lesion of joint, knee
- 8087 Other local excision or destruction of lesion of joint, ankle
- 8088 Other local excision or destruction of lesion of joint, foot and toe
- 8089 Other local excision or destruction of lesion of joint, other specified sites
- 8090 Other excision of joint, unspecified site
- 8091 Other excision of joint, shoulder
- 8092 Other excision of joint, elbow
- 8093 Other excision of joint, wrist
- 8094 Other excision of joint, hand and finger
- 8095 Other excision of joint, hip
- 8096 Other excision of joint, knee
- 8097 Other excision of joint, ankle
- 8098 Other excision of joint, foot and toe
- 8099 Other excision of joint, other specified sites
- 8100 Spinal fusion, not otherwise specified
- 8101 Atlas-axis spinal fusion
- 8102 Other cervical fusion of the anterior column, anterior technique
- 8103 Other cervical fusion of the posterior column, posterior technique
- 8104 Dorsal and dorsolumbar fusion of the anterior column, anterior technique
- 8105 Dorsal and dorsolumbar fusion of the posterior column, posterior technique
- 8106 Lumbar and lumbosacral fusion of the anterior column, anterior technique
- 8107 Lumbar and lumbosacral fusion of the posterior column, posterior technique
- 8108 Lumbar and lumbosacral fusion of the anterior column, posterior technique
- 8111 Ankle fusion
- 8112 Triple arthrodesis
- 8113 Subtalar fusion
- 8114 Midtarsal fusion
- 8115 Tarsometatarsal fusion
- 8116 Metatarsophalangeal fusion
- 8117 Other fusion of foot
- 8118 Subtalar joint arthroereisis

- 8120 Arthrodesis of unspecified joint
- 8121 Arthrodesis of hip
- 8122 Arthrodesis of knee
- 8123 Arthrodesis of shoulder
- 8124 Arthrodesis of elbow
- 8125 Carporadial fusion
- 8126 Metacarpocarpal fusion
- 8127 Metacarpophalangeal fusion
- 8128 Interphalangeal fusion
- 8129 Arthrodesis of other specified joints
- 8130 Refusion of spine, not otherwise specified
- 8131 Refusion of atlas-axis spine
- 8132 Refusion of other cervical spine, anterior column, anterior technique
- 8133 Refusion of other cervical spine, posterior column, posterior technique
- 8134 Refusion of dorsal and dorsolumbar spine, anterior column, anterior technique
- 8135 Refusion of dorsal and dorsolumbar spine, posterior column, posterior technique
- 8136 Refusion of lumbar and lumbosacral spine, anterior column, anterior technique
- 8137 Refusion of lumbar and lumbosacral spine, posterior column, posterior technique
- 8138 Refusion of lumbar and lumbosacral spine, anterior column, posterior technique
- 8139 Refusion of spine, not elsewhere classified
- 8140 Repair of hip, not elsewhere classified
- 8142 Five-in-one repair of knee
- 8143 Triad knee repair
- 8144 Patellar stabilization
- 8145 Other repair of the cruciate ligaments
- 8146 Other repair of the collateral ligaments
- 8147 Other repair of knee
- 8149 Other repair of ankle
- 8151 Total hip replacement
- 8152 Partial hip replacement
- 8153 Revision of hip replacement, not otherwise specified
- 8154 Total knee replacement
- 8155 Revision of knee replacement, not otherwise specified
- 8156 Total ankle replacement
- 8157 Replacement of joint of foot and toe
- 8159 Revision of joint replacement of lower extremity, not elsewhere classified

- 8162 Fusion or refusion of 2-3 vertebrae
- 8163 Fusion or refusion of 4-8 vertebrae
- 8164 Fusion or refusion of 9 or more vertebrae
- 8165 Percutaneous vertebroplasty
- 8166 Percutaneous vertebral augmentation
- 8171 Arthroplasty of metacarpophalangeal and interphalangeal joint with implant
- 8172 Arthroplasty of metacarpophalangeal and interphalangeal joint without implant
- 8173 Total wrist replacement
- 8174 Arthroplasty of carpal or carpometacarpal joint with implant
- 8175 Arthroplasty of carpal or carpometacarpal joint without implant
- 8179 Other repair of hand, fingers, and wrist
- 8180 Other total shoulder replacement
- 8181 Partial shoulder replacement
- 8182 Repair of recurrent dislocation of shoulder
- 8183 Other repair of shoulder
- 8184 Total elbow replacement
- 8185 Other repair of elbow
- 8188 Reverse total shoulder replacement
- 8191 Arthrocentesis
- 8192 Injection of therapeutic substance into joint or ligament
- 8193 Suture of capsule or ligament of upper extremity
- 8194 Suture of capsule or ligament of ankle and foot
- 8195 Suture of capsule or ligament of other lower extremity
- 8196 Other repair of joint
- 8197 Revision of joint replacement of upper extremity
- 8198 Other diagnostic procedures on joint structures
- 8199 Other operations on joint structures
- 8201 Exploration of tendon sheath of hand
- 8202 Myotomy of hand
- 8203 Bursotomy of hand
- 8204 Incision and drainage of palmar or thenar space
- 8209 Other incision of soft tissue of hand
- 8211 Tenotomy of hand
- 8212 Fasciotomy of hand
- 8219 Other division of soft tissue of hand
- 8221 Excision of lesion of tendon sheath of hand

- 8222 Excision of lesion of muscle of hand
- 8229 Excision of other lesion of soft tissue of hand
- 8231 Bursectomy of hand
- 8232 Excision of tendon of hand for graft
- 8233 Other tenonectomy of hand
- 8234 Excision of muscle or fascia of hand for graft
- 8235 Other fasciectomy of hand
- 8236 Other myectomy of hand
- 8239 Other excision of soft tissue of hand
- 8241 Suture of tendon sheath of hand
- 8242 Delayed suture of flexor tendon of hand
- 8243 Delayed suture of other tendon of hand
- 8244 Other suture of flexor tendon of hand
- 8245 Other suture of other tendon of hand
- 8246 Suture of muscle or fascia of hand
- 8251 Advancement of tendon of hand
- 8252 Recession of tendon of hand
- 8253 Reattachment of tendon of hand
- 8254 Reattachment of muscle of hand
- 8255 Other change in hand muscle or tendon length
- 8256 Other hand tendon transfer or transplantation
- 8257 Other hand tendon transposition
- 8258 Other hand muscle transfer or transplantation
- 8259 Other hand muscle transposition
- 8261 Pollicization operation carrying over nerves and blood supply
- 8269 Other reconstruction of thumb
- 8271 Tendon pulley reconstruction of hand
- 8272 Plastic operation on hand with graft of muscle or fascia
- 8279 Plastic operation on hand with other graft or implant
- 8281 Transfer of finger, except thumb
- 8282 Repair of cleft hand
- 8283 Repair of macrodactyly
- 8284 Repair of mallet finger
- 8285 Other tenodesis of hand
- 8286 Other tenoplasty of hand
- 8289 Other plastic operations on hand

- 8291 Lysis of adhesions of hand
- 8292 Aspiration of bursa of hand
- 8293 Aspiration of other soft tissue of hand
- 8294 Injection of therapeutic substance into bursa of hand
- 8295 Injection of therapeutic substance into tendon of hand
- 8296 Other injection of locally-acting therapeutic substance into soft tissue of hand
- 8299 Other operations on muscle, tendon, and fascia of hand
- 8301 Exploration of tendon sheath
- 8302 Myotomy
- 8303 Bursotomy
- 8309 Other incision of soft tissue
- 8311 Achillotenotomy
- 8312 Adductor tenotomy of hip
- 8313 Other tenotomy
- 8314 Fasciotomy
- 8319 Other division of soft tissue
- 8321 Open biopsy of soft tissue
- 8329 Other diagnostic procedures on muscle, tendon, fascia, and bursa, including that of hand
- 8331 Excision of lesion of tendon sheath
- 8332 Excision of lesion of muscle
- 8339 Excision of lesion of other soft tissue
- 8341 Excision of tendon for graft
- 8342 Other tenonectomy
- 8343 Excision of muscle or fascia for graft
- 8344 Other fasciectomy
- 8345 Other myectomy
- 8349 Other excision of soft tissue
- 835 Bursectomy
- 8361 Suture of tendon sheath
- 8362 Delayed suture of tendon
- 8363 Rotator cuff repair
- 8364 Other suture of tendon
- 8365 Other suture of muscle or fascia
- 8371 Advancement of tendon
- 8372 Recession of tendon
- 8373 Reattachment of tendon

- 8374 Reattachment of muscle
- 8375 Tendon transfer or transplantation
- 8376 Other tendon transposition
- 8377 Muscle transfer or transplantation
- 8379 Other muscle transposition
- 8381 Tendon graft
- 8382 Graft of muscle or fascia
- 8383 Tendon pulley reconstruction other than hand
- 8384 Release of clubfoot, not elsewhere classified
- 8385 Other change in muscle or tendon length
- 8386 Quadricepsplasty
- 8387 Other plastic operations on muscle
- 8388 Other plastic operations on tendon
- 8389 Other plastic operations on fascia
- 8391 Lysis of adhesions of muscle, tendon, fascia, and bursa
- 8392 Insertion or replacement of skeletal muscle stimulator
- 8393 Removal of skeletal muscle stimulator
- 8394 Aspiration of bursa
- 8395 Aspiration of other soft tissue
- 8396 Injection of therapeutic substance into bursa
- 8397 Injection of therapeutic substance into tendon
- 8398 Injection of locally acting therapeutic substance into other soft tissue
- 8399 Other operations on muscle, tendon, fascia, and bursa
- 8400 Upper limb amputation, not otherwise specified
- 8401 Amputation and disarticulation of finger
- 8402 Amputation and disarticulation of thumb
- 8403 Amputation through hand
- 8404 Disarticulation of wrist
- 8405 Amputation through forearm
- 8406 Disarticulation of elbow
- 8407 Amputation through humerus
- 8408 Disarticulation of shoulder
- 8409 Interthoracoscapular amputation
- 8410 Lower limb amputation, not otherwise specified
- 8411 Amputation of toe
- 8412 Amputation through foot

- 8413 Disarticulation of ankle
- 8414 Amputation of ankle through malleoli of tibia and fibula
- 8415 Other amputation below knee
- 8416 Disarticulation of knee
- 8417 Amputation above knee
- 8418 Disarticulation of hip
- 8419 Abdominopelvic amputation
- 8421 Thumb reattachment
- 8422 Finger reattachment
- 8423 Forearm, wrist, or hand reattachment
- 8424 Upper arm reattachment
- 8425 Toe reattachment
- 8426 Foot reattachment
- 8427 Lower leg or ankle reattachment
- 8428 Thigh reattachment
- 8429 Other reattachment of extremity
- 843 Revision of amputation stump
 - 8440 Implantation or fitting of prosthetic limb device, not otherwise specified
 - 8441 Fitting of prosthesis of upper arm and shoulder
 - 8442 Fitting of prosthesis of lower arm and hand
 - 8443 Fitting of prosthesis of arm, not otherwise specified
 - 8444 Implantation of prosthetic device of arm
 - 8445 Fitting of prosthesis above knee
 - 8446 Fitting of prosthesis below knee
 - 8447 Fitting of prosthesis of leg, not otherwise specified
 - 8448 Implantation of prosthetic device of leg
 - 8451 Insertion of interbody spinal fusion device
 - 8452 Insertion of recombinant bone morphogenetic protein
 - 8453 Implantation of internal limb lengthening device with kinetic distraction
 - 8454 Implantation of other internal limb lengthening device
 - 8455 Insertion of bone void filler
 - 8456 Insertion or replacement of (cement) spacer
 - 8457 Removal of (cement) spacer
 - 8459 Insertion of other spinal devices
 - 8460 Insertion of spinal disc prosthesis, not otherwise specified
 - 8461 Insertion of partial spinal disc prosthesis, cervical

- 8462 Insertion of total spinal disc prosthesis, cervical
- 8463 Insertion of spinal disc prosthesis, thoracic
- 8464 Insertion of partial spinal disc prosthesis, lumbosacral
- 8465 Insertion of total spinal disc prosthesis, lumbosacral
- 8466 Revision or replacement of artificial spinal disc prosthesis, cervical
- 8467 Revision or replacement of artificial spinal disc prosthesis, thoracic
- 8468 Revision or replacement of artificial spinal disc prosthesis, lumbosacral
- 8469 Revision or replacement of artificial spinal disc prosthesis, not otherwise specified
- 8471 Application of external fixator device, monoplanar system
- 8472 Application of external fixator device, ring system
- 8473 Application of hybrid external fixator device
- 8480 Insertion or replacement of interspinous process device(s)
- 8481 Revision of interspinous process device(s)
- 8482 Insertion or replacement of pedicle-based dynamic stabilization device(s)
- 8483 Revision of pedicle-based dynamic stabilization device(s)
- 8484 Insertion or replacement of facet replacement device(s)
- 8485 Revision of facet replacement device(s)
- 8491 Amputation, not otherwise specified
- 8492 Separation of equal conjoined twins
- 8493 Separation of unequal conjoined twins
- 8494 Insertion of sternal fixation device with rigid plates
- 8499 Other operations on musculoskeletal system
- 850 Mastotomy
 - 8511 Closed [percutaneous] [needle] biopsy of breast
 - 8512 Open biopsy of breast
 - 8519 Other diagnostic procedures on breast
- 8520 Excision or destruction of breast tissue, not otherwise specified
- 8521 Local excision of lesion of breast
- 8522 Resection of quadrant of breast
- 8523 Subtotal mastectomy
- 8524 Excision of ectopic breast tissue
- 8525 Excision of nipple
- 8531 Unilateral reduction mammoplasty
- 8532 Bilateral reduction mammoplasty
- 8533 Unilateral subcutaneous mammectomy with synchronous implant
- 8534 Other unilateral subcutaneous mammectomy

- 8535 Bilateral subcutaneous mammectomy with synchronous implant
- 8536 Other bilateral subcutaneous mammectomy
- 8541 Unilateral simple mastectomy
- 8542 Bilateral simple mastectomy
- 8543 Unilateral extended simple mastectomy
- 8544 Bilateral extended simple mastectomy
- 8545 Unilateral radical mastectomy
- 8546 Bilateral radical mastectomy
- 8547 Unilateral extended radical mastectomy
- 8548 Bilateral extended radical mastectomy
- 8550 Augmentation mammoplasty, not otherwise specified
- 8551 Unilateral injection into breast for augmentation
- 8552 Bilateral injection into breast for augmentation
- 8553 Unilateral breast implant
- 8554 Bilateral breast implant
- 8555 Fat graft to breast
- 856 Mastopexy
- 8570 Total reconstruction of breast, not otherwise specified
- 8571 Latissimus dorsi myocutaneous flap
- 8572 Transverse rectus abdominis myocutaneous (TRAM) flap, pedicled
- 8573 Transverse rectus abdominis myocutaneous (TRAM) flap, free
- 8574 Deep inferior epigastric artery perforator (DIEP) flap, free
- 8575 Superficial inferior epigastric artery (SIEA) flap, free
- 8576 Gluteal artery perforator (GAP) flap, free
- 8579 Other total reconstruction of breast
- 8581 Suture of laceration of breast
- 8582 Split-thickness graft to breast
- 8583 Full-thickness graft to breast
- 8584 Pedicle graft to breast
- 8585 Muscle flap graft to breast
- 8586 Transposition of nipple
- 8587 Other repair or reconstruction of nipple
- 8589 Other mammoplasty
- 8591 Aspiration of breast
- 8592 Injection of therapeutic agent into breast
- 8593 Revision of implant of breast

- 8594 Removal of implant of breast
- 8595 Insertion of breast tissue expander
- 8596 Removal of breast tissue expander
- 8599 Other operations on the breast
- 8601 Aspiration of skin and subcutaneous tissue
- 8602 Injection or tattooing of skin lesion or defect
- 8603 Incision of pilonidal sinus or cyst
- 8604 Other incision with drainage of skin and subcutaneous tissue
- 8605 Incision with removal of foreign body or device from skin and subcutaneous tissue
- 8606 Insertion of totally implantable infusion pump
- 8607 Insertion of totally implantable vascular access device [VAD]
- 8609 Other incision of skin and subcutaneous tissue
- 8611 Closed biopsy of skin and subcutaneous tissue
- 8619 Other diagnostic procedures on skin and subcutaneous tissue
- 8621 Excision of pilonidal cyst or sinus
- 8622 Excisional debridement of wound, infection, or burn
- 8623 Removal of nail, nail bed, or nail fold
- 8624 Chemosurgery of skin
- 8625 Dermabrasion
- 8626 Ligation of dermal appendage
- 8627 Debridement of nail, nail bed, or nail fold
- 8628 Nonexcisional debridement of wound, infection or burn
- 863 Other local excision or destruction of lesion or tissue of skin and subcutaneous tissue
- 864 Radical excision of skin lesion
- 8651 Replantation of scalp
- 8659 Closure of skin and subcutaneous tissue of other sites
- 8660 Free skin graft, not otherwise specified
- 8661 Full-thickness skin graft to hand
- 8662 Other skin graft to hand
- 8663 Full-thickness skin graft to other sites
- 8664 Hair transplant
- 8665 Heterograft to skin
- 8666 Homograft to skin
- 8667 Dermal regenerative graft
- 8669 Other skin graft to other sites
- 8670 Pedicle or flap graft, not otherwise specified

- 8671 Cutting and preparation of pedicle grafts or flaps
- 8672 Advancement of pedicle graft
- 8673 Attachment of pedicle or flap graft to hand
- 8674 Attachment of pedicle or flap graft to other sites
- 8675 Revision of pedicle or flap graft
- 8681 Repair for facial weakness
- 8682 Facial rhytidectomy
- 8683 Size reduction plastic operation
- 8684 Relaxation of scar or web contracture of skin
- 8685 Correction of syndactyly
- 8686 Onychoplasty
- 8687 Fat graft of skin and subcutaneous tissue
- 8689 Other repair and reconstruction of skin and subcutaneous tissue
- 8690 Extraction of fat for graft or banking
- 8691 Excision of skin for graft
- 8692 Electrolysis and other epilation of skin
- 8693 Insertion of tissue expander
- 8694 Insertion or replacement of single array neurostimulator pulse generator, not specified as rechargeable
- 8695 Insertion or replacement of multiple array neurostimulator pulse generator, not specified as rechargeable
- 8696 Insertion or replacement of other neurostimulator pulse generator
- 8697 Insertion or replacement of single array rechargeable neurostimulator pulse generator
- 8698 Insertion or replacement of multiple array (two or more) rechargeable neurostimulator pulse generator
- 8699 Other operations on skin and subcutaneous tissue
- 8701 Pneumoencephalogram
- 8702 Other contrast radiogram of brain and skull
- 8703 Computerized axial tomography of head
- 8704 Other tomography of head
- 8705 Contrast dacryocystogram
- 8706 Contrast radiogram of nasopharynx
- 8707 Contrast laryngogram
- 8708 Cervical lymphangiogram
- 8709 Other soft tissue x-ray of face, head, and neck
- 8711 Full-mouth x-ray of teeth
- 8712 Other dental x-ray

- 8713 Temporomandibular contrast arthrogram
- 8714 Contrast radiogram of orbit
- 8715 Contrast radiogram of sinus
- 8716 Other x-ray of facial bones
- 8717 Other x-ray of skull
- 8721 Contrast myelogram
- 8722 Other x-ray of cervical spine
- 8723 Other x-ray of thoracic spine
- 8724 Other x-ray of lumbosacral spine
- 8729 Other x-ray of spine
- 8731 Endotracheal bronchogram
- 8732 Other contrast bronchogram
- 8733 Mediastinal pneumogram
- 8734 Intrathoracic lymphangiogram
- 8735 Contrast radiogram of mammary ducts
- 8736 Xerography of breast
- 8737 Other mammography
- 8738 Sinogram of chest wall
- 8739 Other soft tissue x-ray of chest wall
- 8741 Computerized axial tomography of thorax
- 8742 Other tomography of thorax
- 8743 X-ray of ribs, sternum, and clavicle
- 8744 Routine chest x-ray, so described
- 8749 Other chest x-ray
- 8751 Percutaneous hepatic cholangiogram
- 8752 Intravenous cholangiogram
- 8753 Intraoperative cholangiogram
- 8754 Other cholangiogram
- 8759 Other biliary tract x-ray
- 8761 Barium swallow
- 8762 Upper GI series
- 8763 Small bowel series
- 8764 Lower GI series
- 8765 Other x-ray of intestine
- 8766 Contrast pancreatogram
- 8769 Other digestive tract x-ray

- 8771 Computerized axial tomography of kidney
- 8772 Other nephrotomogram
- 8773 Intravenous pyelogram
- 8774 Retrograde pyelogram
- 8775 Percutaneous pyelogram
- 8776 Retrograde cystourethrogram
- 8777 Other cystogram
- 8778 Ileal conduitogram
- 8779 Other x-ray of the urinary system
- 8781 X-ray of gravid uterus
- 8782 Gas contrast hysterosalpingogram
- 8783 Opaque dye contrast hysterosalpingogram
- 8784 Percutaneous hysterogram
- 8785 Other x-ray of fallopian tubes and uterus
- 8789 Other x-ray of female genital organs
- 8791 Contrast seminal vesiculogram
- 8792 Other x-ray of prostate and seminal vesicles
- 8793 Contrast epididymogram
- 8794 Contrast vasogram
- 8795 Other x-ray of epididymis and vas deferens
- 8799 Other x-ray of male genital organs
- 8801 Computerized axial tomography of abdomen
- 8802 Other abdomen tomography
- 8803 Sinogram of abdominal wall
- 8804 Abdominal lymphangiogram
- 8809 Other soft tissue x-ray of abdominal wall
- 8811 Pelvic opaque dye contrast radiography
- 8812 Pelvic gas contrast radiography
- 8813 Other peritoneal pneumogram
- 8814 Retroperitoneal fistulogram
- 8815 Retroperitoneal pneumogram
- 8816 Other retroperitoneal x-ray
- 8819 Other x-ray of abdomen
- 8821 Skeletal x-ray of shoulder and upper arm
- 8822 Skeletal x-ray of elbow and forearm
- 8823 Skeletal x-ray of wrist and hand

- 8824 Skeletal x-ray of upper limb, not otherwise specified
- 8825 Pelvimetry
- 8826 Other skeletal x-ray of pelvis and hip
- 8827 Skeletal x-ray of thigh, knee, and lower leg
- 8828 Skeletal x-ray of ankle and foot
- 8829 Skeletal x-ray of lower limb, not otherwise specified
- 8831 Skeletal series
- 8832 Contrast arthrogram
- 8833 Other skeletal x-ray
- 8834 Lymphangiogram of upper limb
- 8835 Other soft tissue x-ray of upper limb
- 8836 Lymphangiogram of lower limb
- 8837 Other soft tissue x-ray of lower limb
- 8838 Other computerized axial tomography
- 8839 X-ray, other and unspecified
- 8840 Arteriography using contrast material, unspecified site
- 8841 Arteriography of cerebral arteries
- 8842 Aortography
- 8843 Arteriography of pulmonary arteries
- 8844 Arteriography of other intrathoracic vessels
- 8845 Arteriography of renal arteries
- 8846 Arteriography of placenta
- 8847 Arteriography of other intra-abdominal arteries
- 8848 Arteriography of femoral and other lower extremity arteries
- 8849 Arteriography of other specified sites
- 8850 Angiocardiography, not otherwise specified
- 8851 Angiocardiography of venae cavae
- 8852 Angiocardiography of right heart structures
- 8853 Angiocardiography of left heart structures
- 8854 Combined right and left heart angiography
- 8855 Coronary arteriography using a single catheter
- 8856 Coronary arteriography using two catheters
- 8857 Other and unspecified coronary arteriography
- 8858 Negative-contrast cardiac roentgenography
- 8859 Intra-operative coronary fluorescence vascular angiography
- 8860 Phlebography using contrast material, unspecified site

- 8861 Phlebography of veins of head and neck using contrast material
- 8862 Phlebography of pulmonary veins using contrast material
- 8863 Phlebography of other intrathoracic veins using contrast material
- 8864 Phlebography of the portal venous system using contrast material
- 8865 Phlebography of other Intra-Abdominal veins using contrast material
- 8866 Phlebography of femoral and other lower extremity veins using contrast material
- 8867 Phlebography of other specified sites using contrast material
- 8868 Impedance phlebography
- 8871 Diagnostic ultrasound of head and neck
- 8872 Diagnostic ultrasound of heart
- 8873 Diagnostic ultrasound of other sites of thorax
- 8874 Diagnostic ultrasound of digestive system
- 8875 Diagnostic ultrasound of urinary system
- 8876 Diagnostic ultrasound of abdomen and retroperitoneum
- 8877 Diagnostic ultrasound of peripheral vascular system
- 8878 Diagnostic ultrasound of gravid uterus
- 8879 Other diagnostic ultrasound
- 8881 Cerebral thermography
- 8882 Ocular thermography
- 8883 Bone thermography
- 8884 Muscle thermography
- 8885 Breast thermography
- 8886 Blood vessel thermography
- 8889 Thermography of other sites
- 8890 Diagnostic imaging, not elsewhere classified
- 8891 Magnetic resonance imaging of brain and brain stem
- 8892 Magnetic resonance imaging of chest and myocardium
- 8893 Magnetic resonance imaging of spinal canal
- 8894 Magnetic resonance imaging of musculoskeletal
- 8895 Magnetic resonance imaging of pelvis, prostate, and bladder
- 8896 Other intraoperative magnetic resonance imaging
- 8897 Magnetic resonance imaging of other and unspecified sites
- 8898 Bone mineral density studies
- 8901 Interview and evaluation, described as brief
- 8902 Interview and evaluation, described as limited
- 8903 Interview and evaluation, described as comprehensive

- 8904 Other interview and evaluation
- 8905 Diagnostic interview and evaluation, not otherwise specified
- 8906 Consultation, described as limited
- 8907 Consultation, described as comprehensive
- 8908 Other consultation
- 8909 Consultation, not otherwise specified
- 8910 Intracarotid amobarbital test
- 8911 Tonometry
- 8912 Nasal function study
- 8913 Neurologic examination
- 8914 Electroencephalogram
- 8915 Other nonoperative neurologic function tests
- 8916 Transillumination of newborn skull
- 8917 Polysomnogram
- 8918 Other sleep disorder function tests
- 8919 Video and radio-telemetered electroencephalographic monitoring
- 8921 Urinary manometry
- 8922 Cystometrogram
- 8923 Urethral sphincter electromyogram
- 8924 Uroflowmetry [UFR]
- 8925 Urethral pressure profile [UPP]
- 8926 Gynecological examination
- 8929 Other nonoperative genitourinary system measurements
- 8931 Dental examination
- 8932 Esophageal manometry
- 8933 Digital examination of enterostomy stoma
- 8934 Digital examination of rectum
- 8935 Transillumination of nasal sinuses
- 8936 Manual examination of breast
- 8937 Vital capacity determination
- 8938 Other nonoperative respiratory measurements
- 8939 Other nonoperative measurements and examinations
- 8941 Cardiovascular stress test using treadmill
- 8942 Masters' two-step stress test
- 8943 Cardiovascular stress test using bicycle ergometer
- 8944 Other cardiovascular stress test

- 8945 Artificial pacemaker rate check
- 8946 Artificial pacemaker artifact wave form check
- 8947 Artificial pacemaker electrode impedance check
- 8948 Artificial pacemaker voltage or amperage threshold check
- 8949 Automatic implantable cardioverter/defibrillator (AICD) check
- 8950 Ambulatory cardiac monitoring
- 8951 Rhythm electrocardiogram
- 8952 Electrocardiogram
- 8953 Vectorcardiogram (with ECG)
- 8954 Electrographic monitoring
- 8955 Phonocardiogram with ECG lead
- 8956 Carotid pulse tracing with ECG lead
- 8957 Apexcardiogram (with ECG lead)
- 8958 Plethysmogram
- 8959 Other nonoperative cardiac and vascular measurements
- 8960 Continuous intra-arterial blood gas monitoring
- 8961 Systemic arterial pressure monitoring
- 8962 Central venous pressure monitoring
- 8963 Pulmonary artery pressure monitoring
- 8964 Pulmonary artery wedge monitoring
- 8965 Measurement of systemic arterial blood gases
- 8966 Measurement of mixed venous blood gases
- 8967 Monitoring of cardiac output by oxygen consumption technique
- 8968 Monitoring of cardiac output by other technique
- 8969 Monitoring of coronary blood flow
- 897 General physical examination
- 898 Autopsy
- 9001 Microscopic examination of specimen from nervous system and of spinal fluid, bacterial smear
- 9002 Microscopic examination of specimen from nervous system and of spinal fluid, culture
- 9003 Microscopic examination of specimen from nervous system and of spinal fluid, culture and sensitivity
- 9004 Microscopic examination of specimen from nervous system and of spinal fluid, parasitology
- 9005 Microscopic examination of specimen from nervous system and of spinal fluid, toxicology
- 9006 Microscopic examination of specimen from nervous system and of spinal fluid, cell block and Papanicolaou smear

9009 Microscopic examination of specimen from nervous system and of spinal fluid, other microscopic examination

9011 Microscopic examination of specimen from endocrine gland, not elsewhere classified, bacterial smear

9012 Microscopic examination of specimen from endocrine gland, not elsewhere classified, culture

9013 Microscopic examination of specimen from endocrine gland, not elsewhere classified, culture and sensitivity

9014 Microscopic examination of specimen from endocrine gland, not elsewhere classified, parasitology

9015 Microscopic examination of specimen from endocrine gland, not elsewhere classified, toxicology

9016 Microscopic examination of specimen from endocrine gland, not elsewhere classified, cell block and Papanicolaou smear

9019 Microscopic examination of specimen from endocrine gland, not elsewhere classified, other microscopic examination

9021 Microscopic examination of specimen from eye, bacterial smear

9022 Microscopic examination of specimen from eye, culture

9023 Microscopic examination of specimen from eye, culture and sensitivity

9024 Microscopic examination of specimen from eye, parasitology

9025 Microscopic examination of specimen from eye, toxicology

9026 Microscopic examination of specimen from eye, cell block and Papanicolaou smear

9029 Microscopic examination of specimen from eye, other microscopic examination

9031 Microscopic examination of specimen from ear, nose, throat, and larynx, bacterial smear

9032 Microscopic examination of specimen from ear, nose, throat, and larynx, culture

9033 Microscopic examination of specimen from ear, nose, throat, and larynx, culture and sensitivity

9034 Microscopic examination of specimen from ear, nose, throat, and larynx, parasitology

9035 Microscopic examination of specimen from ear, nose, throat, and larynx, toxicology

9036 Microscopic examination of specimen from ear, nose, throat, and larynx, cell block and Papanicolaou smear

9039 Microscopic examination of specimen from ear, nose, throat, and larynx, other microscopic examination

9041 Microscopic examination of specimen from trachea, bronchus, pleura, lung, and other thoracic specimen, and of sputum, bacterial smear

9042 Microscopic examination of specimen from trachea, bronchus, pleura, lung, and other thoracic specimen, and of sputum, culture

9043 Microscopic examination of specimen from trachea, bronchus, pleura, lung, and other thoracic specimen, and of sputum, culture and sensitivity

9044 Microscopic examination of specimen from trachea, bronchus, pleura, lung, and other thoracic specimen, and of sputum, parasitology

- 9045 Microscopic examination of specimen from trachea, bronchus, pleura, lung, and other thoracic specimen, and of sputum, toxicology
- 9046 Microscopic examination of specimen from trachea, bronchus, pleura, lung, and other thoracic specimen, and of sputum, cell block and Papanicolaou smear
- 9049 Microscopic examination of specimen from trachea, bronchus, pleura, lung, and other thoracic specimen, and of sputum, other microscopic examination
- 9051 Microscopic examination of blood, bacterial smear
- 9052 Microscopic examination of blood, culture
- 9053 Microscopic examination of blood, culture and sensitivity
- 9054 Microscopic examination of blood, parasitology
- 9055 Microscopic examination of blood, toxicology
- 9056 Microscopic examination of blood, cell block and Papanicolaou smear
- 9059 Microscopic examination of blood, other microscopic examination
- 9061 Microscopic examination of specimen from spleen and of bone marrow, bacterial smear
- 9062 Microscopic examination of specimen from spleen and of bone marrow, culture
- 9063 Microscopic examination of specimen from spleen and of bone marrow, culture and sensitivity
- 9064 Microscopic examination of specimen from spleen and of bone marrow, parasitology
- 9065 Microscopic examination of specimen from spleen and of bone marrow, toxicology
- 9066 Microscopic examination of specimen from spleen and of bone marrow, cell block and Papanicolaou smear
- 9069 Microscopic examination of specimen from spleen and of bone marrow, other microscopic examination
- 9071 Microscopic examination of specimen from lymph node and of lymph, bacterial smear
- 9072 Microscopic examination of specimen from lymph node and of lymph, culture
- 9073 Microscopic examination of specimen from lymph node and of lymph, culture and sensitivity
- 9074 Microscopic examination of specimen from lymph node and of lymph, parasitology
- 9075 Microscopic examination of specimen from lymph node and of lymph, toxicology
- 9076 Microscopic examination of specimen from lymph node and of lymph, cell block and Papanicolaou smear
- 9079 Microscopic examination of specimen from lymph node and of lymph, other microscopic examination
- 9081 Microscopic examination of specimen from upper gastrointestinal tract and of vomitus, bacterial smear
- 9082 Microscopic examination of specimen from upper gastrointestinal tract and of vomitus, culture
- 9083 Microscopic examination of specimen from upper gastrointestinal tract and of vomitus, culture and sensitivity
- 9084 Microscopic examination of specimen from upper gastrointestinal tract and of vomitus, parasitology

- 9085 Microscopic examination of specimen from upper gastrointestinal tract and of vomitus, toxicology
- 9086 Microscopic examination of specimen from upper gastrointestinal tract and of vomitus, cell block and Papanicolaou smear
- 9089 Microscopic examination of specimen from upper gastrointestinal tract and of vomitus, other microscopic examination
- 9091 Microscopic examination of specimen from lower gastrointestinal tract and of stool, bacterial smear
- 9092 Microscopic examination of specimen from lower gastrointestinal tract and of stool, culture
- 9093 Microscopic examination of specimen from lower gastrointestinal tract and of stool, culture and sensitivity
- 9094 Microscopic examination of specimen from lower gastrointestinal tract and of stool, parasitology
- 9095 Microscopic examination of specimen from lower gastrointestinal tract and of stool, toxicology
- 9096 Microscopic examination of specimen from lower gastrointestinal tract and of stool, cell block and Papanicolaou smear
- 9099 Microscopic examination of specimen from lower gastrointestinal tract and of stool, other microscopic examination
- 9101 Microscopic examination of specimen from liver, biliary tract, and pancreas, bacterial smear
- 9102 Microscopic examination of specimen from liver, biliary tract, and pancreas, culture
- 9103 Microscopic examination of specimen from liver, biliary tract, and pancreas, culture and sensitivity
- 9104 Microscopic examination of specimen from liver, biliary tract, and pancreas, parasitology
- 9105 Microscopic examination of specimen from liver, biliary tract, and pancreas, toxicology
- 9106 Microscopic examination of specimen from liver, biliary tract, and pancreas, cell block and Papanicolaou smear
- 9109 Microscopic examination of specimen from liver, biliary tract, and pancreas, other microscopic examination
- 9111 Microscopic examination of peritoneal and retroperitoneal specimen, bacterial smear
- 9112 Microscopic examination of peritoneal and retroperitoneal specimen, culture
- 9113 Microscopic examination of peritoneal and retroperitoneal specimen, culture and sensitivity
- 9114 Microscopic examination of peritoneal and retroperitoneal specimen, parasitology
- 9115 Microscopic examination of peritoneal and retroperitoneal specimen, toxicology
- 9116 Microscopic examination of peritoneal and retroperitoneal specimen, cell block and Papanicolaou smear
- 9119 Microscopic examination of peritoneal and retroperitoneal specimen, other microscopic examination
- 9121 Microscopic examination of specimen from kidney, ureter, perirenal and periureteral tissue, bacterial smear

- 9122 Microscopic examination of specimen from kidney, ureter, perirenal and periureteral tissue, culture
- 9123 Microscopic examination of specimen from kidney, ureter, perirenal and periureteral tissue, culture and sensitivity
- 9124 Microscopic examination of specimen from kidney, ureter, perirenal and periureteral tissue, parasitology
- 9125 Microscopic examination of specimen from kidney, ureter, perirenal and periureteral tissue, toxicology
- 9126 Microscopic examination of specimen from kidney, ureter, perirenal and periureteral tissue, cell block and Papanicolaou smear
- 9129 Microscopic examination of specimen from kidney, ureter, perirenal and periureteral tissue, other microscopic examination
- 9131 Microscopic examination of specimen from bladder, urethra, prostate, seminal vesicle, perivesical tissue, and of urine and semen, bacterial smear
- 9132 Microscopic examination of specimen from bladder, urethra, prostate, seminal vesicle, perivesical tissue, and of urine and semen, culture
- 9133 Microscopic examination of specimen from bladder, urethra, prostate, seminal vesicle, perivesical tissue, and of urine and semen, culture and sensitivity
- 9134 Microscopic examination of specimen from bladder, urethra, prostate, seminal vesicle, perivesical tissue, and of urine and semen, parasitology
- 9135 Microscopic examination of specimen from bladder, urethra, prostate, seminal vesicle, perivesical tissue, and of urine and semen, toxicology
- 9136 Microscopic examination of specimen from bladder, urethra, prostate, seminal vesicle, perivesical tissue, and of urine and semen, cell block and Papanicolaou smear
- 9139 Microscopic examination of specimen from bladder, urethra, prostate, seminal vesicle, perivesical tissue, and of urine and semen, other microscopic examination
- 9141 Microscopic examination of specimen from female genital tract, bacterial smear
- 9142 Microscopic examination of specimen from female genital tract, culture
- 9143 Microscopic examination of specimen from female genital tract, culture and sensitivity
- 9144 Microscopic examination of specimen from female genital tract, parasitology
- 9145 Microscopic examination of specimen from female genital tract, toxicology
- 9146 Microscopic examination of specimen from female genital tract, cell block and Papanicolaou smear
- 9149 Microscopic examination of specimen from female genital tract, other microscopic examination
- 9151 Microscopic examination of specimen from musculoskeletal system and of joint fluid, bacterial smear
- 9152 Microscopic examination of specimen from musculoskeletal system and of joint fluid, culture
- 9153 Microscopic examination of specimen from musculoskeletal system and of joint fluid, culture and sensitivity
- 9154 Microscopic examination of specimen from musculoskeletal system and of joint fluid, parasitology

- 9155 Microscopic examination of specimen from musculoskeletal system and of joint fluid, toxicology
- 9156 Microscopic examination of specimen from musculoskeletal system and of joint fluid, cell block and Papanicolaou smear
- 9159 Microscopic examination of specimen from musculoskeletal system and of joint fluid, other microscopic examination
- 9161 Microscopic examination of specimen from skin and other integument, bacterial smear
- 9162 Microscopic examination of specimen from skin and other integument, culture
- 9163 Microscopic examination of specimen from skin and other integument, culture and sensitivity
- 9164 Microscopic examination of specimen from skin and other integument, parasitology
- 9165 Microscopic examination of specimen from skin and other integument, toxicology
- 9166 Microscopic examination of specimen from skin and other integument, cell block and Papanicolaou smear
- 9169 Microscopic examination of specimen from skin and other integument, other microscopic examination
- 9171 Microscopic examination of specimen from operative wound, bacterial smear
- 9172 Microscopic examination of specimen from operative wound, culture
- 9173 Microscopic examination of specimen from operative wound, culture and sensitivity
- 9174 Microscopic examination of specimen from operative wound, parasitology
- 9175 Microscopic examination of specimen from operative wound, toxicology
- 9176 Microscopic examination of specimen from operative wound, cell block and Papanicolaou smear
- 9179 Microscopic examination of specimen from operative wound, other microscopic examination
- 9181 Microscopic examination of specimen from other site, bacterial smear
- 9182 Microscopic examination of specimen from other site, culture
- 9183 Microscopic examination of specimen from other site, culture and sensitivity
- 9184 Microscopic examination of specimen from other site, parasitology
- 9185 Microscopic examination of specimen from other site, toxicology
- 9186 Microscopic examination of specimen from other site, cell block and Papanicolaou smear
- 9189 Microscopic examination of specimen from other site, other microscopic examination
- 9191 Microscopic examination of specimen from unspecified site, bacterial smear
- 9192 Microscopic examination of specimen from unspecified site, culture
- 9193 Microscopic examination of specimen from unspecified site, culture and sensitivity
- 9194 Microscopic examination of specimen from unspecified site, parasitology
- 9195 Microscopic examination of specimen from unspecified site, toxicology
- 9196 Microscopic examination of specimen from unspecified site, cell block and Papanicolaou smear
- 9199 Microscopic examination of specimen from unspecified site, other microscopic examination

- 9201 Thyroid scan and radioisotope function studies
- 9202 Liver scan and radioisotope function study
- 9203 Renal scan and radioisotope function study
- 9204 Gastrointestinal scan and radioisotope function study
- 9205 Cardiovascular and hematopoietic scan and radioisotope function study
- 9209 Other radioisotope function studies
- 9211 Cerebral scan
- 9212 Scan of other sites of head
- 9213 Parathyroid scan
- 9214 Bone scan
- 9215 Pulmonary scan
- 9216 Scan of lymphatic system
- 9217 Placental scan
- 9218 Total body scan
- 9219 Scan of other sites
- 9220 Infusion of liquid brachytherapy radioisotope
- 9221 Superficial radiation
- 9222 Orthovoltage radiation
- 9223 Radioisotopic teleradiotherapy
- 9224 Teleradiotherapy using photons
- 9225 Teleradiotherapy using electrons
- 9226 Teleradiotherapy of other particulate radiation
- 9227 Implantation or insertion of radioactive elements
- 9228 Injection or instillation of radioisotopes
- 9229 Other radiotherapeutic procedure
- 9230 Stereotactic radiosurgery, not otherwise specified
- 9231 Single source photon radiosurgery
- 9232 Multi-source photon radiosurgery
- 9233 Particulate radiosurgery
- 9239 Stereotactic radiosurgery, not elsewhere classified
- 9241 Intra-operative electron radiation therapy
- 9301 Functional evaluation
- 9302 Orthotic evaluation
- 9303 Prosthetic evaluation
- 9304 Manual testing of muscle function
- 9305 Range of motion testing

- 9306 Measurement of limb length
- 9307 Body measurement
- 9308 Electromyography
- 9309 Other diagnostic physical therapy procedure
- 9311 Assisting exercise
- 9312 Other active musculoskeletal exercise
- 9313 Resistive exercise
- 9314 Training in joint movements
- 9315 Mobilization of spine
- 9316 Mobilization of other joints
- 9317 Other passive musculoskeletal exercise
- 9318 Breathing exercise
- 9319 Exercise, not elsewhere classified
- 9321 Manual and mechanical traction
- 9322 Ambulation and gait training
- 9323 Fitting of orthotic device
- 9324 Training in use of prosthetic or orthotic device
- 9325 Forced extension of limb
- 9326 Manual rupture of joint adhesions
- 9327 Stretching of muscle or tendon
- 9328 Stretching of fascia
- 9329 Other forcible correction of musculoskeletal deformity
- 9331 Assisted exercise in pool
- 9332 Whirlpool treatment
- 9333 Other hydrotherapy
- 9334 Diathermy
- 9335 Other heat therapy
- 9336 Cardiac retraining
- 9337 Prenatal training
- 9338 Combined physical therapy without mention of the components
- 9339 Other physical therapy
- 9341 Spinal traction using skull device
- 9342 Other spinal traction
- 9343 Intermittent skeletal traction
- 9344 Other skeletal traction
- 9345 Thomas' splint traction

- 9346 Other skin traction of limbs
- 9351 Application of plaster jacket
- 9352 Application of neck support
- 9353 Application of other cast
- 9354 Application of splint
- 9355 Dental wiring
- 9356 Application of pressure dressing
- 9357 Application of other wound dressing
- 9358 Application of pressure trousers
- 9359 Other immobilization, pressure, and attention to wound
- 9361 Osteopathic manipulative treatment for general mobilization
- 9362 Osteopathic manipulative treatment using high-velocity, low-amplitude forces
- 9363 Osteopathic manipulative treatment using low- velocity, high-amplitude forces
- 9364 Osteopathic manipulative treatment using isotonic, isometric forces
- 9365 Osteopathic manipulative treatment using indirect forces
- 9366 Osteopathic manipulative treatment to move tissue fluids
- 9367 Other specified osteopathic manipulative treatment
- 9371 Dyslexia training
- 9372 Dysphasia training
- 9373 Esophageal speech training
- 9374 Speech defect training
- 9375 Other speech training and therapy
- 9376 Training in use of lead dog for the blind
- 9377 Training in braille or moon
- 9378 Other rehabilitation for the blind
- 9381 Recreation therapy
- 9382 Educational therapy
- 9383 Occupational therapy
- 9384 Music therapy
- 9385 Vocational rehabilitation
- 9389 Rehabilitation, not elsewhere classified
- 9390 Non-invasive mechanical ventilation
- 9391 Intermittent positive pressure breathing [IPPB]
- 9393 Nonmechanical methods of resuscitation
- 9394 Respiratory medication administered by nebulizer
- 9395 Hyperbaric oxygenation

- 9396 Other oxygen enrichment
- 9397 Decompression chamber
- 9398 Other control of atmospheric pressure and composition
- 9399 Other respiratory procedures
- 9401 Administration of intelligence test
- 9402 Administration of psychologic test
- 9403 Character analysis
- 9408 Other psychologic evaluation and testing
- 9409 Psychologic mental status determination, not otherwise specified
- 9411 Psychiatric mental status determination
- 9412 Routine psychiatric visit, not otherwise specified
- 9413 Psychiatric commitment evaluation
- 9419 Other psychiatric interview and evaluation
- 9421 Narcoanalysis
- 9422 Lithium therapy
- 9423 Neuroleptic therapy
- 9424 Chemical shock therapy
- 9425 Other psychiatric drug therapy
- 9426 Subconvulsive electroshock therapy
- 9427 Other electroshock therapy
- 9429 Other psychiatric somatotherapy
- 9431 Psychoanalysis
- 9432 Hypnotherapy
- 9433 Behavior therapy
- 9434 Individual therapy for psychosexual dysfunction
- 9435 Crisis intervention
- 9436 Play psychotherapy
- 9437 Exploratory verbal psychotherapy
- 9438 Supportive verbal psychotherapy
- 9439 Other individual psychotherapy
- 9441 Group therapy for psychosexual dysfunction
- 9442 Family therapy
- 9443 Psychodrama
- 9444 Other group therapy
- 9445 Drug addiction counseling
- 9446 Alcoholism counseling

- 9449 Other counseling
- 9451 Referral for psychotherapy
- 9452 Referral for psychiatric aftercare
- 9453 Referral for alcoholism rehabilitation
- 9454 Referral for drug addiction rehabilitation
- 9455 Referral for vocational rehabilitation
- 9459 Referral for other psychologic rehabilitation
- 9461 Alcohol rehabilitation
- 9462 Alcohol detoxification
- 9463 Alcohol rehabilitation and detoxification
- 9464 Drug rehabilitation
- 9465 Drug detoxification
- 9466 Drug rehabilitation and detoxification
- 9467 Combined alcohol and drug rehabilitation
- 9468 Combined alcohol and drug detoxification
- 9469 Combined alcohol and drug rehabilitation and detoxification
- 9501 Limited eye examination
- 9502 Comprehensive eye examination
- 9503 Extended ophthalmologic work-up
- 9504 Eye examination under anesthesia
- 9505 Visual field study
- 9506 Color vision study
- 9507 Dark adaptation study
- 9509 Eye examination, not otherwise specified
- 9511 Fundus photography
- 9512 Fluorescein angiography or angioscopy of eye
- 9513 Ultrasound study of eye
- 9514 X-ray study of eye
- 9515 Ocular motility study
- 9516 P32 and other tracer studies of eye
- 9521 Electroretinogram [ERG]
- 9522 Electro-oculogram [EOG]
- 9523 Visual evoked potential [VEP]
- 9524 Electronystagmogram [ENG]
- 9525 Electromyogram of eye [EMG]
- 9526 Tonography, provocative tests, and other glaucoma testing

- 9531 Fitting and dispensing of spectacles
- 9532 Prescription, fitting, and dispensing of contact lens
- 9533 Dispensing of other low vision aids
- 9534 Ocular prosthetics
- 9535 Orthoptic training
- 9536 Ophthalmologic counseling and instruction
- 9541 Audiometry
- 9542 Clinical test of hearing
- 9543 Audiological evaluation
- 9544 Clinical vestibular function tests
- 9545 Rotation tests
- 9546 Other auditory and vestibular function tests
- 9547 Hearing examination, not otherwise specified
- 9548 Fitting of hearing aid
- 9549 Other nonoperative procedures related to hearing
- 9601 Insertion of nasopharyngeal airway
- 9602 Insertion of oropharyngeal airway
- 9603 Insertion of esophageal obturator airway
- 9604 Insertion of endotracheal tube
- 9605 Other intubation of respiratory tract
- 9606 Insertion of Sengstaken tube
- 9607 Insertion of other (naso-)gastric tube
- 9608 Insertion of (naso-)intestinal tube
- 9609 Insertion of rectal tube
- 9611 Packing of external auditory canal
- 9614 Vaginal packing
- 9615 Insertion of vaginal mold
- 9616 Other vaginal dilation
- 9617 Insertion of vaginal diaphragm
- 9618 Insertion of other vaginal pessary
- 9619 Rectal packing
- 9621 Dilation of frontonasal duct
- 9622 Dilation of rectum
- 9623 Dilation of anal sphincter
- 9624 Dilation and manipulation of enterostomy stoma
- 9625 Therapeutic distention of bladder

- 9626 Manual reduction of rectal prolapse
- 9627 Manual reduction of hernia
- 9628 Manual reduction of enterostomy prolapse
- 9629 Reduction of intussusception of alimentary tract
- 9631 Gastric cooling
- 9632 Gastric freezing
- 9633 Gastric lavage
- 9634 Other irrigation of (naso-)gastric tube
- 9635 Gastric gavage
- 9636 Irrigation of gastrostomy or enterostomy
- 9637 Proctoclysis
- 9638 Removal of impacted feces
- 9639 Other transanal enema
- 9641 Irrigation of cholecystostomy and other biliary tube
- 9642 Irrigation of pancreatic tube
- 9643 Digestive tract instillation, except gastric gavage
- 9644 Vaginal douche
- 9645 Irrigation of nephrostomy and pyelostomy
- 9646 Irrigation of ureterostomy and ureteral catheter
- 9647 Irrigation of cystostomy
- 9648 Irrigation of other indwelling urinary catheter
- 9649 Other genitourinary instillation
- 9651 Irrigation of eye
- 9652 Irrigation of ear
- 9653 Irrigation of nasal passages
- 9654 Dental scaling, polishing, and debridement
- 9655 Tracheostomy toilette
- 9656 Other lavage of bronchus and trachea
- 9657 Irrigation of vascular catheter
- 9658 Irrigation of wound catheter
- 9659 Other irrigation of wound
- 966 Enteral infusion of concentrated nutritional substances
- 9670 Continuous invasive mechanical ventilation of unspecified duration
- 9671 Continuous invasive mechanical ventilation for less than 96 consecutive hours
- 9672 Continuous invasive mechanical ventilation for 96 consecutive hours or more
- 9701 Replacement of (naso-)gastric or esophagostomy tube

- 9702 Replacement of gastrostomy tube
- 9703 Replacement of tube or enterostomy device of small intestine
- 9704 Replacement of tube or enterostomy device of large intestine
- 9705 Replacement of stent (tube) in biliary or pancreatic duct
- 9711 Replacement of cast on upper limb
- 9712 Replacement of cast on lower limb
- 9713 Replacement of other cast
- 9714 Replacement of other device for musculoskeletal immobilization
- 9715 Replacement of wound catheter
- 9716 Replacement of wound packing or drain
- 9721 Replacement of nasal packing
- 9722 Replacement of dental packing
- 9723 Replacement of tracheostomy tube
- 9724 Replacement and refitting of vaginal diaphragm
- 9725 Replacement of other vaginal pessary
- 9726 Replacement of vaginal or vulvar packing or drain
- 9729 Other nonoperative replacements
- 9731 Removal of eye prosthesis
- 9732 Removal of nasal packing
- 9733 Removal of dental wiring
- 9734 Removal of dental packing
- 9735 Removal of dental prosthesis
- 9736 Removal of other external mandibular fixation device
- 9737 Removal of tracheostomy tube
- 9738 Removal of sutures from head and neck
- 9739 Removal of other therapeutic device from head and neck
- 9741 Removal of thoracotomy tube or pleural cavity drain
- 9742 Removal of mediastinal drain
- 9743 Removal of sutures from thorax
- 9744 Nonoperative removal of heart assist system
- 9749 Removal of other device from thorax
- 9751 Removal of gastrostomy tube
- 9752 Removal of tube from small intestine
- 9753 Removal of tube from large intestine or appendix
- 9754 Removal of cholecystostomy tube
- 9755 Removal of T-tube, other bile duct tube, or liver tube

- 9756 Removal of pancreatic tube or drain
- 9759 Removal of other device from digestive system
- 9761 Removal of pyelostomy and nephrostomy tube
- 9762 Removal of ureterostomy tube and ureteral catheter
- 9763 Removal of cystostomy tube
- 9764 Removal of other urinary drainage device
- 9765 Removal of urethral stent
- 9769 Removal of other device from urinary system
- 9771 Removal of intrauterine contraceptive device
- 9772 Removal of intrauterine pack
- 9773 Removal of vaginal diaphragm
- 9774 Removal of other vaginal pessary
- 9775 Removal of vaginal or vulvar packing
- 9779 Removal of other device from genital tract
- 9781 Removal of retroperitoneal drainage device
- 9782 Removal of peritoneal drainage device
- 9783 Removal of abdominal wall sutures
- 9784 Removal of sutures from trunk, not elsewhere classified
- 9785 Removal of packing from trunk, not elsewhere classified
- 9786 Removal of other device from abdomen
- 9787 Removal of other device from trunk
- 9788 Removal of external immobilization device
- 9789 Removal of other therapeutic device
- 9801 Removal of intraluminal foreign body from mouth without incision
- 9802 Removal of intraluminal foreign body from esophagus without incision
- 9803 Removal of intraluminal foreign body from stomach and small intestine without incision
- 9804 Removal of intraluminal foreign body from large intestine without incision
- 9805 Removal of intraluminal foreign body from rectum and anus without incision
- 9811 Removal of intraluminal foreign body from ear without incision
- 9812 Removal of intraluminal foreign body from nose without incision
- 9813 Removal of intraluminal foreign body from pharynx without incision
- 9814 Removal of intraluminal foreign body from larynx without incision
- 9815 Removal of intraluminal foreign body from trachea and bronchus without incision
- 9816 Removal of intraluminal foreign body from uterus without incision
- 9817 Removal of intraluminal foreign body from vagina without incision
- 9818 Removal of intraluminal foreign body from artificial stoma without incision

- 9819 Removal of intraluminal foreign body from urethra without incision
- 9820 Removal of foreign body, not otherwise specified
- 9821 Removal of superficial foreign body from eye without incision
- 9822 Removal of other foreign body without incision from head and neck
- 9823 Removal of foreign body from vulva without incision
- 9824 Removal of foreign body from scrotum or penis without incision
- 9825 Removal of other foreign body without incision from trunk except scrotum, penis, or vulva
- 9826 Removal of foreign body from hand without incision
- 9827 Removal of foreign body without incision from upper limb, except hand
- 9828 Removal of foreign body from foot without incision
- 9829 Removal of foreign body without incision from lower limb, except foot
- 9851 Extracorporeal shockwave lithotripsy [ESWL] of the kidney, ureter and/or bladder
- 9852 Extracorporeal shockwave lithotripsy [ESWL] of the gallbladder and/or bile duct
- 9859 Extracorporeal shockwave lithotripsy of other sites
- 9900 Perioperative autologous transfusion of whole blood or blood components
- 9901 Exchange transfusion
- 9902 Transfusion of previously collected autologous blood
- 9903 Other transfusion of whole blood
- 9904 Transfusion of packed cells
- 9905 Transfusion of platelets
- 9906 Transfusion of coagulation factors
- 9907 Transfusion of other serum
- 9908 Transfusion of blood expander
- 9909 Transfusion of other substance
- 9910 Injection or infusion of thrombolytic agent
- 9911 Injection of Rh immune globulin
- 9912 Immunization for allergy
- 9913 Immunization for autoimmune disease
- 9914 Injection or infusion of immunoglobulin
- 9915 Parenteral infusion of concentrated nutritional substances
- 9916 Injection of antidote
- 9917 Injection of insulin
- 9918 Injection or infusion of electrolytes
- 9919 Injection of anticoagulant
- 9920 Injection or infusion of platelet inhibitor
- 9921 Injection of antibiotic

- 9922 Injection of other anti-infective
- 9923 Injection of steroid
- 9924 Injection of other hormone
- 9925 Injection or infusion of cancer chemotherapeutic substance
- 9926 Injection of tranquilizer
- 9927 Iontophoresis
- 9928 Injection or infusion of biological response modifier [BRM] as an antineoplastic agent
- 9929 Injection or infusion of other therapeutic or prophylactic substance
- 9931 Vaccination against cholera
- 9932 Vaccination against typhoid and paratyphoid fever
- 9933 Vaccination against tuberculosis
- 9934 Vaccination against plague
- 9935 Vaccination against tularemia
- 9936 Administration of diphtheria toxoid
- 9937 Vaccination against pertussis
- 9938 Administration of tetanus toxoid
- 9939 Administration of diphtheria-tetanus-pertussis, combined
- 9941 Administration of poliomyelitis vaccine
- 9942 Vaccination against smallpox
- 9943 Vaccination against yellow fever
- 9944 Vaccination against rabies
- 9945 Vaccination against measles
- 9946 Vaccination against mumps
- 9947 Vaccination against rubella
- 9948 Administration of measles-mumps-rubella vaccine
- 9951 Prophylactic vaccination against the common cold
- 9952 Prophylactic vaccination against influenza
- 9953 Prophylactic vaccination against arthropod-borne viral encephalitis
- 9954 Prophylactic vaccination against other arthropod-borne viral diseases
- 9955 Prophylactic administration of vaccine against other diseases
- 9956 Administration of tetanus antitoxin
- 9957 Administration of botulism antitoxin
- 9958 Administration of other antitoxins
- 9959 Other vaccination and inoculation
- 9960 Cardiopulmonary resuscitation, not otherwise specified
- 9961 Atrial cardioversion

- 9962 Other electric countershock of heart
- 9963 Closed chest cardiac massage
- 9964 Carotid sinus stimulation
- 9969 Other conversion of cardiac rhythm
- 9971 Therapeutic plasmapheresis
- 9972 Therapeutic leukopheresis
- 9973 Therapeutic erythrocytapheresis
- 9974 Therapeutic plateletpheresis
- 9975 Administration of neuroprotective agent
- 9976 Extracorporeal immunoabsorption
- 9977 Application or administration of an adhesion barrier substance
- 9978 Aquapheresis
- 9979 Other therapeutic apheresis
- 9981 Hypothermia (central) (local)
- 9982 Ultraviolet light therapy
- 9983 Other phototherapy
- 9984 Isolation
- 9985 Hyperthermia for treatment of cancer
- 9986 Non-invasive placement of bone growth stimulator
- 9988 Therapeutic photopheresis
- 9991 Acupuncture for anesthesia
- 9992 Other acupuncture
- 9993 Rectal massage (for levator spasm)
- 9994 Prostatic massage
- 9995 Stretching of foreskin
- 9996 Collection of sperm for artificial insemination
- 9997 Fitting of denture
- 9998 Extraction of milk from lactating breast
- 9999 Other miscellaneous procedures