

Table S6. International Classification of Disease, 9th edition, Clinical Modification (ICD-9-CM) Diagnosis Codes Used to Define Uterine Fibroid and Comorbidities

	ICD-9-CM	Description
Uterine fibroids	218.xx	Uterine leiomyoma
	218.0	Submucous leiomyoma of uterus
	218.1	Intramural leiomyoma of uterus
	218.2	Subserous leiomyoma of uterus
	218.9	Leiomyoma of uterus, unspecified
	219.xx	Other benign neoplasm of uterus
	219.0	Benign neoplasm of cervix uteri
	219.1	Benign neoplasm of corpus uteri
	219.8	Benign neoplasm of other specified parts of uterus
	219.9	Benign neoplasm of uterus, part unspecified
	654.1x	Tumors of body of uterus
		Tumors of body of uterus, unspecified as to episode of care or not applicable
	654.10	Tumors of body of uterus, delivered, with or without mention of antepartum condition
	654.11	Tumors of body of uterus, delivered, with mention of postpartum complication
654.12	Tumors of body of uterus, antepartum condition or complication	
654.13	Tumors of body of uterus, postpartum condition or complication	
654.14	Tumors of body of uterus, postpartum condition or complication	
Heavy menstrual bleeding	626.2	Excessive or frequent menstruation
	627.0	Premenopausal menorrhagia
Pelvic pain	625.0	Dyspareunia
	625.3	Dysmenorrhea
	789.03	Abdominal pain, right lower quadrant
	789.63	Abdominal tenderness, right lower quadrant
	789.64	Abdominal tenderness, left lower quadrant
	789.9	Other symptoms involving abdomen and pelvis
	789.00	Abdominal pain, unspecified site
	789.04	Abdominal pain, left lower quadrant
	789.07	Abdominal pain, generalized
	789.09	Abdominal pain, other specified site
Anemias	280.xx	Iron deficiency anemias
		Iron deficiency anemia secondary to blood loss (chronic)
	280.0	Iron deficiency anemia secondary to inadequate dietary iron intake
	280.1	Iron deficiency anemia secondary to inadequate dietary iron intake
	280.8	Other specified iron deficiency anemias

	280.9	Iron deficiency anemia, unspecified
	285.1	Acute posthemorrhagic anemia
	285.2	Anemia of chronic disease
	285.29	Anemia of other chronic disease
	285.8	Other specified anemias
	285.9	Anemia, unspecified
Inflammatory diseases		Inflammatory disease of ovary, fallopian tube, pelvic cellular tissue, and peritoneum
	614.xx	
	614.0	Acute salpingitis and oophoritis
	614.1	Chronic salpingitis and oophoritis
		Salpingitis and oophoritis not specified as acute, subacute, or chronic
	614.2	
	614.3	Acute parametritis and pelvic cellulitis
	614.4	Chronic or unspecified parametritis and pelvic cellulitis
	614.5	Acute or unspecified pelvic peritonitis, female
		Pelvic peritoneal adhesions, female (postoperative) (postinfection)
	614.6	
	614.7	Other chronic pelvic peritonitis, female
		Other specified inflammatory disease of female pelvic organs and tissues
	614.8	
	Unspecified inflammatory disease of female pelvic organs and tissues	
614.9		
615	Inflammatory diseases of uterus, except cervix	
615.0	Acute inflammatory diseases of uterus, except cervix	
615.1	Chronic inflammatory diseases of uterus, except cervix	
615.9	Unspecified inflammatory disease of uterus	
Noninflammatory diseases		Noninflammatory disorders of ovary, fallopian tube, and broad ligament
	620.xx	
	620.0	Follicular cyst of ovary
	620.1	Corpus luteum cyst or hematoma
	620.2	Other and unspecified ovarian cyst
	620.3	Acquired atrophy of ovary and fallopian tube
	620.4	Prolapse or hernia of ovary and fallopian tube
	620.5	Torsion of ovary, ovarian pedicle, or fallopian tube
	620.6	Broad ligament laceration syndrome
	620.7	Hematoma of broad ligament
		Other noninflammatory disorders of ovary, fallopian tube, and broad ligament
	620.8	
	Unspecified noninflammatory disorder of ovary, fallopian tube, and broad ligament	
620.9		

	622.xx	Noninflammatory disorders of cervix
	622.0	Erosion and ectropion of cervix
	622.1	Dysplasia of cervix (uteri)
	622.10	Dysplasia of cervix, unspecified
	622.11	Mild dysplasia of cervix
	622.12	Moderate dysplasia of cervix
	622.2	Leukoplakia of cervix (uteri)
	622.3	Old laceration of cervix
	622.4	Stricture and stenosis of cervix
	622.5	Incompetence of cervix
	622.6	Hypertrophic elongation of cervix
	622.7	Mucous polyp of cervix
	622.8	Other specified noninflammatory disorders of cervix
	622.9	Unspecified noninflammatory disorder of cervix
	623.5	Leukorrhea, not specified as infective
Endometriosis	617.xx	Endometriosis
	617.0	Endometriosis of uterus
	617.1	Endometriosis of ovary
	617.2	Endometriosis of fallopian tube
	617.3	Endometriosis of pelvic peritoneum
	617.4	Endometriosis of rectovaginal septum and vagina
	617.5	Endometriosis of intestine
	617.6	Endometriosis in scar of skin
	617.8	Endometriosis of other specified sites
	617.9	Endometriosis, site unspecified
Pregnancy	V22.x	Normal pregnancy
	V23.x	Supervision of high-risk pregnancy
	V27.x	Outcome of delivery
	630–633	Ectopic and molar pregnancy
	634–639	Other pregnancy with abortive outcome
	640-649	Complications mainly related to pregnancy
	650-659	Normal delivery, and other indications for care in pregnancy, labor, and delivery
	660–669	Complications occurring mainly in the course of labor and delivery
	670–677	Complications of the puerperium
Pregnancy/delivery	V22.2	Pregnant state, incidental
	650	Normal delivery
Urinary problems	591.xx	Hydronephrosis
	593.5x	Hydroureter

	788.1	Dysuria
	788.2	Retention of urine
	788.20	Retention of urine, unspecified
	788.21	Incomplete bladder emptying
	788.29	Other specified retention of urine
	788.3	Urinary incontinence
	788.30	Urinary incontinence, unspecified
	788.31	Urge incontinence
	788.33	Mixed incontinence (male) (female)
	788.34	Incontinence without sensory awareness
	788.35	Post-void dribbling
	788.36	Nocturnal enuresis
	788.37	Continuous leakage
	788.38	Overflow incontinence
	788.39	Other urinary incontinence
	788.4	Frequency of urination and polyuria
	788.41	Urinary frequency
	788.42	Polyuria
	788.43	Nocturia
	788.5	Oliguria and anuria
	788.6	Other abnormality of urination
	788.61	Splitting of urinary stream
	788.62	Slowing of urinary stream
	788.63	Urgency of urination
	788.64	Urinary hesitancy
	788.65	Straining on urination
	788.69	Other abnormality of urination
	788.7	Urethral discharge
	788.8	Extravasation of urine
	788.9	Other symptoms involving urinary system
	788.91	Functional urinary incontinence
	788.99	Other symptoms involving urinary system
Constipation or gas	564.00	Constipation, unspecified
	564.09	Other constipation
	787.3	Flatulence, eructation, and gas pain
	564.0	Constipation
	564.01	Slow transit constipation
	564.02	Outlet dysfunction constipation
Disorders of the uterus not elsewhere classified	621.xx	Disorders of uterus, not elsewhere classified
	621.0	Polyp of corpus uteri
	621.1	Chronic subinvolution of uterus
	621.2	Hypertrophy of uterus

	621.3	Endometrial hyperplasia
	621.30	Endometrial hyperplasia, unspecified
	621.31	Simple endometrial hyperplasia without atypia
	621.32	Complex endometrial hyperplasia without atypia
	621.33	Endometrial hyperplasia with atypia
	621.34	Benign endometrial hyperplasia
	621.35	Endometrial intraepithelial neoplasia [EIN]
	621.4	Hematometra
	621.5	Intrauterine synechiae
	621.6	Malposition of uterus
	621.7	Chronic inversion of uterus
		Other specified disorders of uterus, not elsewhere classified
	621.8	
	621.9	Unspecified disorder of uterus
Genital prolapse	618.xx	Genital prolapse
		Prolapse of vaginal walls without mention of uterine prolapse
	618.0	
	618.00	Unspecified prolapse of vaginal walls
	618.01	Cystocele, midline
	618.02	Cystocele, lateral
	618.03	Urethrocele
	618.04	Rectocele
	618.05	Perineocele
		Other prolapse of vaginal walls without mention of uterine prolapse
	618.09	
		Uterine prolapse without mention of vaginal wall prolapse
	618.1	
	618.2	Uterovaginal prolapse, incomplete
	618.3	Uterovaginal prolapse, complete
	618.4	Uterovaginal prolapse, unspecified
	618.5	Prolapse of vaginal vault after hysterectomy
	618.6	Vaginal enterocele, congenital or acquired
	618.7	Old laceration of muscles of pelvic floor
	618.8	Other specified genital prolapse
	618.81	Incompetence or weakening of pubocervical tissue
	618.82	Incompetence or weakening of rectovaginal tissue
	618.83	Pelvic muscle wasting
	618.84	Cervical stump prolapse
	618.89	Other specified genital prolapse
	618.9	Unspecified genital prolapse
Benign neoplasm of the uterus/ovary	220	Benign neoplasm of ovary
	219	Other benign neoplasm of uterus

	219.0	Benign neoplasm of cervix uteri
	219.1	Benign neoplasm of corpus uteri
	219.8	Benign neoplasm of other specified parts of uterus
	219.9	Benign neoplasm of uterus, part unspecified
Sepsis	038.0x-	
	038.9x	Septicemia
	038.0	Streptococcal septicemia
	038.1	Staphylococcal septicemia
	038.10	Staphylococcal septicemia, unspecified
	038.11	Methicillin susceptible <i>Staphylococcus aureus</i> septicemia
	038.12	Methicillin resistant <i>Staphylococcus aureus</i> septicemia
	038.19	Other staphylococcal septicemia
	038.2	Pneumococcal septicemia [<i>Streptococcus pneumoniae</i> septicemia]
	038.3	Septicemia due to anaerobes
	038.4	Septicemia due to other gram-negative organisms
	038.40	Septicemia due to gram-negative organism, unspecified
	038.41	Septicemia due to hemophilus influenzae [H. influenzae]
	038.42	Septicemia due to escherichia coli [E. coli]
	038.43	Septicemia due to pseudomonas
	038.44	Septicemia due to serratia
	038.49	Other septicemia due to gram-negative organisms
038.8	Other specified septicemias	
038.9	Unspecified septicemia	
670.2	Puerperal sepsis	
995.91	Sepsis	
995.92	Severe sepsis	
Intestinal obstructions	537.3	Other obstruction of duodenum
	560.89	Other specified intestinal obstruction
	560	Intestinal obstruction without mention of hernia
	560.0	Intussusception
	560.8	Other specified intestinal obstruction
	560.81	Intestinal or peritoneal adhesions with obstruction (postoperative) (postinfection)
	560.9	Unspecified intestinal obstruction
Peritonitis	567.xx	Peritonitis and retroperitoneal infections
	567.0	Peritonitis in infectious diseases classified elsewhere
	567.1	Pneumococcal peritonitis
	567.2	Other suppurative peritonitis

	567.21	Peritonitis (acute) generalized
	567.22	Peritoneal abscess
	567.23	Spontaneous bacterial peritonitis
	567.29	Other suppurative peritonitis
	567.3	Retroperitoneal infections
	567.31	Psoas muscle abscess
	567.38	Other retroperitoneal abscess
	567.39	Other retroperitoneal infections
	567.8	Other specified peritonitis
	567.81	Choleperitonitis
	567.82	Sclerosing mesenteritis
	567.89	Other specified peritonitis
	567.9	Unspecified peritonitis
	098.86	Gonococcal peritonitis
	614.5	Acute or unspecified pelvic peritonitis, female
	614.7	Other chronic pelvic peritonitis, female
Nocturia	788.43	Nocturia
Dyspareunia	625.0	Dyspareunia
Spontaneous abortion	634.X	Spontaneous abortion
	634.0	Spontaneous abortion; complicated by genital tract and pelvic infection
	634.00	Spontaneous abortion, complicated by genital tract and pelvic infection, unspecified
	634.01	Spontaneous abortion, complicated by genital tract and pelvic infection, incomplete
	634.02	Spontaneous abortion, complicated by genital tract and pelvic infection, complete
	634.1	Spontaneous abortion; complicated by delayed or excessive hemorrhage
	634.10	Spontaneous abortion, complicated by delayed or excessive hemorrhage, unspecified
	634.11	Spontaneous abortion, complicated by delayed or excessive hemorrhage, incomplete
	634.12	Spontaneous abortion, complicated by delayed or excessive hemorrhage, complete
	634.2	Spontaneous abortion; complicated by damage to pelvic organs or tissues
	634.20	Spontaneous abortion, complicated by damage to pelvic organs or tissues, unspecified
	634.21	Spontaneous abortion, complicated by damage to pelvic organs or tissues, incomplete
	634.22	Spontaneous abortion, complicated by damage to pelvic organs or tissues, complete

634.3 Spontaneous abortion; complicated by renal failure
Spontaneous abortion, complicated by renal failure,
634.30 unspecified
Spontaneous abortion, complicated by renal failure,
634.31 incomplete
Spontaneous abortion, complicated by renal failure,
634.32 complete
Spontaneous abortion; complicated by metabolic
634.4 disorder
Spontaneous abortion, complicated by metabolic
634.40 disorder, unspecified
Spontaneous abortion, complicated by metabolic
634.41 disorder, incomplete
Spontaneous abortion, complicated by metabolic
634.42 disorder, complete
634.5 Spontaneous abortion; complicated by shock
Spontaneous abortion, complicated by shock,
634.50 unspecified
Spontaneous abortion, complicated by shock,
634.51 incomplete

634.52 Spontaneous abortion, complicated by shock, complete
634.6 Spontaneous abortion; complicated by embolism
Spontaneous abortion, complicated by embolism,
634.60 unspecified
Spontaneous abortion, complicated by embolism,
634.61 incomplete
Spontaneous abortion, complicated by embolism,
634.62 complete
Spontaneous abortion; with other specified
634.7 complications
Spontaneous abortion, with other specified
634.70 complications, unspecified
Spontaneous abortion, with other specified
634.71 complications, incomplete
Spontaneous abortion, with other specified
634.72 complications, complete
634.8 Spontaneous abortion; with unspecified complication
Spontaneous abortion, with unspecified complication,
634.80 unspecified
Spontaneous abortion, with unspecified complication,
634.81 incomplete

Therapeutic abortion

- 634.82 Spontaneous abortion, with unspecified complication, complete
- 634.9 Spontaneous abortion; without mention of complication
- 634.90 Spontaneous abortion, without mention of complication, unspecified
- 634.91 Spontaneous abortion, without mention of complication, incomplete
- 634.92 Spontaneous abortion, without mention of complication, complete
- 635.X Legally induced abortion
- 635.0 Legally induced abortion; complicated by genital tract and pelvic infection
- 635.00 Legally induced abortion, complicated by genital tract and pelvic infection, unspecified
- 635.01 Legally induced abortion, complicated by genital tract and pelvic infection, incomplete
- 635.02 Legally induced abortion, complicated by genital tract and pelvic infection, complete
- 635.1 Legally induced abortion; complicated by delayed or excessive hemorrhage
- 635.10 Legally induced abortion, complicated by delayed or excessive hemorrhage, unspecified
- 635.11 Legally induced abortion, complicated by delayed or excessive hemorrhage, incomplete
- 635.12 Legally induced abortion, complicated by delayed or excessive hemorrhage, complete
- 635.2 Legally induced abortion; complicated by damage to pelvic organs or tissues
- 635.20 Legally induced abortion, complicated by damage to pelvic organs or tissues, unspecified
- 635.21 Legally induced abortion, complicated by damage to pelvic organs or tissues, incomplete
- 635.22 Legally induced abortion, complicated by damage to pelvic organs or tissues, complete
- 635.3 Legally induced abortion; complicated by renal failure
- 635.30 Legally induced abortion, complicated by renal failure, unspecified
- 635.31 Legally induced abortion, complicated by renal failure, incomplete
- 635.32 Legally induced abortion, complicated by renal failure, complete

635.4	Legally induced abortion; complicated by metabolic disorder
635.40	Legally induced abortion, complicated by metabolic disorder, unspecified
635.41	Legally induced abortion, complicated by metabolic disorder, incomplete
635.42	Legally induced abortion, complicated by metabolic disorder, complete
635.5	Legally induced abortion; complicated by shock
635.50	Legally induced abortion, complicated by shock, unspecified
635.51	Legally induced abortion, complicated by shock, incomplete
635.52	Legally induced abortion, complicated by shock, complete
635.6	Legally induced abortion; complicated by embolism
635.60	Legally induced abortion, complicated by embolism, unspecified
635.61	Legally induced abortion, complicated by embolism, incomplete
635.62	Legally induced abortion, complicated by embolism, complete
635.7	Legally induced abortion; with other specified complications
635.70	Legally induced abortion, with other specified complications, unspecified
635.71	Legally induced abortion, with other specified complications, incomplete
635.72	Legally induced abortion, with other specified complications, complete
635.8	Legally induced abortion; with unspecified complication
635.80	Legally induced abortion, with unspecified complication, unspecified
635.81	Legally induced abortion, with unspecified complication, incomplete
635.82	Legally induced abortion, with unspecified complication, complete
635.9	Legally induced abortion; without mention of complication
635.90	Legally induced abortion, without mention of complication, unspecified

	635.91	Legally induced abortion, without mention of complication, incomplete
	635.92	Legally induced abortion, without mention of complication, complete
Ectopic pregnancy	633	Ectopic pregnancy
	633.0	Abdominal pregnancy
	633.00	Abdominal pregnancy without intrauterine pregnancy
	633.01	Abdominal pregnancy with intrauterine pregnancy
	633.1	Tubal pregnancy
	633.10	Tubal pregnancy without intrauterine pregnancy
	633.11	Tubal pregnancy with intrauterine pregnancy
	633.2	Ovarian pregnancy
	633.20	Ovarian pregnancy without intrauterine pregnancy
	633.21	Ovarian pregnancy with intrauterine pregnancy
	633.8	Other ectopic pregnancy
	633.80	Other ectopic pregnancy without intrauterine pregnancy
	633.81	Other ectopic pregnancy with intrauterine pregnancy
	633.9	Unspecified ectopic pregnancy
	633.90	Unspecified ectopic pregnancy without intrauterine pregnancy
	633.91	Unspecified ectopic pregnancy with intrauterine pregnancy
Cesarean section	669.7	Cesarean delivery, without mention of indication
	654.1	Tumors of body of uterus
	654.10	Tumors of body of uterus, unspecified as to episode of care or not applicable
	654.11	Tumors of body of uterus, delivered, with or without mention of antepartum condition
	654.12	Tumors of body of uterus, delivered, with mention of postpartum complication
	654.13	Tumors of body of uterus, antepartum condition or complication
	654.14	Tumors of body of uterus, postpartum condition or complication
	654.3	Retroverted and incarcerated gravid uterus
	654.30	Retroverted and incarcerated gravid uterus, unspecified as to episode of care or not applicable
	654.31	Retroverted and incarcerated gravid uterus, delivered, with mention of antepartum condition
	654.32	Retroverted and incarcerated gravid uterus, delivered, with mention of postpartum complication

	654.33	Retroverted and incarcerated gravid uterus, antepartum condition or complication
	654.34	Retroverted and incarcerated gravid uterus, postpartum condition or complication
	654.81	Congenital or acquired abnormality of vulva, delivered, with or without mention of antepartum condition
	654.82	Congenital or acquired abnormality of vulva, delivered, with mention of postpartum complication
	654.83	Congenital or acquired abnormality of vulva, antepartum condition or complication
	654.84	Congenital or acquired abnormality of vulva, postpartum condition or complication
	654.9	Abnormality of organs and soft tissues of pelvis; other and unspecified
	654.90	Other and unspecified abnormality of organs and soft tissues of pelvis, unspecified as to episode of care or not applicable
	654.91	Other and unspecified abnormality of organs and soft tissues of pelvis, delivered, with or without mention of antepartum condition
	654.92	Other and unspecified abnormality of organs and soft tissues of pelvis, delivered, with mention of postpartum complication
	654.93	Other and unspecified abnormality of organs and soft tissues of pelvis, antepartum condition or complication
	654.94	Other and unspecified abnormality of organs and soft tissues of pelvis, postpartum condition or complication
Uterine Cancer	179	Malignant neoplasm of uterus, part unspecified
	182	Malignant neoplasm of body of uterus
	182.0	Malignant neoplasm of corpus uteri, except isthmus
	182.1	Malignant neoplasm of isthmus
	182.8	Malignant neoplasm of other specified sites of body of uterus
Other pelvic malignancy	183	Malignant neoplasm of ovary and other uterine adnexa
	183.0	Malignant neoplasm of ovary
	183.2	Malignant neoplasm of fallopian tube
	183.3	Malignant neoplasm of broad ligament of uterus
	183.4	Malignant neoplasm of parametrium
	183.5	Malignant neoplasm of round ligament of uterus

183.8 Malignant neoplasm of other specified sites of uterine adnexa

183.9 Malignant neoplasm of uterine adnexa, unspecified site
