

Chapter 8: Primary Care Treatment

Background

Depression is one of the most common disorders encountered by primary care providers (Katon 1987; Ballenger et al. 1999). In the private sector, most depressed patients are treated in the general medical rather than the mental health settings (Schurman, Kramer, and Mitchell 1985; Regier et al. 1993; Kessler et al. 1994). However, primary care physicians detect only 24% to 64% of patients with major depression (\pm dysthymia) and presumably give a formal depression diagnosis to even a smaller percentage (Simon and VonKorff 1995; Coyne, Schwenk, and Fechner-Bates 1995; Tiemens, VonKorff, and Lin 1999; Kirmayer et al. 1993; Depression Guideline Panel 1993; Coyne, Fechner-Bates, and Schwenk 1994; Tiemens, Ormel, and Simon 1996; Hirschfeld et al. 1997; Wells et al. 1989; Ormel et al. 1991). Mental health clinicians are more likely to give formal diagnoses of depression and see depressed patients more frequently. Of all visits for depression in 1993-1994 in the National Ambulatory Medical Care Survey, 35.6% were to primary care physicians and 58.6% were to psychiatrists (Pincus et al. 1998).

The VA may differ from private care settings in the treatment of depressed patients. The VA has been committed to providing an array of mental health services for veterans and does not impose severe limits on mental health visits as do many managed care organizations (MCOs). MCOs' coverage policies have deliberately shifted the treatment of patients from mental health to primary care providers, and typically provide a maximum of 20 specialty mental health visits per year. Only 10% of depressed patients in prepaid plans consider a psychiatrist to be their main source of care, compared to 22% of depressed patients in fee-for-service settings (Sturm, Meredith, and Wells 1996).

Primary Location of Depression Treatment

Most patients who received a diagnosis of depression in the VA are seen at least once in mental health settings. There were a total of 542,075 patients diagnosed with depression during a visit in specialty mental health care or in primary care or other non-mental health settings. 331,399 of these patients (61%) had at least one visit with a diagnosis of depression in specialty mental health, while 210,676 (39%) had visits with a diagnosis of depression only in primary care. (When patients with a diagnosis of Bipolar I during the year were excluded, 305, 122 patients were seen at least once in specialty settings and 204,272 only in primary care.)

A more detailed examination of location of depression treatment among the 507,791 depressed patients using outpatient services showed that 56% of patients had more than fifty percent of their visits with a diagnosis of depression in mental health specialty settings; 4% of patients had more than fifty percent of their visits with a diagnosis of depression in primary care, and 40% of patients had all of their visits with a diagnosis of depression in primary care (See Tables 8.A and 8.B).

Table 8.A: Location of Treatment considering OP visits with a Diagnosis of Depression

Primary Care Only	>50% Primary Care	>50% Mental Health Care	All
N (%)	N (%)	N (%)	N (%)
202871 (40%)	20997 (4%)	283923 (56%)	507791 (100%)

Table 8.B: Location of Treatment considering OP visits with a Diagnosis of Depression, by Comorbidity Group

					All
	Depression alone/ONLY with OthAnx	Depression + any SABuse	Depression + any PTSD	Other Complicated Dep	
Primary Care Only	50 %	23 %	20 %	37 %	40 %
> 50% Primary Care	3 %	7 %	4 %	5 %	4 %
> 50% Mental Health Care	47 %	71 %	76 %	58 %	56 %
All	100 %	100 %	100 %	100 %	100 %

Joint treatment of depression, when patients are seen by mental health specialists but PCPs provide the majority of mental health care, appears relatively rare. This is in line with the literature, which suggests that only 5% to 16% of the patients identified as depressed by their primary care physicians are referred to MHP (Orleans et al. 1985)(Coulter et al., 1989).

Please note that while depressed patients received their depression-focused care predominantly in mental health settings, the majority of depressed patients (84%) had more primary care and other non-mental health use than specialty use. Only 16% of depressed patients had most of their healthcare-related visits in specialty mental health (See Table 8.C).

Table 8.C: Location of Treatment considering ALL OP visits made to VA OP Clinics

Primary Care Only	>50% Primary Care	>50% Mental Health Care	All
N (%)	N (%)	N (%)	N (%)
161,998 (32%)	265,779 (52%)	80,014 (16%)	507,791 (100%)

Predictors of Treatment in Primary Care

Depressed patients who received all of their depression-related treatment in primary care were older, more likely to be male, and less likely to have a psychiatric comorbidity. Patients seen in primary care settings were also more likely to have “unknown” race. Aside from the increased representation of men, this is in line with the literature describing predictors of depression treatment in primary care rather than specialty settings.

Table 8.D: Predictors of Depression-Related Treatment: Age

	Location of Depression-Focused Care			All
	Primary Care Only	>50% Primary Care	>50% Mental Health Care	
	N=202,871 (40%)	N=20,997 (4%)	N=283,923 (56%)	
Mean Age	62.0	56.5	55.4	58.1
Std.	14.0	13.7	13.0	13.8
Age, %				
< 35 years	3.2%	4.9%	5.6%	4.6%
35 - 49 years	16.3%	27.2%	27.1%	22.8%
50 - 64 years	35.9%	41.4%	44.4%	40.9%
65 - 79 years	34.9%	20.7%	19.2%	25.5%
>= 80 years	9.7%	5.8%	3.8%	6.2%
All	100.00	100.00	100.00	100.00

Table 8.E: Other Predictors of Depression-Related Treatment

	Location of Depression-Focused Care			
	Primary Care Only	>50% Primary Care	>50% Mental Health Care	All
	N=202,871 (40%)	N=20,997 (4%)	N=283,923 (56%)	N=507,791
Gender				
female	7.7%	9.9%	9.6%	8.9%
male	92.3%	90.1%	90.4%	91.1%
Race/Ethnicity				
Hispanic	3.5%	5.1%	5.2%	4.5%
American Indian	0.3%	0.3%	0.4%	0.3%
Black	8.5%	14.2%	12.8%	11.1%
Asian	0.2%	0.3%	0.3%	0.3%
White	54.6%	61.4%	60.2%	58.0%
Unknown	32.9%	18.7%	21.1%	25.7%
Marital Status				
Divorced or Separated	22.8%	32.4%	29.9%	27.2%
Married	57.7%	46.1%	48.2%	51.9%
Never Married	11.1%	15.2%	17.0%	14.6%
Widowed	8.3%	6.2%	4.9%	6.3%

Treatment Practices

Veterans who received depression focused treatment only in primary care were seen less often than patients seen in specialty mental health, as has been reported for in the general treatment population (Frank and Kamlet, 1990). The mean number of clinic visits with a depression diagnosis was 1.5 for patients seen for depression treated only in primary care, 6.1 for patients with >50% of their depression treatment in primary care, and 5.2 for patients with >50% of their depression treatment in specialty mental health.

Table 8.F: Number of Primary Care Clinic Stops with a Diagnosis of Depression

					All
		Primary Care Only	>50% Primary Care	>50% Mental Health Care	
Primary stops w/Dep Dx	Mean	1.5	4.5	0.6	1.1
	Std	2.5	10.0	1.7	3

Table 8.G: Total Number of Clinic Stops with a Diagnosis of Depression

					All
		Primary Care Only	>50% Primary Care	>50% Mental Health Care	
OP stops w/Dep Dx	Mean	1.5	6.1	5.2	3.8
	Std	2.5	12.1	11.6	9.3

Table 8.H: Number of Primary Care Clinic Stops with a Diagnosis of Depression

					All
		Primary Care Only	>50% Primary Care	>50% Mental Health Care	
N (%) of Patients		202,871 (40%)	20,997 (4%)	283,923 (56%)	507,791 (100%)
Annual visit days	Mean	13.1	23.6	22.6	18.8
	Std	16.6	24.7	27.2	23.9
Annual Clinic Stops	Mean	19.8	36.8	34.2	28.6
	Std	27.4	42.8	45.4	39.7

Psychotropic Use

In the community, the bulk of antidepressants are prescribed by primary care physicians rather than by psychiatrists (Hohmann et al 1991). Following a diagnosis of depression, antidepressants are offered to 33-59% of primary care patients (Callahan, Dittus, and Tierney 1996), and antidepressants are prescribed in 50-60% of encounters in which depression is noted as a reason for the encounter (Pincus et al 1998).

In the VA, large majorities of depressed patients received antidepressants, regardless of where they receive their care. However, patients receiving depression focused treatment solely in primary care were less likely to receive antidepressants (73%) than patients receiving some (>50% primary care) or most (>50% MH care) of their depression treatment in mental health specialty settings (86% and 83%, respectively). Patients treated only in primary care were less likely to be treated with multiple psychotropic medication classes. Perhaps surprisingly, depressed patients seen only in primary care settings were less likely to receive benzodiazepines than patients seen in specialty settings.

Table 8.I: Use of Psychotropic Medications, by Location of Care for Depression

				Overall
	Primary Care Only	>50% Primary Care	>50% Mental Health Care	
Number (%) of Patients	202,871 (40%)	20,997 (4%)	283,923 (56%)	507,791
Received meds from >=4 Psychotropic Classes,				
Psychotropics	1.0 %	7.7 %	10.3 %	6.0 %
Antidepressants	79.3 %	92.0 %	88.9 %	87.5 %
Antipsychotics	73.3 %	86.3 %	82.7 %	81.6 %
Benzodiazepines	3.0 %	16.4 %	26.2 %	13.7 %
Other Antianxiety	17.4 %	33.3 %	28.2 %	27.4 %
Mood Stabilizers	3.0 %	10.0 %	11.0 %	8.0 %
Stimulants	9.0 %	19.5 %	17.8 %	15.9 %
Anticholinesterases	0.3 %	1.0 %	1.6 %	0.9 %
Antihistamine/Antiparkinson	2.4 %	2.6 %	0.8 %	2.2 %
Alcohol Treatment	6.7 %	15.5 %	17.1 %	12.9 %
	0.1 %	0.6 %	2.6 %	0.7 %

Adequate Follow-up of Newly Diagnosed Cases of Depression

Of the 507,791 patients diagnosed with depression in the VA in FY02 who also had outpatient utilization, 20,019 (4%) were identified as newly diagnosed cases of depression using the criteria established by the Office of Quality Performance. Only 2% of patients receiving all of their care for depression in Primary Care settings had adequate follow-up compared to 13% in specialty mental health settings (three or more outpatient follow-up visits with a primary care or mental health practitioner). Receipt of adequate antidepressant prescriptions during the acute (84-day) treatment phase was high across locales of treatment.

Table 8.J: Adequate Antidepressant Medication Management, by Location of Care for Depression

				All
	Primary Care Only	>50% Primary Care	>50% Mental Health Care	
Number of Patients (%)	7468 (37%)	1041 (5%)	11510 (58%)	20,019
Met OQP Follow-up Visit Measure	1.8%	13.3%	12.5%	8.60%
Met OQP Adequate Medication Measure	66.5%	65.7%	63.2%	64.60%

Appendix A: Inclusion Criteria

Qualifying Diagnoses and Location of Treatment

Patients in this Depression Report were identified using data obtained from the nationwide VA Patient Treatment File (PTF) and the Outpatient Cares File (OPC) located at the Austin Automation Center in Austin, Texas. Patients were included provided they had at least one qualifying depression diagnosis in the FY02 inpatient or outpatient dataset for mental health specialty locations. The qualifying ICD-9 diagnoses codes, their frequencies in terms of percentages of the Depression Registry population, and the distribution of the number of qualifying diagnoses per patient are listed below:

<u>Qualifying Diagnoses:</u> (In order of greatest frequency)	<u>Frequency:</u> (In terms of %)
311 Depressive Disorder NOS	46.2%
296.3 MDD, recurrent episodes	36.8%*
300.4 Dysthymia	22.8%
296.2 MDD, single episode	18.0%*
309.0 Adjustment Disorder with Depressed Mood	5.2%
293.83 Mood Disorder due to Medical condition	6.0%
296.90 Mood Disorder NOS	3.1%
309.1 Prolonged Depressive Reaction	1.5%
296.99 Other Specified Affective Disorders	0.2%
301.12 Chronic Depressive Personality Disorder	0.02%

<u>Number of Qualifying Diagnoses</u> <u>Per patient:</u>	<u>Frequency:</u> (In terms of %)
1	69%
2	24%
3 or more	7%

Locale of Treatment

Inpatient (by bed section):

General Psychiatric:

- 33 Geriatric Evaluation and Management Psychiatry
- 39 General compensated Work Therapy/Transitional Residence (CWT/TR)
- 70 Acute Psychiatric
- 71 Long-term Psychiatric
- 92 Psychiatric General Intermediate
- 93 High Intensity General Psychiatric Inpatient
- 94 Psychiatric Observation

Specialized Psychiatric:

- 84 Psychiatric-Substance Abuse Intermediate Care
- 89 STAR I, II, III Program (Inpatient Rehabilitation Unit)

Substance Abuse & PTSD:

- 29 Substance Abuse CWT/TR
- 38 PTSD/ CWT/TR
- 72 Alcohol Dependence-High Intensity
- 73 Drug Dependence-High Intensity
- 74 Substance Abuse-High Intensity
- 79 Special Inpatient PTSD Unit
- 90 Substance Abuse Star I, II, III Program
- 91** Evaluate and Brief treatment-PTSD

** Bed section discontinued or has very few discharges

Outpatient (by clinic stop):

- 137 Alcohol counseling
- 143 Persian Gulf counseling
- 165 Bereavement counseling
- 292 Observation Psychiatry
- 501 Homeless Mentally Ill Outreach
- 502 Mental Health-Individual
- 503 Mental Health Residential Care
- 504 PCC Med Center Visit
- 505 Day Treatment-Individual
- 506 Day Hospital-Individual
- 507 Drug Dependence-Individual
- 508 Alcohol Treatment-Individual
- 509 Psychiatry-Individual
- 510 Psychology-Individual
- 511 Neurobehavioral-Individual
- 512 Psychiatry consult
- 513 Substance Abuse-Individual
- 514 Substance Abuse-Home
- 515 CWT/TR-Homeless Chronically Mentally Ill (HCMI)
- 516 PTSD Group
- 517 CWT/Substance Abuse
- 518 CWT/TR Substance Abuse
- 519 Substance/PTSD Teams
- 520 Long Term Enhance-Individual
- 521 Long Term Enhance-Group
- 522 HUD-VA Shared Housing
- 523 Opioid Substitution
- 524 Active Duty Sexual Trauma
- 525 Women Stress Treatment
- 526 Telephone Special Psychiatry
- 527 Phone General Psychiatry
- 528 Phone/Homeless Mentally Ill (HMI)
- 529 Health Care for Homeless Veterans/ HMI

530 Telephone/ HUD-VA Shared Housing
 531 Mental Health Primary Care Team-Individual
 532 Psychiatry/Social Rehabilitation-Individual
 535 Mental Health Vocational Assistance
 536 Telephone/Mental Health Vocational Assistance
 537 Telephone Psychiatry/Social Rehabilitation
 538 Psychological Testing
 540 PTSD consult/Liaison Team-PTSD Clinical Team
 541 PTSD Clinic
 542 Telephone PTSD
 543 Telephone Alcohol Dependence
 544 Telephone Drug Dependence
 545 Telephone Substance Abuse
 546 Telephone/ Mental Health Intensive Case Management (MHICM)
 547 Intensive Substance Abuse Treatment
 548 Substance Abuse Day Hospital
 550 Mental Hygiene-Group
 551 IPCC community Clinic/Day
 552 Mental Health Intermediate (MHICM)
 553 Day Treatment-Group
 554 Day Hospital-Group
 555 Drug Dependence-Group
 556 Alcohol Treatment-Group
 557 Psychiatry-Group
 558 Psychology-Group
 559 Psychiatry/Social Rehabilitation-Group
 560 Substance Abuse-Group
 561 PTSD Clinical Team (PCT) PTSD-Group
 562 PTSD-Individual
 563 Mental Health Primary Care Team-Group
 564 Mental Health Team Case Management
 571 Readjustment counseling-Individual
 572 Readjustment counseling-Group
 573 Mental Health Incentive Therapy-Group
 574 Mental Health compensated Work Therapy-Group
 575 Mental Health Vocational Assistance-Group
 576 Psychogeriatrics Clinic-Individual
 577 Psychogeriatrics Clinic-Group
 578 Psychogeriatrics Day Program
 579 Telephone/Psychogeriatrics
 580 PTSD Day Hospital
 581 PTSD Day Treatment
 589 Non Active Duty Sexual Trauma
 590 comm. Outreach to Homeless Vets by Staff Other than HCHV

*Please note that the percentage of patients (55%) with the diagnoses 296.2 or 296.3, as shown above, was obtained by counting all patients with either diagnosis at any time during FY02. This process allows for individual patients who had both diagnoses in the same year to be counted twice. When such patients are excluded (6%), the resulting figure of 49% is the percentage of patients that have a diagnosis of 296.2 and/or 296.3 in FY02.

Appendix B : VERA Price Groups

ASSIGNMENT OF VERA PATIENT CLASSES TO VERA 10 PRICE GROUPS		
	VERA Price Groups - Basic	VERA Patient Classes
1	Non-reliant Care	Compensation and Pension Exams Employee/Collateral Pharmacy Non-vested
2	Basic Medical	Ear, Nose, and Throat Other Acute Disease Endocrine, Nutritional, Metabolic Disorders Central Nervous System Musculoskeletal Disorders
3	Mental Health	Acute Mental Disease Addictive Disorders
4	Heart/Lung/GI	Cardiovascular Disease Gastroenterology Disorders Pulmonary Disease
5	Oncology/Infectious Disease	Hep C w/o drug therapy HIV w/o drug therapy Oncology
6	Multiple Medical	Medical + Psych + Sub Abuse Psych + Substance Abuse Multiple Medical PTSD Acute
	VERA Price Groups - Complex	VERA Patient Classes
7	Specialized Care	Hep C with drug therapy HIV with drug therapy PTSD Chronic Home Based Primary Care Traumatic Brain Injury
8	Support Care	Stroke SCI Para - Old Injury Domiciliary SCI Quad - Old Injury Blind Rehab

		Community Nursing Home
		Low ADL
9	Chronic Mental	Mental Health Intensive Care Mgmt
		Other Psychosis
		Substance Abuse
		Schizophrenia and Dementia
10	Critically Ill	SCI Para - New Injury
		Behavioral
		Clinical Complex
		End Stage Renal Disease
		Physical
		SCI Quad - New Injury
		Rehabilitation
		Specialized Care
		Transplants
		Ventilator

Appendix C: Psychotropic Medications

<u>Class</u>	<u>Drugs Included in Class</u>
Alcohol Treatment	disulfiram, naltrexone
Antiparkinson/Antihistamine	diphenhydramine, benztropine, trihexyphenidal, biperiden, procyclidine, hydroxyzine
Benzodiazepines	alprazolam, chlordiazepoxide, clonazepam, clorazepate, diazepam, estazolam, flurazepam, halazepam, lorazepam, oxazepam, prazepam, quazepam, temazepam, triazolam
Antianxiety	bupirone, chloral hydrate, zolpidem, zaleplon
Mood Stabilizers	carbamazepine, oxcarbamazepine, divalproex, felbamate, gabapentin, lamotrigine, topiramate, valproic acid, lithium
Antidepressants	amitriptyline, desipramine, doxepin, imipramine, clomipramine, nortriptyline, phenelzine, tranylcypromine, bupropion, citalopram, fluoxetine, nefazodone, paroxetine, sertraline, trazodone, venlafaxine, mirtazapine (fluvoxamine)
Antipsychotics	<i>First-generation:</i> chlorpromazine, thioridazine, mesoridazine, loxapine, molindone, perphenazine, fluphenazine, haloperidol, thiothixene, trifluoperazine, pimozide <i>Second-generation:</i> clozapine, ziprasidone, risperidone, quetiapine, olanzapine, aripiprazole
Stimulants	dextroamphetamine, methylphenidate
Anticholinesterases	donepezil, rivastigmine, tacrine

Appendix D: Cost Data

The Allocation Resource Center (ARC) in Braintree, Massachusetts, provided cost data for each patient by facility and cost center. The ARC database is an integrated, costed, clinical database for all veterans receiving care in a given fiscal year. ARC's basic approach is that patient costs = (patient workload) x (unit costs). Patient workload is estimated from a broad set of data resources. The ARC data sources include the Patient Treatment File, the Patient Assessment File, the Immunology Case Registry, the Fee Basis File, Home Dialysis, the Outpatient Care File, Outpatient Pharmacy data, HCFA, and the cost Distribution Report. The ARC estimates each patient's portion of the total resource utilization and applies that proportion to unit costs, which are based on Decision Support System (DSS) data. ARC cost estimates encompass direct and indirect costs, excluding capital expenses. Note that in FY99 and FY00 the ARC derived costs from cost Distribution Report data (CDR). This report presents ARC cost estimates for FY02 derived from DSS costs data.

A patient's total costs are assigned to the station at which they had the most utilization. Service location costs are aggregated into 15 groups. For the purposes of this report, the following 3 groups were included in the analysis.

ARC FY02 Cost Data:

Group 1: Medicine

Blind Rehab	Neurology
Neurology GEM	Medical ICU
Rehabilitation	Medical GEM
Rehabilitation GEM	Medicine
Spinal cord Injury	Epilepsy Center

Group 2: Surgery

- Operating Room Procedures
- Surgical ICU
- Surgery
- Transplant Team costs

Group 3: Psychiatry

- Eval/Brief Trmt PTSD
- Psychiatry
- Psychiatry GEM
- Psy General Intermediate
- Psy Subst Intermed
- Spec Inpt PTSD Unit
- Sustained Trmt and Rehab
- Substance Abuse STAR
- Substance Abuse

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