

Supplementary Appendix

ICD-9 codes for inclusion criteria at index hospitalization

Advanced cancer (ICD-9-CM: 191, 197, 198, or any of 141–148, 157, 172 plus 196)

Advanced HIV/AIDS (ICD-9-CM: 042 with comorbid cancer, cachexia, or cirrhosis [155, 571.2, 571.5, 799.4, 140–172, or 174–208])

Advanced CHF (ICD-9-CM: 428)

Advanced COPD (ICD-9-CM: 490–492, 493.2, or 494–496)

All patients had to have two more hospitalizations in any six months in the year before hospital admission or one or more intensive care unit admissions in the year before hospital admission to be included in the sample.

ICD-9 codes for exclusion criteria at index hospitalization

Dementia (290.x, 291.2, 292.82, 294.1x, 331.0, 331.1x, 331.82)

Delirium (291.0, 292.81, 293.0, 293.1)

Drug- or alcohol-induced mental disorders, including delirium (291.x, 292.x)

ICD-9 codes for mental illnesses and substance use disorders

Depression (296.2x, 296.3x, 298.0, 300.4, 309.1, 311.0)

Alcohol abuse/dependence (303.x, 305.0x)

PTSD (309.81)

Other anxiety (acute stress, generalized anxiety disorder, obsessive compulsive disorder, panic, social phobia) (300.01, 300.02, 300.21, 300.23, 300.3, 308.3)

Drug abuse/dependence (excluding tobacco) (304.x, 305, 305.2x–305.9x)

Schizophrenia spectrum disorder (295.x)

Bipolar disorder (296.0, 296.1, 296.4–296.8)

Other psychosis; delusion (297.x, 298, 298.1–298.4, 298.8–298.9)

Adjustment disorder (309, 309.0, 309.2, 309.20, 309.24, 309.28, 309.3, 309.4, 309.8, 309.80, 309.82, 309.83, 309.89, 309.9)

Other (other and unspecified mood disorder, phobias other than social phobia, other stress reactions not captured under anxiety, other or unspecified transient mental disorder due to conditions classified elsewhere) (293, 293.8x, 296, 296.9x, 300.2, 300.20, 300.22, 300.29, 308, 308.0, 308.1, 308.2, 308.4, 308.9)

Medications for depression in VA formulary listed in VA/DoD Guidelines for Major Depressive Disorder¹

Bupropion, citalopram, desipramine, desvenlafaxine, duloxetine, escitalopram, fluoxetine, mirtazapine, nortriptyline, paroxetine, sertraline, venlafaxine

Medications for anxiety in VA formulary listed in World Federation of Biological Psychiatry guidelines² or British Association for Psychopharmacology³ guidelines for PTSD, obsessive compulsive disorder, or other anxiety disorders, or VA/DoD Guidelines for PTSD⁴

Alprazolam,^{2,3} amitriptyline,^{2,4} buspirone,³ citalopram,^{2,3} clomipramine,^{2,3} clonazepam,^{2,3} desipramine,³ diazepam,^{2,3} duloxetine,^{2,3} escitalopram,^{2,3} fluoxetine,^{2–4} fluvoxamine,^{2,3} gabapentin,^{2,3,*} hydroxyzine,^{2,3,*} imipramine,^{2–4} lorazepam,^{2,3} mirtazapine,^{2,4} nefazodone,⁴ olanzapine,³ paroxetine,^{2–4} phenelzine,^{2–4} prazosin,^{4,*} pregabalin,² quetiapine,² risperidone,² sertraline,^{2–4} trazodone,³ valproate,³ venlafaxine^{2–4}

Psychotherapy

Current Procedural Terminology (CPT) codes for family psychotherapy with patient present, group therapy, individual therapy (with or without an evaluation and management code) (90804–90819, 90821–90824, 90826–90829, 90847, 90849, 90853, 90857).

ICD-9 codes for individual psychotherapy and counseling (94.3, 94.30–94.31, 94.33–94.39, 94.4, 94.41–94.44, 94.49).

References

1. Department of Veterans Affairs/Department of Defense: VA/DoD Clinical Practice Guideline for Management of Major Depressive Disorder, 2009. www.healthquality.va.gov/guidelines/mh/mdd/index.asp (Last accessed November 4, 2016).
2. Bandelow B, Sher L, Bunevicius R, et al.: Guidelines for the pharmacological treatment of anxiety disorders, obsessive-compulsive disorder and posttraumatic stress disorder in primary care. *Int J Psychiatry Clin Pract* 2012;16:77–84.
3. Baldwin DS, Anderson IM, Nutt DJ, et al.: Evidence-based pharmacological treatment of anxiety disorders, post-traumatic stress disorder and obsessive-compulsive disorder: A revision of the 2005 guidelines from the British Association for Psychopharmacology. *J Psychopharmacol* 2014;28:403–439.
4. Department of Veterans Affairs/Department of Defense: VA/DoD Clinical Practice Guideline for Management of Post-Traumatic Stress, 2010. www.healthquality.va.gov/guidelines/mh/ptsd/index.asp (Last accessed November 4, 2016).

*Because gabapentin, hydroxyzine, and prazosin have many indications other than anxiety, we do not include them in our measures of anxiety treatment.