

Diagnostic Codes Used to Define Cohort (Psychiatric Disorders)

ICD-9 co	ode Description
290	SENILE/PRESENILE PSYCHOS*
2900	SENILE DEMENTIA, UNCOMPLICATED
2901	PRESENILE DEMENTIA*
29010	PRESENILE DEMENTIA, UNCOMPLICATED
29011	PRESENILE DEMENTIA WITH DELIRIUM
29012	PRESENILE DEMENTIA WITH DELUSIONAL FEATURES
29013	PRESENILE DEMENTIA WITH DEPRESSIVE FEATURES
2902	SENILE DELUSION/DEPRESS*
29020	SENILE DEMENTIA WITH DELUSIONAL FEATURES
29021	SENILE DEMENTIA WITH DEPRESSIVE FEATURES
2903	SENILE DEMENTIA WITH DELIRIUM
2904	ARTERIOSCLEROT DEMENTIA*
29040	ARTERIOSCLEROTIC DEMENTIA, UNCOMPLICATED
29041	ARTERIOSCLEROTIC DEMENTIA WITH DELIRIUM
29042	ARTERIOSCLEROTIC DEMENTIA WITH DELUSIONAL FEATURES
29043	ARTERIOSCLEROTIC DEMENTIA WITH DEPRESSIVE FEATURES
2908	OTHER SPECIFIED SENILE PSYCHOTIC CONDITIONS
2909	UNSPECIFIED SENILE PSYCHOTIC CONDITION
294	OTHER ORGANIC PSYCH COND*
2940	AMNESTIC SYNDROME
2941	DEMENTIA IN CONDITIONS CLASSIFIED ELSEWHERE
29410	DEMENTIA IN CONDITIONS CLASSIFIED ELSEWHERE W/O BEHAVIORAL DISTURBANC
29411	DEMENTIA IN CONDITIONS CLASSIFIED ELSEWHERE WITH BEHAVIORAL DISTURBAN
2948	OTHER SPECIFIED ORGANIC BRAIN SYNDROMES (CHRONIC)
2949	UNSPECIFIED ORGANIC BRAIN SYNDROME (CHRONIC)
295	SCHIZOPHRENIC DISORDERS*
2950	SIMPLE SCHIZOPHRENIA*
29500	SIMPLE TYPE SCHIZOPHRENIA, UNSPECIFIED STATE
29501	SIMPLE TYPE SCHIZOPHRENIA, SUBCHRONIC STATE
29502	SIMPLE TYPE SCHIZOPHRENIA, CHRONIC STATE
29503	SIMPLE TYPE SCHIZOPHRENIA, SUBCHRONIC STATE WITH ACUTE EXACERBATION

ICD-9 code	Description
29504	SIMPLE TYPE SCHIZOPHRENIA, CHRONIC STATE WITH ACUTE EXACERBATION
29505	SIMPLE TYPE SCHIZOPHRENIA, IN REMISSION
2951	HEBEPHRENIA*
29510	DISORGANIZED TYPE SCHIZOPHRENIA, UNSPECIFIED STATE
29511	DISORGANIZED TYPE SCHIZOPHRENIA, SUBCHRONIC STATE
29512	DISORGANIZED TYPE SCHIZOPHRENIA, CHRONIC STATE
29513	DISORGANIZED TYPE SCHIZOPHRENIA, SUBCHRONIC STATE WITH ACUTE EXACERBA
29514	DISORGANIZED TYPE SCHIZOPHRENIA, CHRONIC STATE WITH ACUTE EXACERBATIO
29515	DISORGANIZED TYPE SCHIZOPHRENIA, IN REMISSION
2952	CATATONIC SCHIZOPHRENIA*
29520	CATATONIC TYPE SCHIZOPHRENIA, UNSPECIFIED STATE
29521	CATATONIC TYPE SCHIZOPHRENIA, SUBCHRONIC STATE
29522	CATATONIC TYPE SCHIZOPHRENIA, CHRONIC STATE
29523	CATATONIC TYPE SCHIZOPHRENIA, SUBCHRONIC STATE WITH ACUTE EXACERBATIO
29524	CATATONIC TYPE SCHIZOPHRENIA, CHRONIC STATE WITH ACUTE EXACERBATION
29525	CATATONIC TYPE SCHIZOPHRENIA, IN REMISSION
2953	PARANOID SCHIZOPHRENIA*
29530	PARANOID TYPE SCHIZOPHRENIA, UNSPECIFIED STATE
29531	PARANOID TYPE SCHIZOPHRENIA, SUBCHRONIC STATE
29532	PARANOID TYPE SCHIZOPHRENIA, CHRONIC STATE
29533	PARANOID TYPE SCHIZOPHRENIA, SUBCHRONIC STATE WITH ACUTE EXACERBATION
29534	PARANOID TYPE SCHIZOPHRENIA, CHRONIC STATE WITH ACUTE EXACERBATION
29535	PARANOID TYPE SCHIZOPHRENIA, IN REMISSION
2954	AC SCHIZOPHRENIC EPISODE*
29540	ACUTE SCHIZOPHRENIC EPISODE, UNSPECIFIED STATE
29541	ACUTE SCHIZOPHRENIC EPISODE, SUBCHRONIC STATE
29542	ACUTE SCHIZOPHRENIC EPISODE, CHRONIC STATE
29543	ACUTE SCHIZOPHRENIC EPISODE, SUBCHRONIC STATE WITH ACUTE EXACERBATION
29544	ACUTE SCHIZOPHRENIC EPISODE, CHRONIC STATE WITH ACUTE EXACERBATION
29545	ACUTE SCHIZOPHRENIC EPISODE, IN REMISSION
2955	LATENT SCHIZOPHRENIA*
29550	LATENT SCHIZOPHRENIA, UNSPECIFIED STATE

ICD-9 code	Description
29551	LATENT SCHIZOPHRENIA, SUBCHRONIC STATE
29552	LATENT SCHIZOPHRENIA, CHRONIC STATE
29553	LATENT SCHIZOPHRENIA, SUBCHRONIC STATE WITH ACUTE EXACERBATION
29554	LATENT SCHIZOPHRENIA, CHRONIC STATE WITH ACUTE EXACERBATION
29555	LATENT SCHIZOPHRENIA, IN REMISSION
2956	RESIDUAL SCHIZOPHRENIA*
29560	RESIDUAL SCHIZOPHRENIA, UNSPECIFIED STATE
29561	RESIDUAL SCHIZOPHRENIA, SUBCHRONIC STATE
29562	RESIDUAL SCHIZOPHRENIA, CHRONIC STATE
29563	RESIDUAL SCHIZOPHRENIA, SUBCHRONIC STATE WITH ACUTE EXACERBATION
29564	RESIDUAL SCHIZOPHRENIA, CHRONIC STATE WITH ACUTE EXACERBATION
29565	RESIDUAL SCHIZOPHRENIA, IN REMISSION
2957	SCHIZOAFFECTIVE TYPE*
29570	SCHIZO-AFFECTIVE TYPE SCHIZOPHRENIA, UNSPECIFIED STATE
29571	SCHIZO-AFFECTIVE TYPE SCHIZOPHRENIA, SUBCHRONIC STATE
29572	SCHIZO-AFFECTIVE TYPE SCHIZOPHRENIA, CHRONIC STATE
29573	SCHIZO-AFFECTIVE TYPE SCHIZOPHRENIA, SUBCHRONIC STATE WITH ACUTE EXAC
29574	SCHIZO-AFFECTIVE TYPE SCHIZOPHRENIA, CHRONIC STATE WITH ACUTE EXACERB
29575	SCHIZO-AFFECTIVE TYPE SCHIZOPHRENIA, IN REMISSION
2958	SCHIZOPHRENIA NEC*
29580	OTHER SPECIFIED TYPES OF SCHIZOPHRENIA, UNSPECIFIED STATE
29581	OTHER SPECIFIED TYPES OF SCHIZOPHRENIA, SUBCHRONIC STATE
29582	OTHER SPECIFIED TYPES OF SCHIZOPHRENIA, CHRONIC STATE
29583	OTHER SPECIFIED TYPES OF SCHIZOPHRENIA, SUBCHRONIC STATE WITH ACUTE E
29584	OTHER SPECIFIED TYPES OF SCHIZOPHRENIA, CHRONIC STATE WITH ACUTE EXAC
29585	OTHER SPECIFIED TYPES OF SCHIZOPHRENIA, IN REMISSION
2959	SCHIZOPHRENIA NOS*
29590	UNSPECIFIED TYPE SCHIZOPHRENIA, UNSPECIFIED STATE
29591	UNSPECIFIED TYPE SCHIZOPHRENIA, SUBCHRONIC STATE
29592	UNSPECIFIED TYPE SCHIZOPHRENIA, CHRONIC STATE
29593	UNSPECIFIED TYPE SCHIZOPHRENIA, SUBCHRONIC STATE WITH ACUTE EXACERBAT
29594	UNSPECIFIED TYPE SCHIZOPHRENIA, CHRONIC STATE WITH ACUTE EXACERBATION

ICD-9 cod	e Description
29595	UNSPECIFIED TYPE SCHIZOPHRENIA, IN REMISSION
296	AFFECTIVE PSYCHIATRIC DISORDERS*
2960	MANIC DIS, SINGL EPISODE*
29600	MANIC AFFECTIVE DISORDER, SINGLE EPISODE, UNSPECIFIED DEGREE
29601	MANIC AFFECTIVE DISORDER, SINGLE EPISODE, MILD DEGREE
29602	MANIC AFFECTIVE DISORDER, SINGLE EPISODE, MODERATE DEGREE
29603	MANIC AFFECTIVE DISORDER, SINGLE EPISODE, SEVERE DEGREE, WITHOUT MENT
29604	MANIC AFFECTIVE DISORDER, SINGLE EPISODE, SEVERE DEGREE, SPECIFIED AS
29605	MANIC AFFECTIVE DISORDER, SINGLE EPISODE, IN PARTIAL OR UNSPECIFIED R
29606	MANIC AFFECTIVE DISORDER, SINGLE EPISODE, IN FULL REMISSION
2961	MANIC, RECURRENT EPISODE*
29610	MANIC AFFECTIVE DISORDER, RECURRENT EPISODE, UNSPECIFIED DEGREE
29611	MANIC AFFECTIVE DISORDER, RECURRENT EPISODE, MILD DEGREE
29612	MANIC AFFECTIVE DISORDER, RECURRENT EPISODE, MODERATE DEGREE
29613	MANIC AFFECTIVE DISORDER, RECURRENT EPISODE, SEVERE DEGREE, WITHOUT M
29614	MANIC AFFECTIVE DISORDER, RECURRENT EPISODE, SEVERE DEGREE, SPECIFIED
29615	MANIC AFFECTIVE DISORDER, RECURRENT EPISODE, IN PARTIAL OR UNSPECIFIE
29616	MANIC AFFECTIVE DISORDER, RECURRENT EPISODE, IN FULL REMISSION
2962	DEPR PSYCH, SINGL EPISOD*
29620	MAJOR DEPRESSIVE AFFECTIVE DISORDER, SINGLE EPISODE, UNSPECIFIED DEGR
29621	MAJOR DEPRESSIVE AFFECTIVE DISORDER, SINGLE EPISODE, MILD DEGREE
29622	MAJOR DEPRESSIVE AFFECTIVE DISORDER, SINGLE EPISODE, MODERATE DEGREE
29623	MAJOR DEPRESSIVE AFFECTIVE DISORDER, SINGLE EPISODE, SEVERE DEGREE, W
29624	MAJOR DEPRESSIVE AFFECTIVE DISORDER, SINGLE EPISODE, SEVERE DEGREE, S
29625	MAJOR DEPRESSIVE AFFECTIVE DISORDER, SINGLE EPISODE, IN PARTIAL OR UN
29626	MAJOR DEPRESSIVE AFFECTIVE DISORDER, SINGLE EPISODE, IN FULL REMISSIO
2963	DEPR PSYCH, RECUR EPISOD*
29630	MAJOR DEPRESSIVE AFFECTIVE DISORDER, RECURRENT EPISODE, UNSPECIFIED D
29631	MAJOR DEPRESSIVE AFFECTIVE DISORDER, RECURRENT EPISODE, MILD DEGREE
29632	MAJOR DEPRESSIVE AFFECTIVE DISORDER, RECURRENT EPISODE, MODERATE DEGR
29633	MAJOR DEPRESSIVE AFFECTIVE DISORDER, RECURRENT EPISODE, SEVERE DEGREE
29634	MAJOR DEPRESSIVE AFFECTIVE DISORDER, RECURRENT EPISODE, SEVERE DEGREE

ICD-9 code Description	
29635	MAJOR DEPRESSIVE AFFECTIVE DISORDER, RECURRENT EPISODE, IN PARTIAL OR
29636	MAJOR DEPRESSIVE AFFECTIVE DISORDER, RECURRENT EPISODE, IN FULL REMIS
2964	BIPOLAR AFFECTIVE, MANIC*
29640	BIPOLAR AFFECTIVE DISORDER, MANIC, UNSPECIFIED DEGREE
29641	BIPOLAR AFFECTIVE DISORDER, MANIC, MILD DEGREE
29642	BIPOLAR AFFECTIVE DISORDER, MANIC, MODERATE DEGREE
29643	BIPOLAR AFFECTIVE DISORDER, MANIC, SEVERE DEGREE, WITHOUT MENTION OF
29644	BIPOLAR AFFECTIVE DISORDER, MANIC, SEVERE DEGREE, SPECIFIED AS WITH P
29645	BIPOLAR AFFECTIVE DISORDER, MANIC, IN PARTIAL OR UNSPECIFIED REMISSIO
29646	BIPOLAR AFFECTIVE DISORDER, MANIC, IN FULL REMISSION
2965	BIPOLAR AFFECT, DEPRESS*
29650	BIPOLAR AFFECTIVE DISORDER, DEPRESSED, UNSPECIFIED DEGREE
29651	BIPOLAR AFFECTIVE DISORDER, DEPRESSED, MILD DEGREE
29652	BIPOLAR AFFECTIVE DISORDER, DEPRESSED, MODERATE DEGREE
29653	BIPOLAR AFFECTIVE DISORDER, DEPRESSED, SEVERE DEGREE, WITHOUT MENTION
29654	BIPOLAR AFFECTIVE DISORDER, DEPRESSED, SEVERE DEGREE, SPECIFIED AS WI
29655	BIPOLAR AFFECTIVE DISORDER, DEPRESSED, IN PARTIAL OR UNSPECIFIED REMI
29656	BIPOLAR AFFECTIVE DISORDER, DEPRESSED, IN REMISSION
2966	BIPOLAR AFFECTIVE, MIXED*
29660	BIPOLAR AFFECTIVE DISORDER, MIXED, UNSPECIFIED DEGREE
29661	BIPOLAR AFFECTIVE DISORDER, MIXED, MILD DEGREE
29662	BIPOLAR AFFECTIVE DISORDER, MIXED, MODERATE DEGREE
29663	BIPOLAR AFFECTIVE DISORDER, MIXED, SEVERE DEGREE, WITHOUT MENTION OF
29664	BIPOLAR AFFECTIVE DISORDER, MIXED, SEVERE DEGREE, SPECIFIED AS WITH P
29665	BIPOLAR AFFECTIVE DISORDER, MIXED, IN PARTIAL OR UNSPECIFIED REMISSIO
29666	BIPOLAR AFFECTIVE DISORDER, MIXED, IN FULL REMISSION
2967	BIPOLAR AFFECTIVE DISORDER, UNSPECIFIED
2968	MANIC-DEPRESSIVE NEC/NOS*
29680	MANIC-DEPRESSIVE PSYCHOSIS, UNSPECIFIED
29681	ATYPICAL MANIC DISORDER
29682	ATYPICAL DEPRESSIVE DISORDER
29689	OTHER MANIC-DEPRESSIVE PSYCHOSIS

ICD-9 c	ode Description
2969	AFFECT PSYCHIATRIC DISORDERS NEC/NOS*
29690	UNSPECIFIED AFFECTIVE PSYCHOSIS
29699	OTHER SPECIFIED AFFECTIVE PSYCHIATRIC DISORDERS
297	PARANOID STATES*
2970	PARANOID STATE, SIMPLE
2971	PARANOIA
2972	PARAPHRENIA
2973	SHARED PARANOID DISORDER
2978	OTHER SPECIFIED PARANOID STATES
2979	UNSPECIFIED PARANOID STATE
298	OTH NONORGANIC PSYCHIATRIC DISORDERS*
2980	DEPRESSIVE TYPE PSYCHOSIS
2981	EXCITATIVE TYPE PSYCHOSIS
2982	REACTIVE CONFUSION
2983	ACUTE PARANOID REACTION
2984	PSYCHOGENIC PARANOID PSYCHOSIS
2988	OTHER AND UNSPECIFIED REACTIVE PSYCHOSIS
2989	UNSPECIFIED PSYCHOSIS
299	PSYCHIATRIC DISORDERS OF CHILDHOOD*
2990	INFANTILE AUTISM*
29900	INFANTILE AUTISM, CURRENT OR ACTIVE STATE
29901	INFANTILE AUTISM, RESIDUAL STATE
2991	DISINTEGRATIVE PSYCHOSIS*
29910	DISINTEGRATIVE PSYCHOSIS, CURRENT OR ACTIVE STATE
29911	DISINTEGRATIVE PSYCHOSIS, RESIDUAL STATE
2998	EARLY CHLD PSYCHIATRIC DISORDERS NEC*
29980	OTHER SPECIFIED EARLY CHILDHOOD PSYCHIATRIC DISORDERS, CURRENT OR ACTIVE STATE
29981	OTHER SPECIFIED EARLY CHILDHOOD PSYCHIATRIC DISORDERS, RESIDUAL STATE
2999	EARLY CHLD PSYCHOSIS NOS*
29990	UNSPECIFIED CHILDHOOD PSYCHOSIS, CURRENT OR ACTIVE STATE
29991	UNSPECIFIED CHILDHOOD PSYCHOSIS, RESIDUAL STATE
300	NEUROTIC DISORDERS*

ICD-9 code	ICD-9 code Description	
3000	ANXIETY STATES*	
30000	ANXIETY STATE, UNSPECIFIED	
30001	PANIC DISORDER	
30002	GENERALIZED ANXIETY DISORDER	
30009	OTHER ANXIETY STATES	
3001	HYSTERIA*	
30010	HYSTERIA, UNSPECIFIED	
30011	CONVERSION DISORDER	
30012	PSYCHOGENIC AMNESIA	
30013	PSYCHOGENIC FUGUE	
30014	MULTIPLE PERSONALITY	
30015	DISSOCIATIVE DISORDER OR REACTION, UNSPECIFIED	
30016	FACTITIOUS ILLNESS WITH PSYCHOLOGICAL SYMPTOMS	
30019	OTHER AND UNSPECIFIED FACTITIOUS ILLNESS	
3002	PHOBIC DISORDERS*	
30020	PHOBIA, UNSPECIFIED	
30021	AGORAPHOBIA WITH PANIC ATTACKS	
30022	AGORAPHOBIA WITHOUT MENTION OF PANIC ATTACKS	
30023	SOCIAL PHOBIA	
30029	OTHER ISOLATED OR SIMPLE PHOBIAS	
3003	OBSESSIVE-COMPULSIVE DISORDERS	
3004	NEUROTIC DEPRESSION	
3005	NEURASTHENIA	
3006	DEPERSONALIZATION SYNDROME	
3007	HYPOCHONDRIASIS	
3008	NEUROTIC DISORDERS NEC*	
30081	SOMATIZATION DISORDER	
30082	UNDIFFERENTIATED SOMATOFORM DISORDER	
30089	OTHER NEUROTIC DISORDERS	
3009	UNSPECIFIED NEUROTIC DISORDER	
301	PERSONALITY DISORDERS*	
3010	PARANOID PERSONALITY DISORDER	

ICD-9 cod	le Description
3011	AFFECTIVE PERSONALITY*
30110	AFFECTIVE PERSONALITY DISORDER, UNSPECIFIED
30111	CHRONIC HYPOMANIC PERSONALITY DISORDER
30112	CHRONIC DEPRESSIVE PERSONALITY DISORDER
30113	CYCLOTHYMIC DISORDER
3012	SCHIZOID PERSONALITY*
30120	SCHIZOID PERSONALITY DISORDER, UNSPECIFIED
30121	INTROVERTED PERSONALITY
30122	SCHIZOTYPAL PERSONALITY
3013	EXPLOSIVE PERSONALITY DISORDER
3014	COMPULSIVE PERSONALITY DISORDER
3015	HISTRIONIC PERSONALITY*
30150	HISTRIONIC PERSONALITY DISORDER, UNSPECIFIED
30151	CHRONIC FACTITIOUS ILLNESS WITH PHYSICAL SYMPTOMS
30159	OTHER HISTRIONIC PERSONALITY DISORDER
3016	DEPENDENT PERSONALITY DISORDER
3017	ANTISOCIAL PERSONALITY DISORDER
3018	OTHER PERSONALITY DIS*
30181	NARCISSISTIC PERSONALITY
30182	AVOIDANT PERSONALITY
30183	BORDERLINE PERSONALITY
30184	PASSIVE-AGGRESSIVE PERSONALITY
30189	OTHER PERSONALITY DISORDERS
3019	UNSPECIFIED PERSONALITY DISORDER
302	SEXUAL DISORDERS*
3020	EGO-DYSTONIC HOMOSEXUALITY
3021	ZOOPHILIA
3022	PEDOPHILIA
3023	TRANSVESTISM
3024	EXHIBITIONISM
3025	TRANS-SEXUALISM*
30250	TRANS-SEXUALISM WITH UNSPECIFIED SEXUAL HISTORY

ICD-9 c	ode Description
30251	TRANS-SEXUALISM WITH ASEXUAL HISTORY
30252	TRANS-SEXUALISM WITH HOMOSEXUAL HISTORY
30253	TRANS-SEXUALISM WITH HETEROSEXUAL HISTORY
3026	DISORDERS OF PSYCHOSEXUAL IDENTITY
3027	PSYCHOSEXUAL DYSFUNCTION*
30270	PSYCHOSEXUAL DYSFUNCTION, UNSPECIFIED
30271	PSYCHOSEXUAL DYSFUNCTION WITH INHIBITED SEXUAL DESIRE
30272	PSYCHOSEXUAL DYSFUNCTION WITH INHIBITED SEXUAL EXCITEMENT
30273	PSYCHOSEXUAL DYSFUNCTION WITH INHIBITED FEMALE ORGASM
30274	PSYCHOSEXUAL DYSFUNCTION WITH INHIBITED MALE ORGASM
30275	PSYCHOSEXUAL DYSFUNCTION WITH PREMATURE EJACULATION
30276	PSYCHOSEXUAL DYSFUNCTION WITH FUNCTIONAL DYSPAREUNIA
30279	PSYCHOSEXUAL DYSFUNCTION WITH OTHER SPECIFIED PSYCHOSEXUAL DYSFUNCTIO
3028	PSYCHOSEXUAL DIS NEC*
30281	FETISHISM
30282	VOYEURISM
30283	SEXUAL MASOCHISM
30284	SEXUAL SADISM
30285	GENDER IDENTITY DISORDER OF ADOLESCENT OR ADULT LIFE
30289	OTHER SPECIFIED PSYCHOSEXUAL DISORDERS
3029	UNSPECIFIED PSYCHOSEXUAL DISORDER
306	PSYCHOPHYSIOLOGIC DIS*
3060	MUSCULOSKELETAL MALFUNCTION ARISING FROM MENTAL FACTORS
3061	RESPIRATORY MALFUNCTION ARISING FROM MENTAL FACTORS
3062	CARDIOVASCULAR MALFUNCTION ARISING FROM MENTAL FACTORS
3063	SKIN DISORDER ARISING FROM MENTAL FACTORS
3064	GASTROINTESTINAL MALFUNCTION ARISING FROM MENTAL FACTORS
3065	PSYCHOGENIC GU DISEASE*
30650	PSYCHOGENIC GENITOURINARY MALFUNCTION, UNSPECIFIED
30651	PSYCHOGENIC VAGINISMUS
30652	PSYCHOGENIC DYSMENORRHEA
30653	PSYCHOGENIC DYSURIA

ICD-9 co	ode Description
30659	OTHER GENITOURINARY MALFUNCTION ARISING FROM MENTAL FACTORS
3066	ENDOCRINE DISORDER ARISING FROM MENTAL FACTORS
3067	DISORDER OF ORGANS OF SPECIAL SENSE ARISING FROM MENTAL FACTORS
3068	OTHER SPECIFIED PSYCHOPHYSIOLOGICAL MALFUNCTION
3069	UNSPECIFIED PSYCHOPHYSIOLOGICAL MALFUNCTION
307	SPECIAL SYMPTOM NEC*
3070	STAMMERING AND STUTTERING
3071	ANOREXIA NERVOSA
3072	TICS*
30720	TIC DISORDER, UNSPECIFIED
30721	TRANSIENT TIC DISORDER OF CHILDHOOD
30722	CHRONIC MOTOR TIC DISORDER
30723	GILLES DE LA TOURETTE'S DISORDER
3073	STEREOTYPED REPETITIVE MOVEMENTS
3074	NONORGANIC SLEEP DISORD*
30740	NONORGANIC SLEEP DISORDER, UNSPECIFIED
30741	TRANSIENT DISORDER OF INITIATING OR MAINTAINING SLEEP
30742	PERSISTENT DISORDER OF INITIATING OR MAINTAINING SLEEP
30743	TRANSIENT DISORDER OF INITIATING OR MAINTAINING WAKEFULNESS
30744	PERSISTENT DISORDER OF INITIATING OR MAINTAINING WAKEFULNESS
30745	PHASE-SHIFT DISRUPTION OF 24-HOUR SLEEP-WAKE CYCLE
30746	SOMNAMBULISM OR NIGHT TERRORS
30747	OTHER DYSFUNCTIONS OF SLEEP STAGES OR AROUSAL FROM SLEEP
30748	REPETITIVE INTRUSIONS OF SLEEP
30749	OTHER SPECIFIC DISORDERS OF SLEEP OF NONORGANIC ORIGIN
3075	EATING DISORDERS NEC/NOS*
30750	EATING DISORDER, UNSPECIFIED
30751	BULIMIA
30752	PICA
30753	PSYCHOGENIC RUMINATION
30754	PSYCHOGENIC VOMITING
30759	OTHER DISORDERS OF EATING

ICD-9 co	ode Description
3076	ENURESIS
3077	ENCOPRESIS
3078	PSYCHALGIA*
30780	PSYCHOGENIC PAIN, SITE UNSPECIFIED
30781	TENSION HEADACHE
30789	OTHER PSYCHALGIA
3079	OTHER AND UNSPECIFIED SPECIAL SYMPTOMS OR SYNDROMES, NOT ELSEWHERE CL
308	ACUTE REACTION TO STRESS*
3080	PREDOMINANT DISTURBANCE OF EMOTIONS
3081	PREDOMINANT DISTURBANCE OF CONSCIOUSNESS
3082	PREDOMINANT PSYCHOMOTOR DISTURBANCE
3083	OTHER ACUTE REACTIONS TO STRESS
3084	MIXED DISORDERS AS REACTION TO STRESS
3089	UNSPECIFIED ACUTE REACTION TO STRESS
309	ADJUSTMENT REACTION*
3090	ADJUSTMENT REACTION WITH BRIEF DEPRESSIVE REACTION
3091	ADJUSTMENT REACTION WITH PROLONGED DEPRESSIVE REACTION
3092	ADJUST REACT/OTH EMOTION*
30921	SEPARATION ANXIETY DISORDER
30922	EMANCIPATION DISORDER OF ADOLESCENCE AND EARLY ADULT LIFE
30923	SPECIFIC ACADEMIC OR WORK INHIBITION
30924	ADJUSTMENT REACTION WITH ANXIOUS MOOD
30928	ADJUSTMENT REACTION WITH MIXED EMOTIONAL FEATURES
30929	OTHER ADJUSTMENT REACTIONS WITH PREDOMINANT DISTURBANCE OF OTHER EMOT
3093	ADJUSTMENT REACTION WITH PREDOMINANT DISTURBANCE OF CONDUCT
3094	ADJUSTMENT REACTION WITH MIXED DISTURBANCE OF EMOTIONS AND CONDUCT
3098	OTHER ADJUST REACTION*
30981	PROLONGED POSTTRAUMATIC STRESS DISORDER
30982	ADJUSTMENT REACTION WITH PHYSICAL SYMPTOMS
30983	ADJUSTMENT REACTION WITH WITHDRAWAL
30989	OTHER SPECIFIED ADJUSTMENT REACTIONS
3099	UNSPECIFIED ADJUSTMENT REACTION

ICD-9 co	de Description
310	NONPSYCHOTIC BRAIN SYND*
3100	FRONTAL LOBE SYNDROME
3101	ORGANIC PERSONALITY SYNDROME
3102	POSTCONCUSSION SYNDROME
3108	OTHER SPECIFIED NONPSYCHOTIC MENTAL DISORDERS FOLLOWING ORGANIC BRAIN
3109	UNSPECIFIED NONPSYCHOTIC MENTAL DISORDER FOLLOWING ORGANIC BRAIN DAMA
311	DEPRESSIVE DISORDER, NOT ELSEWHERE CLASSIFIED
312	CONDUCT DISTURBANCE NEC*
3120	UNSOCIALIZED AGGRESSION*
31200	UNDERSOCIALIZED CONDUCT DISORDER, AGGRESSIVE TYPE, UNSPECIFIED DEGREE
31201	UNDERSOCIALIZED CONDUCT DISORDER, AGGRESSIVE TYPE, MILD DEGREE
31202	UNDERSOCIALIZED CONDUCT DISORDER, AGGRESSIVE TYPE, MODERATE DEGREE
31203	UNDERSOCIALIZED CONDUCT DISORDER, AGGRESSIVE TYPE, SEVERE DEGREE
3121	UNSOCIALIZ, UNAGGRESSIVE*
31210	UNDERSOCIALIZED CONDUCT DISORDER, UNAGGRESSIVE TYPE, UNSPECIFIED DEGR
31211	UNDERSOCIALIZED CONDUCT DISORDER, UNAGGRESSIVE TYPE, MILD DEGREE
31212	UNDERSOCIALIZED CONDUCT DISORDER, UNAGGRESSIVE TYPE, MODERATE DEGREE
31213	UNDERSOCIALIZED CONDUCT DISORDER, UNAGGRESSIVE TYPE, SEVERE DEGREE
3122	SOCIALIZED CONDUCT DIS*
31220	SOCIALIZED CONDUCT DISORDER, UNSPECIFIED DEGREE
31221	SOCIALIZED CONDUCT DISORDER, MILD DEGREE
31222	SOCIALIZED CONDUCT DISORDER, MODERATE DEGREE
31223	SOCIALIZED CONDUCT DISORDER, SEVERE DEGREE
3123	IMPULSE CONTROL DIS NEC*
31230	IMPULSE CONTROL DISORDER, UNSPECIFIED
31231	PATHOLOGICAL GAMBLING
31232	KLEPTOMANIA
31233	PYROMANIA
31234	INTERMITTENT EXPLOSIVE DISORDER
31235	ISOLATED EXPLOSIVE DISORDER
31239	OTHER DISORDERS OF IMPULSE CONTROL
3124	MIXED DISTURBANCE OF CONDUCT AND EMOTIONS

ICD-9 c	ode Description
3128	OTHER SPECIFIED DISTURBANCES OF CONDUCT, NOT ELSEWHERE CLASSIFIED
31281	CONDUCT DISORDER, CHILDHOOD ONSET TYPE
31282	CONDUCT DISORDER, ADOLESCENT ONSET TYPE
31289	OTHER SPECIFIED CONDUCT DISORDER, NOT ELSEWHERE CLASSIFIED
3129	UNSPECIFIED DISTURBANCE OF CONDUCT
313	EMOTIONAL DIS CHILD/ADOL*
3130	OVERANXIOUS DISORDER SPECIFIC TO CHILDHOOD AND ADOLESCENCE
3131	MISERY AND UNHAPPINESS DISORDER SPECIFIC TO CHILDHOOD AND ADOLESCENCE
3132	SENSITIVITY & WITHDRAWAL*
31321	SHYNESS DISORDER OF CHILDHOOD
31322	INTROVERTED DISORDER OF CHILDHOOD
31323	ELECTIVE MUTISM SPECIFIC TO CHILDHOOD AND ADOLESCENCE
3133	RELATIONSHIP PROBLEMS SPECIFIC TO CHILDHOOD AND ADOLESCENCE
3138	OTH EMOTIONAL DIS CHILD*
31381	OPPOSITIONAL DISORDER OF CHILDHOOD OR ADOLESCENCE
31382	IDENTITY DISORDER OF CHILDHOOD OR ADOLESCENCE
31383	ACADEMIC UNDERACHIEVEMENT DISORDER OF CHILDHOOD OR ADOLESCENCE
31389	OTHER EMOTIONAL DISTURBANCES OF CHILDHOOD OR ADOLESCENCE
3139	UNSPECIFIED EMOTIONAL DISTURBANCE OF CHILDHOOD OR ADOLESCENCE
314	HYPERKINETIC SYNDROME*
3140	ATTENTION DEFICIT DIS*
31400	ATTENTION DEFICIT DISORDER OF CHILDHOOD WITHOUT MENTION OF HYPERACTIV
31401	ATTENTION DEFICIT DISORDER OF CHILDHOOD WITH HYPERACTIVITY
3141	HYPERKINESIS OF CHILDHOOD WITH DEVELOPMENTAL DELAY
3142	HYPERKINETIC CONDUCT DISORDER OF CHILDHOOD
3148	OTHER SPECIFIED MANIFESTATIONS OF HYPERKINETIC SYNDROME OF CHILDHOOD
3149	UNSPECIFIED HYPERKINETIC SYNDROME OF CHILDHOOD
315	SPECIFIC DEVELOP DELAYS*
3150	SPECIFIC READING DIS*
31500	DEVELOPMENTAL READING DISORDER, UNSPECIFIED
31501	ALEXIA
31502	DEVELOPMENTAL DYSLEXIA

ICD-9 code	Description
31509	OTHER SPECIFIC DEVELOPMENTAL READING DISORDER
3151	DEVELOPMENTAL ARITHMETICAL DISORDER
3152	OTHER SPECIFIC DEVELOPMENTAL LEARNING DIFFICULTIES
3153	SPEECH/LANGUAGE DISORDER*
31531	DEVELOPMENTAL LANGUAGE DISORDER
31532	RECEPTIVE LANGUAGE DISORDER (MIXED)
31539	OTHER DEVELOPMENTAL SPEECH DISORDER
3154	DEVELOPMENTAL COORDINATION DISORDER
3155	MIXED DEVELOPMENT DISORDER
3158	OTHER SPECIFIED DELAYS IN DEVELOPMENT
3159	UNSPECIFIED DELAY IN DEVELOPMENT
316	PSYCHIC FACTORS ASSOCIATED WITH DISEASES CLASSIFIED ELSEWHERE
317	MILD MENTAL RETARDATION
318	OTHER MENTAL RETARDATION*
3180	MODERATE MENTAL RETARDATION
3181	SEVERE MENTAL RETARDATION
3182	PROFOUND MENTAL RETARDATION

Highlights

Table 11.1

National Overview

In FY-2000, the VHA had 771,703 patients with either a primary or secondary diagnostic code of one or more of the Psychiatric Disorders codes listed above. This number represents approximately twenty-three percent (23.28%) of the total patient population during the fiscal year (Table 11.1). As with most patients seen in the VHA, the majority of patients were male (93.84%), with only 6.16% female. While the percentage female is still low, this patient cohort has the largest representative of women veterans of all the QUERI cohorts under investigation.

Approximately one-third of the Psychiatric patients were between the ages of 45 and 54. The rest of the age groups are fairly equal with 18.21% under the age of 45, 15.56% between the ages of 55-64, 17.26% between the ages of 65 and 74, and 15.3% 75 years of age or older.

The proportion of Psychiatric Disorders patients who were married is below the general patient population in the VHA. Only about forty-six percent (46.8%) were in this marital category. The "Means Test" categories show that 46.26% were Priority 1 - 3 (service-connected injured) veterans and 43.39% were Priority 5 (low income).

VISN Overview

The volume of patients with Psychiatric Disorders ranged from a high of 73,882 individuals in Sunshine network (VISN 8) to a low of 14,837 in the Central Plain network (VISN 14). Most VISNs had one-fifth to one-quarter of their patient population fall into this disease cohort. Two networks, however, had relatively high

percentages of their patients with a Psychiatric Disorder: the New England network (VISN 1), with 27.61% and the Northwest network with 27.58%. Patients who were married ranges from a low of 32.22% in the Desert Pacific (VISN 22) to a high of 53.57% in the Sunshine network (VISN 8). The percentage of the total number of Psychiatric Disorders patients who are in the low income categories ranges from a low of 37.12% in the New York/New Jersey network (VISN 3) to a high of 51.57% in the Desert Pacific network (VISN 22).

Table 11.2

This table compares utilization by the Psychiatric Disorders **primary** diagnosis group for all conditions with utilization by all VA patients for all conditions. Note that for this table, only patients who had a primary diagnosis of Psychiatric Disorders were selected. If a patient had Psychiatric Disorders as a secondary diagnosis only, he/she is not included. Further, for our primary diagnosis Psychiatric Disorders group we examined all utilization that occurred during the fiscal year, both Psychiatric Disorders-specific and all other non-Psychiatric Disorders related medical care obtained.

As an example of what the data show and how to interpret the findings, examine the New England network (VISN 1). In this particular network, 23.11% of the total patients seen at a VA facility in fiscal year 2000 had a primary diagnosis of Psychiatric Disorders. This group of patients accounted for 56.96% of the total bed-days of care in VISN 1, 47.12% of total discharges in VISN 1, and 46.34% of outpatient visits in VISN 1 made by all patients of VA health care services in the network for all medical conditions.

Table 11.3

Table 11.3 is similar to Table 11.2 except that patients who only had a **secondary** diagnosis of Psychiatric Disorders are examined rather than patients who had a primary diagnosis. This table compares utilization by the Psychiatric Disorders secondary diagnosis group for all health conditions they had during the year (i.e., includes both Psychiatric Disorders-specific utilization and utilization for all other non-Psychiatric Disorders care the patient may have received) with utilization by all VISN patients for all conditions.

Using the example of VISN 1, the data can be interpreted as follows: 4.5% of the patients in VISN 1 had at most a secondary diagnosis of Psychiatric Disorders, but never a primary diagnosis. This group of patients accounted for 9.82% of the total bed-days of care, 10.5% of total discharges and 4.53% of outpatients visits utilized by all patients in the network for all conditions.

Table 11.4

Table 11.4 compares resource utilization specifically directed at treating Psychiatric Disorders. In other words, we examine the utilization for which the primary diagnosis (DXLSF) was a defining diagnosis for the Psychiatric Disorders, with utilization for all conditions by all patients in each network.

For example, in VISN 1, 23.11% of the patients had some utilization for which the primary diagnosis was Psychiatric Disorders. Utilization specifically directed at treating the Psychiatric Disorders accounted for 35.18% of all bed-days of care, 14.46% of all discharges, and 20.09% of all outpatient visits.

Table 11.5

Table 11.5 combines the information from Tables 11.2 and 11.4, comparing utilization by the Psychiatric Disorders primary diagnosis group specifically directed at treating their condition with utilization by this same group for all conditions. For example, in VISN 1, 23.11% (N=36,563) of the patients had some utilization for

Psychiatric Disorders. These patients accounted for 172,663 bed-days of care in FY-2000, of which 106,634 or about 62%, were utilized specifically for treating their Psychiatric Disorders (i.e., primary diagnosis (DXLSF) of Psychiatric Disorders). Similarly, approximately 31% of the discharges for patients in the Psychiatric Disorders primary diagnosis group resulted from inpatient stays to treat their disease, and 43% of the outpatient visits made by these patients were for specifically for the treatment of Psychiatric Disorders.

Costs

Cost data are reported for utilization of VA services by VA patients with Psychiatric Disorders in Table 11.6 and Table 11.7. Veterans with Psychiatric Disorders are identified by a Psychiatric Disorders diagnosis for at least one inpatient or outpatient service received. We separately report for veterans who had at least one primary diagnosis of Psychiatric Disorders and veterans whose only diagnoses of Psychiatric Disorders are secondary to another diagnosis. Costs are for VA utilization and include inpatient, outpatient, and pharmacy services for all causes, not just for Psychiatric Disorders -specific use. That is, we report all VA costs for all causes for individuals identified as having Psychiatric Disorders.

There were 771,586 individuals with at least one primary or secondary diagnosis of Psychiatric Disorders for whom cost data were available, and these costs averaged \$9,704 per veteran. Breaking these costs down by whether or not the veteran had at least one primary diagnosis of Psychiatric Disorder, results in an average cost of \$9,504 per veteran for those with at least one primary care diagnosis of Psychiatric Disorders and \$10,563 per veteran for those patients with only secondary diagnoses.

Focusing on those patients with at least one primary diagnosis of Psychiatric Disorders, the \$9,504 costs per veteran are distributed as follows: 19.98% are for inpatient medical/surgical services, 33.26% are for other inpatient services, 33.4% are for outpatient services, and

13.35% are for pharmaceutical services. Across VISNs, overall costs per veteran with a primary diagnosis of Psychiatric Disorders ranged from \$14,082 (VISN 3) to \$6,634 (VISN 18) per veteran.

Table 11.1: Overall Prevalence Statistics – Psychiatric Disorders, FY-2000														
Veterans Integrated Service Network	Total Number of Patients	Patients with Psychiatric Disorders		Gender (%)			Age	e Group	(%)		Marital Status (%)		Means Test Status (%)	
		N	(%)	M	F	<45	45-54	55-64	65-74	75+	Married	Not Married	Service Connected	Low Income
New England (1)	158,204	43,675	27.61	94.79	5.20	16.13	33.28	14.51	18.52	17.55	43.94	54.62	51.59	37.91
Upstate NY (2)	100,499	22,917	22.80	94.39	5.60	17.96	30.80	13.71	18.29	19.25	44.45	54.00	43.24	45.01
NY/NJ (3)	166,593	36,469	21.89	96.44	3.56	15.06	30.72	14.54	20.10	19.58	39.78	58.57	44.46	37.12
Stars and Stripes (4)	202,472	43,446	21.46	94.98	5.02	17.55	33.05	14.65	17.82	16.92	44.97	53.03	44.86	43.46
Capitol (5)	88,163	19,947	22.63	92.68	7.32	21.49	34.56	13.74	16.11	14.11	37.42	61.12	43.28	45.66
Mid-Atlantic (6)	161,081	40,113	24.90	92.39	7.60	19.56	34.40	14.91	17.02	14.12	51.88	46.19	53.40	38.18
Atlantic (7)	201,514	49,039	24.34	92.87	7.12	19.95	35.58	15.38	16.11	12.97	50.72	47.90	48.97	41.12
Sunshine (8)	308,906	73,882	23.92	93.99	6.01	15.84	30.42	16.65	19.57	17.53	53.57	43.20	50.72	41.36
Mid-South (9)	165,501	41,979	25.36	94.82	5.17	17.22	34.57	15.88	18.26	14.07	53.53	45.68	46.26	44.95
Ohio (10)	117,463	30,329	25.82	93.77	6.23	21.36	33.88	14.44	16.59	13.73	42.05	57.16	39.84	50.58
Vets in Partnership (11)	142,393	32,689	22.96	94.18	5.82	19.84	34.36	15.18	16.99	13.63	41.20	57.91	38.89	49.71
Great Lakes (12)	142,079	30,376	21.38	94.51	5.49	19.90	33.30	14.41	16.70	15.69	37.77	60.89	38.21	49.38
Upper Midwest (13)	96,279	20,423	21.21	94.23	5.77	17.76	31.74	14.25	18.43	17.81	46.11	52.00	45.45	39.32
Central Plains (14)	73,699	14,837	20.13	93.67	6.33	18.51	29.73	14.93	20.08	16.76	47.87	51.14	39.91	46.89
Heartland (15)	148,229	37,151	25.06	94.78	5.22	18.02	32.89	15.42	18.82	14.84	49.25	49.84	39.87	48.69
South Central (16)	294,286	72,061	24.49	93.75	6.25	18.33	35.44	16.71	16.43	13.09	51.60	45.94	48.53	43.59
Heart of Texas (17)	151,601	34,955	23.06	92.23	7.76	19.40	35.11	15.78	15.77	13.94	50.30	48.90	51.73	39.06
Southwest (18)	154,764	35,856	23.17	92.59	7.40	18.13	33.35	16.26	16.63	15.63	49.17	49.79	48.38	42.54
Rocky Mt. (19)	95,866	24,109	25.15	92.64	7.36	19.63	35.54	16.09	15.32	13.43	47.84	50.80	48.40	40.94
Northwest (20)	143,215	39,505	27.58	91.90	8.10	21.15	38.64	15.94	12.89	11.37	43.92	54.85	52.39	38.03
Sierra Pacific (21)	149,020	36,253	24.33	93.33	6.66	17.83	38.22	15.74	13.74	14.46	38.76	59.98	48.30	42.87
Desert Pacific (22)	178,204	44,315	24.87	93.35	6.64	22.24	34.90	17.78	13.77	11.31	32.22	66.33	40.26	51.57
National	3,314,672	771,703	23.28	93.84	6.16	18.21	33.67	15.56	17.26	15.30	46.80	51.63	46.26	43.39

					Table 1							
Overall Resou	ırce Utiliz	ation – P	sychiat	ric Disorde	ers (Prim	ary Dia	ignosis G	roup) Ca	mpared	to All User	rs, FY-2000)
Veterans Integrated Service Network (VISN)	Total Patients				Bed Days of Care			Discharges		Outpatient Visits		
	N	N	%	Total N	Psych Disorders N %		Total N	Psych Disorders N %		Total N	Psych Disorders N %	
New England (1)	158,204	36,563	23.11	303,134	172,663	56.96	24,413	11,504	47.12	1,990,550	922,446	46.34
Upstate NY (2)	100,499	18,397	18.31	120,203	56,869	47.31	11,871	4,697	39.57	1,093,796	443,974	40.59
NY/NJ (3)	166,593	30,872	18.53	405,186	227,493	56.15	24,128	9,896	41.01	1,854,064	758,609	40.92
Stars and Stripes (4)	202,472	35,996	17.78	284,688	143,950	50.56	24,122	9,944	41.22	1,846,937	632,790	34.26
Capitol (5)	88,163	16,826	19.09	222,405	116,312	52.30	17,107	6,998	40.91	1,007,572	418,045	41.49
Mid-Atlantic (6)	161,081	31,201	19.37	361,832	158,540	43.82	31,256	12,301	39.36	1,491,680	505,785	33.91
Atlantic (7)	201,514	38,975	19.34	369,514	168,067	45.48	29,275	10,913	37.28	1,891,761	704,864	37.26
Sunshine (8)	308,906	60,218	19.49	392,501	135,969	34.64	41,850	15,711	37.54	3,109,217	1,079,063	34.71
Mid-South (9)	165,501	32,875	19.86	316,108	132,860	42.03	34,579	12,037	34.81	1,483,519	495,188	33.38
Ohio (10)	117,463	26,141	22.25	191,574	97,747	51.02	18,945	8,569	45.23	1,327,847	566,694	42.68
Vets in Partnership (11)	142,393	26,383	18.53	311,786	184,847	59.29	23,779	8,848	37.21	1,368,643	479,495	35.03
Great Lakes (12)	142,079	25,192	17.73	334,130	158,904	47.56	30,157	11,419	37.87	1,715,017	662,519	38.63
Upper Midwest (13)	96,279	16,076	16.70	107,644	38,348	35.62	16,092	5,305	32.97	934,533	352,507	37.72
Central Plains (14)	73,699	10,913	14.81	76,697	32,130	41.89	9,898	3,367	34.02	674,604	218,028	32.32
Heartland (15)	148,229	28,818	19.44	211,861	104,460	49.31	25,568	10,397	40.66	1,458,394	541,562	37.13
South Central (16)	294,286	57,794	19.64	454,315	182,409	40.15	47,751	16,707	34.99	2,750,358	965,887	35.12
Heart of Texas (17)	151,601	29,177	19.25	297,463	153,306	51.54	25,932	10,006	38.59	1,544,273	592,545	38.37
Southwest (18)	154,764	28,711	18.55	167,362	64,323	38.43	23,822	9,088	38.15	1,574,259	523,464	33.25
Rocky Mt. (19)	95,866	19,257	20.09	132,102	64,244	48.63	15,065	5,683	37.72	959,415	359,223	37.44
Northwest (20)	143,215	32,013	22.35	181,076	81,560	45.04	24,296	10,197	41.97	1,488,150	631,260	42.42
Sierra Pacific (21)	149,020	30,650	20.57	214,370	107,886	50.33	19,163	7,770	40.55	1,630,530	649,717	39.85
Desert Pacific (22)	178,204	38,489	21.60	231,584	103,484	44.69	25,132	10,138	40.34	2,119,773	862,492	40.69
National	3,314,672	626,389	18.90	5,687,535	2,686,371	47.23	544,201	211,495	38.86	35,314,892	13,366,157	37.85

Table 11.3: Overall Resource Utilization – Psychiatric Disorders (Secondary Diagnosis Group) Compared to All Users, FY-2000 **Total Total Patients Bed Days** Discharges **Outpatient Visits Psychiatric Veterans Integrated Service Patients** of Care Network (VISN) Disorders Total **Psych Disorders** Total **Psych Disorders** Total **Psych Disorders** N N % Ν N N N Ν % N % New England (1) 9.82 1,990,550 158,204 7,112 4.50 303,134 29,763 24,413 2,564 10.50 90,100 4.53 Upstate NY (2) 100,499 4,520 4.50 120,203 16,585 13.80 11,871 1,569 13.22 1,093,796 60,680 5.55 NY/NJ (3) 33,676 2,377 166,593 5,597 3.36 405,186 8.31 24,128 9.85 1,854,064 78,690 4.24 Stars and Stripes (4) 202,472 7,450 3.68 284,688 33,487 11.76 24,122 2,790 11.57 1,846,937 89,487 4.85 Capitol (5) 88,163 3,121 3.54 222,405 25,449 11.44 17,107 1,833 10.71 1,007,572 41,639 4.13 Mid-Atlantic (6) 161,081 8.912 5.53 361,832 40,276 11.13 31,256 3,835 12.27 1,491,680 99,551 6.67 Atlantic (7) 4.99 201,514 10,064 369,514 47,591 12.88 29,275 3,784 12.93 1,891,761 103,117 5.45 Sunshine (8) 308,906 13,664 4.42 392,501 57,232 14.58 41,850 5,069 3,109,217 167,369 5.38 12.11 Mid-South (9) 9,104 5.50 316,108 40,254 12.73 34,579 4,319 12.49 1,483,519 6.35 165,501 94,172 Ohio (10) 4,188 3.57 191,574 21,692 11.32 18,945 11.08 1,327,847 4.25 117,463 2,100 56,430 Vets in Partnership (11) 142,393 4.43 9.85 1,368,643 6,306 311,786 30,709 23,779 2,845 11.96 74,371 5.43 Great Lakes (12) 142,079 5,184 3.65 334,130 29,861 8.94 30,157 2,838 9.41 1,715,017 84,165 4.91 Upper Midwest (13) 96,279 4,347 4.52 107,644 15,845 14.72 16,092 2,115 13.14 934,533 52,550 5.62 Central Plains (14) 3,924 76,697 10,002 73,699 5.32 13.04 9,898 1,243 12.56 674,604 41,644 6.17 Heartland (15) 148,229 8,333 5.62 211,861 25,651 12.11 25,568 3,422 6.22 13.38 1,458,394 90,781 South Central (16) 4.85 454,315 52,770 11.62 5.245 5.37 294,286 14,267 47,751 10.98 2,750,358 147,632 Heart of Texas (17) 151,601 5,778 3.81 297,463 22,693 7.63 25,932 2.359 9.10 1,544,273 65,618 4.25 Southwest (18) 154,764 7,145 4.62 167,362 20,744 12.39 23,822 2,684 11.27 1,574,259 89,111 5.66 Rocky Mt. (19) 13,925 95,866 4,852 5.06 132.102 10.54 15,065 1.654 10.98 959,415 56,850 5.93 Northwest (20) 7,492 6.54 143.215 5.23 181,076 23,612 13.04 24.296 3,238 13.33 1,488,150 97.398 Sierra Pacific (21) 149,020 5,603 214,370 22,089 10.30 9.74 4.32 3.76 19,163 1,867 1,630,530 70,411 Desert Pacific (22) 3.27 231,584 10.09 8.95 4.02 178,204 5,826 23,368 25,132 2,250 2,119,773 85,146 National 3,314,672 145,314 4.38 5,687,535 637,274 11.20 544,201 62,000 11.39 35,314,892 1,836,912 5.20

Table 11.4:											
Resource Utilization for Treatment of Psychiatric Disorders (Primary Diagnosis Group) Compared to Overall Resource											
Utilization by All Users, FY-2000											
	Total	Total Patients	Bed Days	Discharges	Outpatient Visits						
eterans Integrated Service	Patients	Psychiatric	of Care								

Veterans Integrated Service Network (VISN)	Total Patients	Total Pa Psychia Disord	atric	Bed Days of Care			1-2000	Discharges		Outpatient Visits			
				Total	Psych Disor		Total Psych Disorders			Total			
	N	N	%	N	N	%	N	N	%	N	N	%	
New England (1)	158,204	36,563	23.11	303,134	106,634	35.18	24,413	3,529	14.46	1,990,550	399,870	20.09	
Upstate NY (2)	100,499	18,397	18.31	120,203	28,471	23.69	11,871	1,547	13.03	1,093,796	182,583	16.69	
NY/NJ (3)	166,593	30,872	18.53	405,186	150,483	37.14	24,128	3,052	12.65	1,854,064	287,700	15.52	
Stars and Stripes (4)	202,472	35,996	17.78	284,688	88,065	30.93	24,122	3,490	14.47	1,846,937	229,244	12.41	
Capitol (5)	88,163	16,826	19.09	222,405	70,947	31.90	17,107	2,289	13.38	1,007,572	130,176	12.92	
Mid-Atlantic (6)	161,081	31,201	19.37	361,832	92,840	25.66	31,256	4,641	14.85	1,491,680	165,083	11.07	
Atlantic (7)	201,514	38,975	19.34	369,514	97,680	26.43	29,275	4,027	13.76	1,891,761	283,033	14.96	
Sunshine (8)	308,906	60,218	19.49	392,501	38,176	9.73	41,850	4,055	9.69	3,109,217	320,431	10.31	
Mid-South (9)	165,501	32,875	19.86	316,108	66,904	21.16	34,579	3,415	9.88	1,483,519	153,613	10.35	
Ohio (10)	117,463	26,141	22.25	191,574	46,533	24.29	18,945	2,704	14.27	1,327,847	211,816	15.95	
Vets in Partnership (11)	142,393	26,383	18.53	311,786	135,612	43.50	23,779	3,185	13.39	1,368,643	191,596	14.00	
Great Lakes (12)	142,079	25,192	17.73	334,130	86,633	25.93	30,157	3,144	10.43	1,715,017	247,910	14.46	
Upper Midwest (13)	96,279	16,076	16.70	107,644	14,664	13.62	16,092	1,263	7.85	934,533	134,356	14.38	
Central Plains (14)	73,699	10,913	14.81	76,697	15,624	20.37	9,898	1,108	11.19	674,604	77,227	11.45	
Heartland (15)	148,229	28,818	19.44	211,861	59,317	28.00	25,568	3,436	13.44	1,458,394	205,261	14.07	
South Central (16)	294,286	57,794	19.64	454,315	91,822	20.21	47,751	5,656	11.84	2,750,358	325,821	11.85	
Heart of Texas (17)	151,601	29,177	19.25	297,463	95,971	32.26	25,932	3,614	13.94	1,544,273	202,307	13.10	
Southwest (18)	154,764	28,711	18.55	167,362	21,063	12.59	23,822	2,298	9.65	1,574,259	163,282	10.37	
Rocky Mt. (19)	95,866	19,257	20.09	132,102	39,386	29.81	15,065	2,248	14.92	959,415	150,297	15.67	
Northwest (20)	143,215	32,013	22.35	181,076	37,023	20.45	24,296	3,295	13.56	1,488,150	236,998	15.93	
Sierra Pacific (21)	149,020	30,650	20.57	214,370	54,120	25.25	19,163	2,490	12.99	1,630,530	247,769	15.20	
Desert Pacific (22)	178,204	38,489	21.60	231,584	52,046	22.47	25,132	3,320	13.21	2,119,773	317,437	14.98	
National	3,314,672	626,389	18.90	5,687,535	1,490,014	26.20	544,201	67,806	12.46	35,314,892	4,863,810	13.77	

Table 11.5: Resource Utilization for Treatment of Psychiatric Disorders Compared to Overall Utilization by the Psychiatric Disorders Cohort (Primary Diagnosis Group), FY-2000													
Veterans Integrated Service Network (VISN)	Total Patients	Total Total Patients			Bed Days of Care	1		Discharges		Outpatient Visits			
	N	N	%	Total N	Psych Disor N	ders %	Total N	Psych Disor N	ders %	Total N	Psych Disorde N	%	
New England (1)	158,204	36,563	23.11	172,663	106,634	61.76	11,504	3,529	30.68	922,446	399,870	43.35	
Upstate NY (2)	100,499	18,397	18.31	56,869	28,471	50.06	4,697	1,547	32.94	443,974	182,583	41.12	
NY/NJ (3)	166,593	30,872	18.53	227,493	150,483	66.15	9,896	3,052	30.84	758,609	287,700	37.92	
Stars and Stripes (4)	202,472	35,996	17.78	143,950	88,065	61.18	9,944	3,490	35.10	632,790	229,244	36.23	
Capitol (5)	88,163	16,826	19.09	116,312	70,947	61.00	6,998	2,289	32.71	418,045	130,176	31.14	
Mid-Atlantic (6)	161,081	31,201	19.37	158,540	92,840	58.56	12,301	4,641	37.73	505,785	165,083	32.64	
Atlantic (7)	201,514	38,975	19.34	168,067	97,680	58.12	10,913	4,027	36.90	704,864	283,033	40.15	
Sunshine (8)	308,906	60,218	19.49	135,969	38,176	28.08	15,711	4,055	25.81	1,079,063	320,431	29.70	
Mid-South (9)	165,501	32,875	19.86	132,860	66,904	50.36	12,037	3,415	28.37	495,188	153,613	31.02	
Ohio (10)	117,463	26,141	22.25	97,747	46,533	47.61	8,569	2,704	31.56	566,694	211,816	37.38	
Vets in Partnership (11)	142,393	26,383	18.53	184,847	135,612	73.36	8,848	3,185	36.00	479,495	191,596	39.96	
Great Lakes (12)	142,079	25,192	17.73	158,904	86,633	54.52	11,419	3,144	27.53	662,519	247,910	37.42	
Upper Midwest (13)	96,279	16,076	16.70	38,348	14,664	38.24	5,305	1,263	23.81	352,507	134,356	38.11	
Central Plains (14)	73,699	10,913	14.81	32,130	15,624	48.63	3,367	1,108	32.91	218,028	77,227	35.42	
Heartland (15)	148,229	28,818	19.44	104,460	59,317	56.78	10,397	3,436	33.05	541,562	205,261	37.90	
South Central (16)	294,286	57,794	19.64	182,409	91,822	50.34	16,707	5,656	33.85	965,887	325,821	33.73	
Heart of Texas (17)	151,601	29,177	19.25	153,306	95,971	62.60	10,006	3,614	36.12	592,545	202,307	34.14	
Southwest (18)	154,764	28,711	18.55	64,323	21,063	32.75	9,088	2,298	25.29	523,464	163,282	31.19	
Rocky Mt. (19)	95,866	19,257	20.09	64,244	39,386	61.31	5,683	2,248	39.56	359,223	150,297	41.84	
Northwest (20)	143,215	32,013	22.35	81,560	37,023	45.39	10,197	3,295	32.31	631,260	236,998	37.54	
Sierra Pacific (21)	149,020	30,650	20.57	107,886	54,120	50.16	7,770	2,490	32.05	649,717	247,769	38.13	
Desert Pacific (22)	178,204	38,489	21.60	103,484	52,046	50.29	10,138	3,320	32.75	862,492	317,437	36.80	
National	3,314,672	626,389	18.90	2,686,371	1,490,014	55.47	211,495	67,806	32.06	13,366,157	4,863,810	36.39	

	Table 11.6: FY-2000 Cost of Psychiatric Disorders (Primary Diagnosis)													
Veterans Integrated	No. of	Outpatient		Inpatient Med		Inpatient Ot		Pharmac	y	Total				
Service Network	Patients	\$	%	\$	%	\$	%	\$	%	\$				
New England (1)	36,674	140,956,200	38.14%	65,941,390	17.84%	123,573,025	33.44%	39,062,299	10.57%	369,532,913				
Upstate NY (2)	18,476	70,214,847	39.72%	29,970,896	16.96%	54,250,885	30.69%	22,320,796	12.63%	176,757,424				
NY/NJ (3)	30,996	124,991,097	28.63%	74,854,494	17.15%	188,282,008	43.13%	48,372,929	11.08%	436,500,528				
Stars and Stripes (4)	36,150	87,171,279	27.15%	57,926,991	18.04%	133,552,922	41.59%	42,470,364	13.23%	321,121,555				
Capitol (5)	16,856	56,988,152	29.67%	40,133,300	20.89%	77,887,252	40.55%	17,088,353	8.90%	192,097,057				
Mid-Atlantic (6)	31,403	72,209,960	27.07%	52,111,007	19.54%	104,250,067	39.09%	38,148,589	14.30%	266,719,623				
Atlantic (7)	39,197	108,439,934	33.82%	63,328,967	19.75%	99,457,070	31.01%	49,448,615	15.42%	320,674,586				
Sunshine (8)	60,622	160,855,257	38.27%	85,256,945	20.28%	97,990,294	23.31%	76,224,841	18.13%	420,327,337				
Mid-South (9)	32,997	76,180,565	31.57%	61,286,266	25.40%	65,237,799	27.03%	38,623,526	16.00%	241,328,155				
Ohio (10)	26,238	85,374,155	34.72%	40,702,706	16.55%	92,779,080	37.73%	27,053,580	11.00%	245,909,521				
Vets in Partnership (11)	26,510	79,455,081	29.44%	40,640,533	15.06%	118,509,965	43.91%	31,309,710	11.60%	269,915,289				
Great Lakes (12)	25,315	99,760,805	33.60%	55,966,513	18.85%	113,147,717	38.11%	28,059,224	9.45%	296,934,258				
Upper Midwest (13)	16,134	51,766,784	33.40%	34,631,900	22.35%	46,070,475	29.73%	22,501,413	14.52%	154,970,572				
Central Plains (14)	11,001	32,738,362	34.13%	16,806,517	17.52%	31,203,333	32.53%	15,178,597	15.82%	95,926,809				
Heartland (15)	28,971	76,001,865	35.00%	45,570,006	20.99%	63,343,024	29.17%	32,238,384	14.85%	217,153,279				
South Central (16)	58,076	146,760,596	34.34%	90,495,381	21.18%	118,782,369	27.80%	71,290,802	16.68%	427,329,148				
Heart of Texas (17)	29,307	73,860,195	29.04%	54,887,834	21.58%	91,275,798	35.88%	34,339,162	13.50%	254,362,989				
Southwest (18)	28,908	71,222,609	37.14%	50,907,080	26.55%	41,415,987	21.60%	28,218,380	14.72%	191,764,056				
Rocky Mt. (19)	19,408	44,149,403	29.63%	32,213,136	21.62%	51,181,454	34.35%	21,466,903	14.41%	149,010,896				
Northwest (20)	32,088	94,324,230	36.52%	55,633,789	21.54%	73,975,773	28.65%	34,315,945	13.29%	258,249,737				
Sierra Pacific (21)	30,846	103,947,885	35.68%	54,753,464	18.79%	95,204,826	32.68%	37,414,740	12.84%	291,320,915				
Desert Pacific (22)	38,669	131,131,788	36.95%	85,393,066	24.06%	98,695,274	27.81%	39,693,897	11.18%	354,914,025				
National	626328	1,988,501,048	33.40%	1,189,412,182	19.98%	1,980,066,396	33.26%	794,841,047	13.35%	5,952,820,672				

	Table 11.7: FY-2000 Cost of Psychiatric Disorder (Secondary Diagnosis)													
Veterans Integrated Service Network	No. of Patients	Outpatient		Inpatient Med		Inpatient Ot		Pharmacy		Total				
Scrvice retwork	atients	\$	%	\$	%	\$	%	\$	%	\$				
New England (1)	7,134	16,156,258	22.19%	26,453,761	36.34%	24,744,318	33.99%	5,445,528	7.48%	72,799,865				
Upstate NY (2)	4,534	9,834,610	18.20%	19,046,825	35.25%	20,656,389	38.22%	4,503,350	8.33%	54,041,174				
NY/NJ (3)	5,616	15,349,027	18.45%	34,659,945	41.66%	27,731,268	33.33%	5,455,175	6.56%	83,195,414				
Stars and Stripes (4)	7,464	12,564,505	15.03%	32,563,247	38.95%	30,926,647	36.99%	7,549,866	9.03%	83,604,265				
Capitol (5)	3,132	6,878,885	15.25%	21,352,502	47.32%	14,466,647	32.06%	2,422,113	5.37%	45,120,147				
Mid-Atlantic (6)	8,946	16,500,804	20.39%	32,885,944	40.64%	22,049,212	27.25%	9,474,248	11.71%	80,910,208				
Atlantic (7)	10,101	17,891,057	18.92%	43,381,348	45.88%	23,739,322	25.11%	9,545,537	10.09%	94,557,264				
Sunshine (8)	13,723	27,754,008	22.76%	46,601,065	38.22%	35,139,811	28.82%	12,431,209	10.20%	121,926,093				
Mid-South (9)	9,144	16,646,926	20.70%	37,922,731	47.15%	17,316,458	21.53%	8,549,490	10.63%	80,435,604				
Ohio (10)	4,210	9,112,378	17.47%	19,637,525	37.65%	19,530,333	37.45%	3,873,797	7.43%	52,154,033				
Vets in Partnership (11)	6,324	16,207,766	22.89%	26,333,074	37.19%	21,495,120	30.36%	6,767,113	9.56%	70,803,073				
Great Lakes (12)	5,207	13,652,540	19.96%	26,059,341	38.11%	23,589,734	34.50%	5,082,420	7.43%	68,384,034				
Upper Midwest (13)	4,357	8,663,121	17.85%	25,142,587	51.81%	10,504,542	21.65%	4,214,139	8.68%	48,524,389				
Central Plains (14)	3,943	6,794,117	22.78%	12,551,402	42.08%	5,972,128	20.02%	4,508,878	15.12%	29,826,524				
Heartland (15)	8,380	14,701,838	22.43%	30,912,382	47.16%	12,833,033	19.58%	7,097,545	10.83%	65,544,798				
South Central (16)	14,336	26,043,823	21.85%	52,612,371	44.15%	25,971,398	21.79%	14,544,599	12.20%	119,172,192				
Heart of Texas (17)	3,807	9,738,699	17.73%	25,482,248	46.40%	13,695,873	24.94%	5,996,460	10.92%	54,913,280				
Southwest (18)	7,181	13,015,051	22.43%	25,310,959	43.62%	14,098,969	24.30%	5,598,450	9.65%	58,023,428				
Rocky Mt. (19)	4,879	8,042,163	20.04%	19,361,789	48.24%	8,156,532	20.32%	4,572,112	11.39%	40,132,596				
Northwest (20)	7,492	16,000,683	21.72%	31,702,432	43.03%	19,280,330	26.17%	6,693,908	9.09%	73,677,353				
Sierra Pacific (21)	3,023	12,577,505	19.20%	24,720,585	37.74%	23,115,711	35.29%	5,079,975	7.76%	65,493,775				
Desert Pacific (22)	5,856	14,085,396	19.78%	35,134,133	49.35%	16,863,336	23.69%	5,110,307	7.18%	71,193,172				
National	145258	308,211,158	20.09%	649,828,196	42.35%	431,877,111	28.15%	144,516,217	9.42%	1,534,432,683				

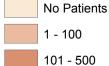
Map 11.1







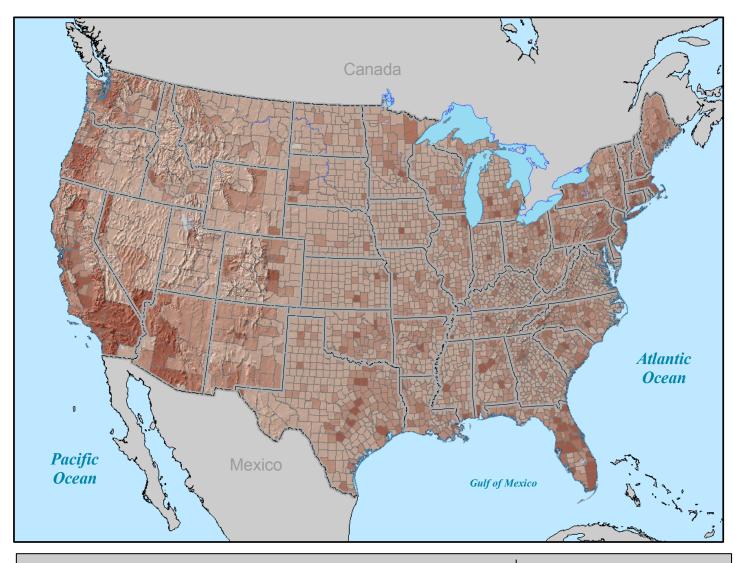
Number of Patients



101 - 300

501 - 1,000

Greater than 1,000



Number of VA Patients with Psychiatric Disorders by County FY-2000 VA Health Care Atlas HSR&D SDR 01-175

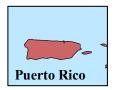
Source: VA Medical SAS Databases, FY-00

Created in ArcGIS 8 using ArcMap

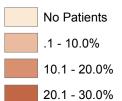
Map 11.2







Percent of Patients



Greater than 30.0%

Atlantic Ocean **Pacific** Mexico **Ocean** Gulf of Mexico

Percent of VA Patients with Psychiatric Disorders by County FY-2000

VA Health Care Atlas HSR&D SDR 01-175

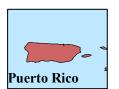
Source: VA Medical SAS Databases, FY-00 Created in ArcGIS 8 using ArcMap

200

Map 11.3







Percent

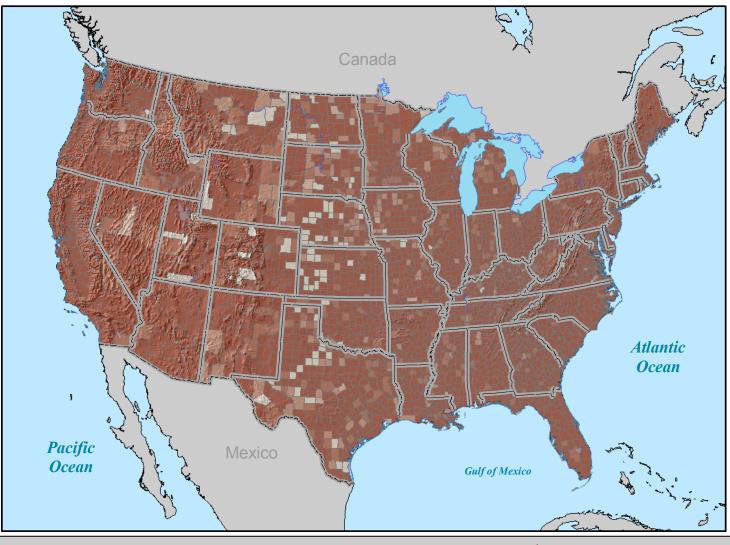
No Discharges

.1 - 10.0%

10.1 - 20.0%

20.1 - 30.0%

Greater than 30.0%



Percent Disease-Specific Discharges of Total Discharges (Psychiatric Disorders) by County FY-2000

VA Health Care Atlas HSR&D SDR 01-175

Source: VA Medical SAS Databases, FY-00 Created in ArcGIS 8 using ArcMap

Map 11.4







Percent

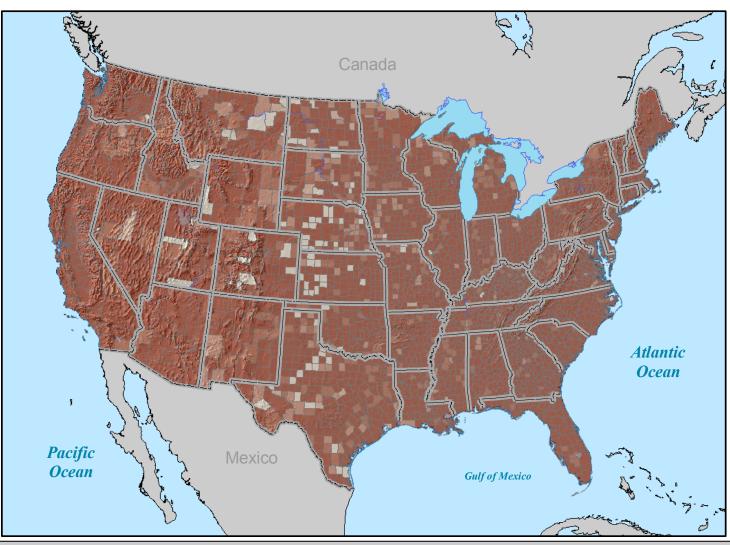
No Discharges

.1 - 10.0%

10.1 - 20.0%

20.1 - 30.0%

Greater than 30.0%



Percent Disease-Specific Discharges of Total Discharges (Psychiatric Disorders) by County FY-2000

VA Health Care Atlas HSR&D SDR 01-175

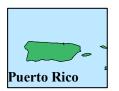
Source: VA Medical SAS Databases, FY-00

Created in ArcGIS 8 using ArcMap

Map 11.5







Number

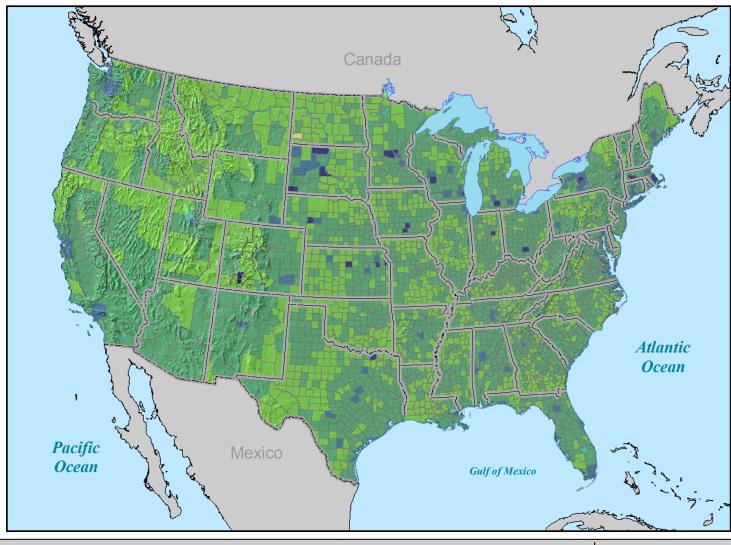
No Visits

12.1 - 24.0

.1 - 12.0

24.1 - 36.0

Greater than 36.0



Average Number of Visits for Patients with Pyschiatric Disorders by County FY-2000 VA Health Care Atlas HSR&D SDR 01-175

Source: VA Medical SAS Databases, FY-00 Created in ArcGIS 8 using ArcMap

Map 11.6







Number per 1,000

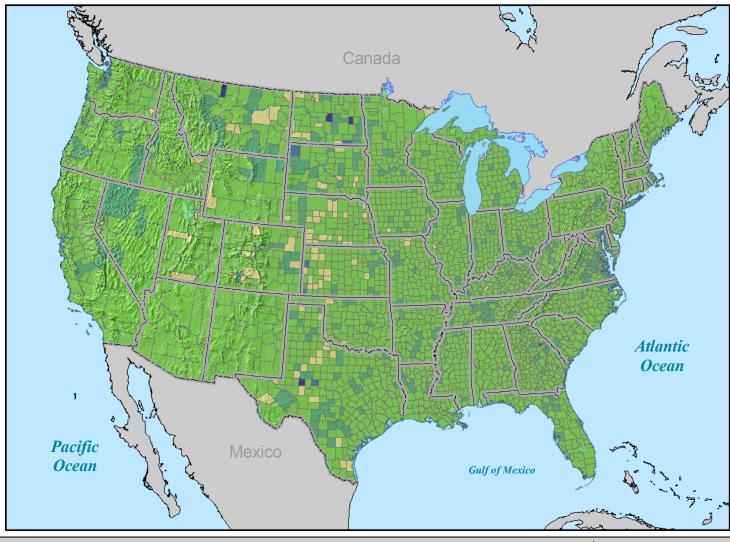
No Discharges

1 - 500

501 - 1000

1001 - 1500

Greater than 1500



Disease Specific Discharges per 1,000 Patients with Psychiatric Disorders by County FY-2000

VA Health Care Atlas HSR&D SDR 01-175

Source: VA Medical SAS Databases, FY-00

Created in ArcGIS 8 using ArcMap

For More Information

The Mental Health Quality Enhancement Research Initiative (MHQ) employs the QUERI process to improve the quality of care and health outcomes of veterans with major depressive disorder (MDD) and schizophrenia. Schizophrenia and MDD were chosen as targets for MHQ due to their prevalence, significant impact on the lives of patients, and the substantial cost to society. Major depressive disorder is one of the most common and costly of mental disorders. Depression costs the US an estimated \$44 billion per year, which includes both direct (i.e., medical care) and indirect (i.e., lost productivity) costs. Schizophrenia, perhaps the most devastating mental disorder, affects more than 2 million Americans and costs exceed \$30 billion per year, accounting for more than 25% of total direct costs for mental illness.

While there are effective pharmacologic therapies for both MDD and schizophrenia, studies show that depression is under-diagnosed and inadequately treated, and that almost 50% of patients with schizophrenia who are discharged from hospitals do not remain in treatment over time. MHQ's mission encompasses improving the quality of care for veterans with major depressive disorder or schizophrenia through the translation of research knowledge into clinical and organizational practice. MHQ is located at the HSR&D Center of Excellence in North Little Rock, Arkansas and is cochaired by Richard Owen, MD, (Research Coordinator) and Stephen Marder, MD (Clinical Coordinator). Researchers or other interested parties are encouraged to contact the MHQ Coordinator to learn more about VHA's current research foci and ongoing projects in the area of Mental Health:

Mona Ritchie, LCSW Administrative Coordinator HSR&D Center for Mental Healthcare and Outcomes Research (152/NLR) 2200 Fort Roots Drive North Little Rock, AR 72114-1706

Telephone: 501/257-1735 Fax: 501/257-1707

E-mail: Ritchiemonajane@uams.edu

Web site: http://www.mentalhealth.med.va.gov/mhq/index.shtml

A summary of QUERI-MHQ activities is provided below. These descriptions were extracted from the Fact Sheets available on the Web site: http://www.hsrd.research.va.gov/queri.cfm.

Research Focus and Translation Activities

Since its inception in 1998, MHQ has focused on research to close gaps in the knowledge of best treatment practices and develop effective strategies for implementing clinical guidelines. Today, MHQ efforts center on two translation initiatives and other projects in five key areas:

- Development and testing of streamlined outcomes measures (including health-related quality of life) for schizophrenia and depression treatment, in coordination with the National Mental Health Improvement Program and various Mental Illness Research, Education, and Clinical Centers (MIRECCs);
- Variation in psychotropic prescribing practices and the impact of barriers to prescribing newer psychotropic medications, including clozapine;
- Development and testing of guideline-based clinical reminders;
- Resource toolkits development and dissemination to support implementation of best practices for MDD and schizophrenia; and
- Internet and VA Intranet website maintenance to accelerate and complement dissemination of resources.

MHQ is focusing its immediate translation efforts in two areas: increasing the appropriate use of antipsychotics and incorporating the collaborative care model for the treatment of depression in primary care into routine VA practice settings.

Appropriate use of novel antipsychotic medication: MHQ research shows that prescribing rates for the newer antipsychotic agents (i.e., risperidone, olanzapine, quetiapine) vary widely. Prescribing rates for clozapine, which is reserved for use in treatment of refractory patients, also vary dramatically. Further, traditional agents, as well as the newer drugs, are often prescribed at doses outside of guideline recommended ranges. MHO's translation goal is to increase the guideline-concordant use of antipsychotics. including appropriate switching of refractory patients to newer agents (including clozapine) and reducing the frequency of antipsychotic prescribing outside guideline recommended dose ranges. The translation project includes: 1) a multi-site demonstration project in one VISN that will demonstrate the effectiveness of an intensive implementation strategy (e.g., use of opinion leaders, provision of clinical tools such as pocket cards and computerized reminders, and frequent performance feedback) to improve

medication management; 2) revision of the implementation strategy and subsequent "roll-out" to two other VISNs for implementation; and 3) national dissemination of information and tools to promote guideline-concordant medication management. The expected impact of this translation effort includes increased adherence to VHA schizophrenia guidelines and improved patient outcomes.

Collaborative care model for MDD: The goal of this project, headed by MHQ Executive Committee member Dr. Lisa Rubenstein, is to translate a previously tested collaborative care model for improving the quality of depression care across multiple VISNs. The project team will conduct a process evaluation of evidence-based quality improvement (EBQI), a dissemination method that relies on

expert design and local implementation. EBQI for depression (EBQID) will assist implementation of collaborative care for depression. The project's objectives are to: adapt the depression collaborative care model to diverse VA settings; develop EBQID for VA that includes an interactive website and group learning through participant Learning Sessions; and evaluate the success of intervention implementation in participating sites using a process evaluation approach. The project team is partnering with three VISNs. Here are a few of the significant findings from MHQ research:

- Depression treatment in primary care settings: Multi-component interventions improve processes (i.e., identification of depressed patients and initiation of guideline concordant treatment) and outcomes (i.e., depression symptoms) of depression treatment in primary care settings. Such interventions include provider education, case management, feedback, and patient education and activation.
- *Variation in antipsychotic prescribing:* Antipsychotic medication prescribing continues to vary across VA sites, both in terms of medications used and dose range.
- Reducing high dose prescribing of antipsychotics: Thus far, MHQ's translation project has stimulated significant reduction in rates of very high-dose prescribing (25% above the high end of the recommended ranges) in participating intervention sites.
- Diagnoses vary among primary care clinics: The frequency of diagnosis of depressive disorders, including MDD, varies substantially in VA primary care clinics.
- Gaps in implementing guidelines: A survey of VA medical center mental health service chiefs reported that nearly one-third have not implemented portions of the MDD guideline designed for mental health specialty settings.