

**Supplemental Table 1. Diagnosis Codes for Anxiety**

Code	Vocabulary
F40.01	ICD10CM
F40.1	ICD10CM
F40.10	ICD10CM
F40.11	ICD10CM
F41.0	ICD10CM
F41.1	ICD10CM
F42	ICD10CM
F43.1	ICD10CM
F43.10	ICD10CM
F43.11	ICD10CM
F43.12	ICD10CM
300	ICD9CM
300	ICD9CM
300.01	ICD9CM
300.02	ICD9CM
300.09	ICD9CM
300.21	ICD9CM
300.23	ICD9CM
300.29	ICD9CM
300.3	ICD9CM
309.81	ICD9CM

**Supplemental Table 2. Diagnosis Codes for Depression**

Code	Vocabulary
F31.3	ICD10CM
F31.30	ICD10CM
F31.31	ICD10CM
F31.32	ICD10CM
F31.4	ICD10CM
F31.5	ICD10CM
F32	ICD10CM
F32.0	ICD10CM
F32.1	ICD10CM
F32.2	ICD10CM
F32.3	ICD10CM
F32.4	ICD10CM
F32.5	ICD10CM
F32.8	ICD10CM
F32.9	ICD10CM
F33	ICD10CM
F33.0	ICD10CM
F33.1	ICD10CM
F33.2	ICD10CM
F33.3	ICD10CM
F33.4	ICD10CM
F33.40	ICD10CM
F33.41	ICD10CM
F33.42	ICD10CM
F33.8	ICD10CM
F33.9	ICD10CM
F34.1	ICD10CM
F43.2	ICD10CM
F43.20	ICD10CM
F43.21	ICD10CM
F43.22	ICD10CM
F43.23	ICD10CM
F43.24	ICD10CM
F43.25	ICD10CM
F43.29	ICD10CM
296.2	ICD9CM

296.2	ICD9CM
296.21	ICD9CM
296.22	ICD9CM
296.23	ICD9CM
296.24	ICD9CM
296.25	ICD9CM
296.26	ICD9CM
296.3	ICD9CM
296.3	ICD9CM
296.31	ICD9CM
296.32	ICD9CM
296.33	ICD9CM
296.34	ICD9CM
296.35	ICD9CM
296.36	ICD9CM
296.5	ICD9CM
296.5	ICD9CM
296.51	ICD9CM
296.52	ICD9CM
296.53	ICD9CM
296.54	ICD9CM
296.55	ICD9CM
296.56	ICD9CM
300.4	ICD9CM
309	ICD9CM
309	ICD9CM
309.1	ICD9CM
309.2	ICD9CM
309.21	ICD9CM
309.22	ICD9CM
309.23	ICD9CM
309.24	ICD9CM
309.28	ICD9CM
309.29	ICD9CM
309.3	ICD9CM
309.4	ICD9CM
309.8	ICD9CM
309.81	ICD9CM
309.82	ICD9CM

Leveraging electronic medical records to study pain following mastectomy

309.83	ICD9CM
309.89	ICD9CM
309.9	ICD9CM
311	ICD9CM

**Supplemental Table 3. Identification Strategy for Analgesia**

Institution	Vocabulary	Attribute	Value
AH	RxNorm	thera_class_name	ANALGESICS
VHA	National Drug Formulary		ANALGESICS

**Supplemental Table 4. Procedural Codes and Categorization of Breast Cancer Excision**

**Surgeries**

<b>Category</b>	<b>CPT Code</b>	<b>Description</b>
Mild	19126	Excision of breast lesion identified by preoperative placement of radiological marker, open; each additional lesion separately identified by a preoperative radiological marker (List separately in addition to code for primary procedure)
	19125	Excision of breast lesion identified by preoperative placement of radiological marker, open; single lesion
	38525	Biopsy or excision of lymph node(s); open, deep axillary node(s)
	38500	Biopsy or excision of lymph node(s); open, superficial
	38745	Axillary lymphadenectomy; complete
	38740	Axillary lymphadenectomy; superficial
Moderate	19307	Mastectomy, modified radical, including axillary lymph nodes, with or without pectoralis minor muscle, but excluding pectoralis major muscle
	19303	Mastectomy, simple, complete
Severe	19306	Mastectomy, radical, including pectoral muscles, axillary and internal mammary lymph nodes (Urban type operation)
	19305	Mastectomy, radical, including pectoral muscles, axillary lymph nodes

**Supplemental Table 5. Procedural Codes and Categorization of Breast Cancer**

**Reconstruction Surgeries**

Category	CPT Code	Description
Autologous	19361	Breast reconstruction with latissimus dorsi flap, without prosthetic implant
	19364	Breast reconstruction with free flap
	19367	Breast reconstruction with transverse rectus abdominis myocutaneous flap (TRAM), single pedicle, including closure of donor site
	19368	Breast reconstruction with transverse rectus abdominis myocutaneous flap (TRAM), single pedicle, including closure of donor site; with microvascular anastomosis (supercharging)
	19369	Breast reconstruction with transverse rectus abdominis myocutaneous flap (TRAM), double pedicle, including closure of donor site
Implant	19324	Mammaplasty, augmentation; without prosthetic implant
	19325	Mammaplasty, augmentation; with prosthetic implant
	19340	Immediate insertion of breast prosthesis following mastopexy, mastectomy or in reconstruction
	19342	Delayed insertion of breast prosthesis following mastopexy, mastectomy or in reconstruction
	19357	Breast reconstruction, immediate or delayed, with tissue expander, including subsequent expansion
	19370	Open periprosthetic capsulotomy, breast
Oncoplastic	19371	Periprosthetic capsulectomy, breast
	19316	mastopexy
	19318	reduction mammaplasty
	19350	Nipple/areola reconstruction
	19371	Revision of reconstructed breast

**Supplemental Table 6. Procedural Codes for Chemotherapy**

CPT Code
96401
96402
96405
96406
96409
96411
96413
96415
96416
96417
96420
96422
96423
96425
96440
96446
96450

**Supplemental Table 7. Procedural Codes for Radiation Therapy**

CPT Code
0394T
0395T
1010875
1010895
1010896
1010898
1010904
1010905
1010910
1010911
1010914
1010917
1010919
1010921
1014921
1015092
1015093
1022242
1022243
1027847
1027848
77014
77299
77371
77372
77373
77385
77386
77387
77399
77401
77402
77407
77412
77417
77422

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77601
77602
77603
77604
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77620
77750
77761

77762
77763
77767
77768
77770
77771
77772
77778
77789
77790
77799
G6001
G6002
G6003
G6004
G6005
G6006
G6007
G6008
G6009
G6010
G6011
G6012
G6013
G6014
G6015
G6016
G6017

**Supplemental Table 8. Identification Strategy for Hormone Therapy**

Institution	Vocabulary	Attribute	Value
AH	RxNorm	pharm_class	SELECTIVE ESTROGEN RECEPTOR MODULATORS (SERMS)
			ANTINEOPLASTIC - AROMATASE INHIBITORS
VHA	National Drug Formulary		ANTINEOPLASTIC HORMONES
			ANTINEOPLASTIC, OTHER

**Supplemental Table 9. Select Outcomes stratified by days to follow-up in the AH and VHA**

	<b>Discharge day</b>	<b>30 day</b>	<b>90 day</b>	<b>365 days</b>
AH (N=735)				
Pain	avg (SD) 2.2 ± 1.7 25% 0.67 50% 2.17 75% 3.41 max 8.00	avg (SD) 1.0 ± 1.6 25% 0.00 50% 0.00 75% 2.00 max 10.0	avg (SD) 0.7 ± 1.4 25% 0.00 50% 0.00 75% 0.85 max 8.67	avg (SD) 0.93 ± 1.4 25% 0.00 50% 0.00 75% 1.50 max 8.20
	Analgesic, n(%)	--	252 (34.3)	142 (19.3)
	PM, n(%)	--	2 (0.3)	4 (0.5)
	PT, n(%)	--	29 (4.9)	58 (7.9)
VHA (N=1210)				
Pain	avg (SD) 3 ± 2 25% 0.68 50% 2.44 75% 3.86 max 9.00	avg (SD) 2 ± 2 25% 0.00 50% 1.00 75% 3.00 max 10.00	avg (SD) 2 ± 2 25% 0.00 50% 0.50 75% 3.00 max 10.00	avg (SD) 2 ± 2 25% 0.00 50% 1.75 75% 3.63 max 10.0
	Analgesic, n(%)	--	368 (30.4)	301 (24.9)
	PM, n(%)	--	11 (0.9)	13 (1.0)
	PT, n(%)	--	125 (10.3)	122 (10.1)