

# Treatment for Dual Diagnosis Patients in the Psychiatric and Substance Abuse Systems

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The purpose of this study was to describe and compare the extent to which psychiatric and substance abuse programs treating dual diagnosis patients in the residential and outpatient modalities offered the components recommended for this client group. Surveys were completed by managers of 753 programs in the Department of Veterans Affairs that had a treatment regimen oriented to dual diagnosis patients. Programs within both the psychiatric and substance abuse systems had some of the key services of integrated treatment (e.g., assessment and diagnosis, crisis intervention, counseling targeted at psychiatric and at substance use problems, medications, patient education, HIV screening and counseling, family counseling and education). However, compared to psychiatric programs, substance abuse programs were more likely to offer some of these services and other critical components (e.g., a cognitive-behavioral treatment orientation, assignment of a single case manager to each patient). Outpatient psychiatric programs were particularly lacking on key management practices (e.g., use of clinical practice guidelines, performance monitoring of providers) and services (e.g., detoxification, 12-step meetings) of integrated treatment. Generally, differences between psychiatric and substance abuse programs appeared to involve difficulties in developing treatment that is fully oriented toward the co-occurring diagnosis. To improve the provision of high-quality dual-focused care, we recommend planners' use of cross-system teams and applications of recently produced tools designed to increase programs' ability to deliver integrated care to dually disordered individuals.

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**KEY WORDS:** dual diagnosis; psychiatric; substance abuse; integrated treatment.

There is an increased prevalence of patients diagnosed with both psychiatric and substance use disorders, especially in publicly funded organizations (Drake & Mueser, 2000; Osher & Drake, 1996; Sacks et al., 1997). The increase has heightened recognition of the need for integrated treatment programs that yield better outcomes for dual diagnosis patients than sequential or parallel treatment in psychiatric or substance abuse programs (Drake, Mercer-McFadden, Mueser, McHugo, & Bond, 1998; Drake et al., 2001;

Granholt, Anthenelli, Monteiro, Sevcik, & Stoler, 2003). In an integrated program, psychiatric and substance abuse approaches are brought together by the clinical team. This ensures that patients receive consistent explanations of their disorders and coherent prescriptions for treatment rather than contradictory messages from psychiatric staff on one hand and substance abuse staff on the other (Drake & Mueser, 2000).

Due to the relative benefits of integrated treatment for dual diagnosis patients, especially for those with severe and persistent mental illness, both the psychiatric and substance abuse treatment systems are trying to develop and provide integrated services. However, given the rapid changes in these two systems of care, there is a need for more definitive information about the current provision of services to dual

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diagnosis patients within the inpatient and residential (hereafter referred to as residential) modality, and the outpatient modality, of care. Accordingly, we conducted a nationwide survey of Department of Veterans Affairs (VA) programs to examine the extent to which the psychiatric and substance abuse systems provide comparable services, as well as how services for dual diagnosis patients differ between the two systems. Our primary aims were to provide a snapshot of the current status of dual diagnosis programs to serve as a benchmark against which to measure future change, and a launching point for identifying high priority areas in which to implement improvements.

### **Key Components of High-Quality Integrated Programs**

Drake et al. (2001) noted that the identification of critical components of effective programs is leading to the emergence of evidence-based dual diagnosis services. We focus here on whether programs in the psychiatric and substance abuse systems offer the key components of integrated services, which were identified through a literature review and are summarized below; this review included dual disorder treatment fidelity scales (e.g., Mueser, Noordsy, Drake, & Fox, 2003). To organize our review and assessment, we used the conceptual framework we developed and implemented to describe and compare programs within different systems of care (Timko, Lesar, Calvi, & Moos, 2003; Timko, Sempel, & Moos, 2003). This framework covers four interrelated domains of program characteristics: organizational components, management practices, services, and policies.

#### *Organizational Components*

The key organizational components of integrated dual diagnosis treatment programs include staffing and treatment orientation. Research has emphasized the importance of having well-trained staff (Burnam et al., 1995), a high direct care staff-to-patient ratio (e.g., Mowbray et al.'s (1995) inpatient program had .16 staff members per 1 patient), and the necessity of a high proportion of onsite professional staff, i.e., a fulltime psychiatrist, social worker, and psychologist (Greenfield, Weiss, & Tohen, 1995; Mowbray et al., 1995; Sacks & Ries, 2002). In addition, an important aspect of program

organization is the theoretical orientation that guides the provision of services. In this regard, cognitive-behavioral treatment, emphasizing relapse prevention and skills training to develop better ways of coping and more self-efficacy in high-risk situations, is an appropriately common approach in dual-focused programs (Drake et al., 2001; Drake & Mueser, 2000; Greenfield et al., 1995).

Regarding duration of residential care, and amount of outpatient care, experts recommend flexibility as a critical feature of successful treatment because of different patient needs and program goals (Brunette, Drake, Woods, & Hartnett, 2001) and findings on specific programs reflect this. For example, dual diagnosis patients admitted to an acute inpatient integrated program had an average stay of 12 days (Ries et al., 2000), whereas a dual-focused residential program that emphasized living and vocational skills had an average patient stay of 66 days (Brunette et al., 2001). Intensive outpatient programs, from which dual diagnosis patients are likely to benefit (Granholm et al., 2003), provide treatment at least 3 days per week for 3 hours per day according to guidelines used by the VA, the American Psychiatric Association (1995), and the American Society of Addiction Medicine (1996).

#### *Management Practices*

According to Minkoff (2001), treatment agencies should implement clinical practice guidelines for the treatment of dual diagnosis patients at the program and system levels (see also Minkoff, Ajilore, and Panel Members, 1998; Torrey et al., 2001). Studies of dual focused programs also describe long-term and intensive case management as a key practice (Burnam et al., 1995; Drake & Mueser, 2000; Hellerstein, Rosenthal, & Miner, 2001). In particular, programs should assign a single provider to each patient to be responsible for establishing a treatment plan and following the patient's progress (Minkoff et al., 1998; Mowbray et al., 1995). In addition, Minkoff et al. (1998) emphasized the importance of programs regularly assessing patients' satisfaction with program services and their progress from intake to follow-ups on clinical outcomes. Although the use of practice guidelines and patient follow-ups, and other procedures such as utilization review and performance monitoring, have proliferated in recent years, there is a scarcity of data on the prevalence of these practices in dual focused programs.

### *Services*

In regard to patients' psychiatric and substance use problems, comprehensive program services should include assessment and diagnosis, crisis intervention, individual and group therapy, peer counseling and self-help groups, medications and medication management, and education (Burnam, 1995; Carey, Carey, Maisto, & Purnine, 2002; Drake et al., 2001; Drake & Mueser, 2000; Greenfield et al., 1995; Hellerstein et al., 2001; Minkoff et al., 1998; Mowbray et al., 1995; Sacks & Ries, 2002). With regard to patients' substance use problems, services should include detoxification and 12-step groups (Burnam et al., 1995; Carey, Purnine, Maisto, Carey, & Simons, 2000; Drake & Mueser, 2000; Hellerstein et al., 2001; Minkoff et al., 1998; Mowbray et al., 1995; Sacks & Ries, 2002). Programs should offer family counseling and education to family members about the etiology, treatment, and prognosis of psychiatric and substance use disorders (Carey et al., 2000; Drake et al., 2001; Greenfield et al., 1995; Hellerstein et al., 2001; Minkoff et al., 1998; Mowbray et al., 1995; Mueser & Fox, 2002). As to prioritizing these services, Drake et al.'s (2001) listing of critical components of effective treatment approaches for dual diagnosis patients specifically included individual and group counseling to help patients control psychiatric symptoms and pursue an abstinent lifestyle, as well as increasing patients' social support by providing family interventions.

To be comprehensive, programs for dual diagnosis patients should also offer rehabilitation services such as stress management and social skills training, and vocational skills training and employment services (Burnam et al., 1995; Carey et al., 2000; Drake et al., 2001; Drake & Mueser, 2000; Hellerstein et al., 2001; Minkoff et al., 1998; Mowbray et al., 1995). In addition, patients should have access to sports and other recreational activities (Burnam et al., 1995; Drake et al., 2001; Mowbray et al., 1995). Importantly, residential programs should offer aftercare services (Mowbray et al., 1995), which is consistent with Drake et al.'s (2001) emphasis on taking a long-term perspective when working with dual diagnosis patients. Outpatient programs need to link dual diagnosis clients who are homeless to housing services (Drake & Mueser, 2000; Hellerstein et al., 2001).

### *Policies*

Studies of dual focused residential treatment programs recommend that patients should have lim-

ited choice regarding daily decisionmaking; for example, patients' freedom to come and go at will should be restricted (Burnam et al., 1995; Mowbray, 1995). Dual diagnosis patients need close monitoring (Drake & Mueser, 2000), one aspect of which is regular testing for alcohol and drug use (Drake et al., 2001; Hellerstein et al., 2001; Mowbray et al., 1995). Carey et al.'s (2000) focus group study with experts in treating dual diagnosis patients recommended that staff communicate clear contingencies to patients, such as if and when patients are allowed to re-enter the treatment program after dropping out.

### **Study Aims**

Although much work has been done to identify the components of services that are desirable for dual diagnosis patients, little is known about the extent to which systems of care (rather than single programs) are providing these components. The purpose of this study was to describe and compare the extent to which the psychiatric and substance abuse systems' treatment of dual diagnosis patients in the residential and outpatient modalities offered the components considered essential for this client group. The aim was to apply a conceptual framework of the four main domains of program characteristics to highlight areas within each system in which critical components are being provided, and those in which the system is falling short and needs to improve. Planners can use information about well-implemented programs to find out how to move toward a more enhanced model of integrated treatment. In addition to examining single elements, we developed an index of the key components of integrated treatment in order to create a potential benchmark to measure the extent to which programs in the two systems and in each modality are dual-focused.

## **METHOD**

### **Sample of Programs**

#### *Residential Programs*

A survey was conducted of all 114 substance abuse and all 318 psychiatric inpatient and residential programs in the VA nationwide. Completed surveys were received from 114 (100%) substance abuse, and 298 (94%) psychiatric, program managers, for a total of 412 surveys (95%). Program directors were

asked about whether they had a treatment regimen oriented specifically to dual diagnosis patients. Of the substance abuse programs, 84% ( $N = 96$ ) had such a treatment regimen, as did 74% ( $N = 220$ ) of the psychiatric programs. Among the 96 substance abuse programs with a dual-focused treatment regimen, on average, 45.5% of patients had co-occurring substance use and psychiatric disorders. Among the comparable 220 psychiatric programs, an average of 45.3% of patients were dually diagnosed.

### *Outpatient Programs*

In parallel, a survey was conducted of all 176 substance abuse and all 595 psychiatric outpatient programs in the VA nationwide. Completed surveys were received from 176 (100%) substance abuse, and 547 (92%) psychiatric, program managers, for a total of 723 surveys (95%). To be consistent with a previous study of VA psychiatric outpatient programs (Timko et al., 2003), we used only the 515 programs classified as standard or intensive. A total of 81% ( $N = 143$ ) of the substance abuse programs had a treatment regimen oriented specifically to dual diagnosis patients, as did 57% ( $N = 294$ ) of the 515 psychiatric programs. Among the 143 substance abuse programs with a dual focused regimen, on average, 45.8% of patients had co-occurring substance use and psychiatric disorders. Among the 294 psychiatric programs, an average of 40.3% of patients were dually diagnosed.

The surveys were adapted from the Residential Substance Abuse and Psychiatric Programs Inventory (RESPPI; Timko, 1995), which is a systematic, objective method to assess the quality of care in hospital- and community-based psychiatric and substance abuse treatment programs. Portions of the RESPPI covering the program's organization, management practices, services, and policies are used in biannual VA systemwide evaluations. The RESPPI scores discriminate among programs and have good test-retest and interobserver reliability; its dimensions are independent and internally consistent (Timko, 1995; Timko & Moos, 1998a,b; Timko, Yu, & Moos, 2000). The validity of program administrators' reports on the RESPPI has been confirmed by external observers' assessments (e.g., Timko, 1995).

Patients' demographic characteristics were quite similar in the VA psychiatric and substance abuse inpatient/residential and outpatient programs. Specifically, in each type of program, on average, pa-

tients were about 50 years old, about 95% were men, 25% were African American and 4% were Hispanic, and 25% were married (Greenberg & Rosenheck, 2003; McKeller, Lie, & Humphreys, 2003). In the VA inpatient/residential and outpatient psychiatric programs, about 20–22% of patients were diagnosed with schizophrenia compared to only 1–2% in inpatient/residential and outpatient substance abuse programs; in substance abuse programs the most frequent co-morbid psychiatric disorder was depression (Druss & Rosenheck, 2000; Greenberg & Rosenheck, 2003; McKeller et al., 2003).

### **Procedure**

The survey was mailed to all VA program directors, along with a letter explaining its purpose. The letter explained that the survey was being conducted with the approval of the offices that oversee mental health care and health services research in the VA. Program directors who initially did not respond received follow-up phone calls, letters, and additional copies of the survey. This report focuses on the four key conceptual domains that characterize substance abuse and psychiatric programs.

### **Organization**

Organizational factors included residential programs' size (i.e., number of operational beds, number of patients admitted to the program per month) and average length of stay (in weeks). Outpatient program directors provided the average number of visits per patient, and the number of days per week, and number of hours per treatment day, patients received services. All program directors reported the number of full-time equivalent employees (FTEE) in the following categories: Advanced Professional Staff (e.g., psychiatrist, psychologist, Social Worker); Nursing Staff (e.g., Registered Nurse, Clinical Nurse Specialist, Nurse Practitioner); Addiction Therapist; or Other Direct Care Staff (i.e., non-psychiatrist M.D., pharmacist, physician assistant, recreational or occupational therapist, vocational rehabilitation specialist, technician or aide, and other direct care staff positions). For each staff category, the FTEE staff-per-patient ratio was calculated.

Treatment orientation was assessed with the Drug and Alcohol Program Treatment Inventory (DAPTI; Swindle, Peterson, Paradise, & Moos,

1995). The Cognitive-Behavioral (Cronbach's  $\alpha = .89$ ) and the Psychodynamic ( $\alpha = .91$ ) scales each consist of four goal and four activity items. Program directors rated the importance of each treatment goal on a 4-point scale, from 0 (*none or very little*) to 3 (*primary focus of treatment*). The presence of each activity was rated using a 4-point scale, from 0 (*not at all like our program*) to 3 (*major feature of our program*). Scale scores were the sum of responses to the 8 items and could range from 0 to 24.

### *Management Practices*

Program directors indicated whether their program was using any clinical practice guidelines, American Psychiatric Association guidelines specifically, performance monitoring and feedback for individual clinicians, and the following management procedures: a single case manager who coordinates all of a patient's care from the beginning of treatment through discharge; patient satisfaction surveys; client outcome follow-up; separate quality review committee; and weekly staff meetings and case review.

### *Services*

Program services were assessed on the Policy and Service Characteristics Inventory (PASCI; Timko, 1995) from the RESPPI. Directors indicated whether different treatment services were provided by the program (e.g., assessment and diagnosis, psychiatric counseling, counseling for alcohol and drugs).

### *Policies*

Residential program policies were assessed with items mainly from the PASCI (Timko, 1995). These items reflect the extent to which the program provides options from which patients can select individual patterns of daily living: whether there is a designated period of time to re-enter the program after dropping out; set times for patients to wake up, go to bed, or be in the program at night; and regular testing for alcohol and drug use. Directors also indicated whether the program allows or encourages different patient behaviors (e.g., decorating their room, skipping breakfast to sleep late).

## **Summary Index of Key Components of Integrated Treatment**

To summarize findings, we created a summary index of key characteristics of dual focused programs that applied to both residential and outpatient modalities. The index was the sum of 12 dichotomous items, each of which was scored *no* (0) or *yes* (1). The items assessed whether the program had: (1) A professional staff-patient ratio of .16 or more (Mowbray et al., 1995), (2) For residential programs, a length of stay of 30 days or more; for outpatient programs, treatment offered for at least 3 days/week for 3 hours/day (Timko et al., 2003), (3) A Cognitive-Behavioral Orientation score of at least 16.7 (i.e., the mean score in a national sample of residential substance abuse programs [Moos, Finney, Ouimette, & Suchinsky, 1999]), (4) A single case manager coordinating a patient's care throughout treatment, (5) A regular practice of conducting patient satisfaction surveys, (6) Individual/group counseling for psychiatric and for substance use problems, (7) Medication services, (8) 12-step groups, (9) Couples/family counseling, (10) Vocational-educational counseling, (11) Medical care, and (12) Regular testing for alcohol/drug use.

## **RESULTS**

We compared psychiatric to substance abuse programs within the residential and outpatient modalities of care separately. Psychiatric and substance abuse programs were compared by means of *t*-tests (continuous variables) or chi-square tests (categorical variables).

### **Organizational Components**

#### *Residential Programs*

Psychiatric programs were larger than substance abuse programs but the two program types were comparable on patients' average length of stay and wait list length (Table 1). In terms of staffing, substance abuse programs had a higher average addiction therapist-to-patient ratio, but otherwise staffing ratios did not differ. Substance abuse programs adhered more to a cognitive-behavioral treatment orientation than did psychiatric programs.

**Table 1.** Organizational Components of Psychiatric and Substance Abuse Programs Treating Dual Diagnosis Patients

	Residential			Outpatient		
	Psychiatric ( <i>N</i> = 220) Mean	Substance abuse ( <i>N</i> = 96) Mean	<i>t</i>	Psychiatric ( <i>N</i> = 294) Mean	Substance abuse ( <i>N</i> = 143) Mean	<i>t</i>
Organizational factors						
Size	38.63	27.47	2.88**	—	—	
No. of patients admitted per month	37.91	28.01	2.63**	—	—	
No. of visits per patient	—	—		32.55	23.38	1.77
No. of days per week patients receive services	—	—		1.74	3.85	-12.77***
Number of hours per treatment day patients receive services	—	—		2.23	3.66	-6.80***
Average weeks of stay	7.42	5.83	1.64	—	—	
Number of patients on wait list	4.73	10.38	-2.26	13.45	6.95	2.65**
Staff patient ratio <sup>a</sup>						
Professional staff	.15	.18	.52	.26	.04	1.14
Nursing staff	.74	.55	.87	.03	.00	.68
Addiction therapist	.49	3.36	-8.33***	.36	1.78	-8.64***
Other direct care staff	2.34	3.06	-1.68	.02	.00	-2.16*
Overall treatment orientation						
Cognitive behavioral	16.27	17.56	-2.57**	16.87	17.92	-2.68**
Insight/psychodynamic	12.03	13.13	-1.69	12.09	12.36	-.55

<sup>a</sup>For outpatient programs, calculated as staff per 100 patients.

\**p* < .05. \*\**p* < .01. \*\*\**p* < .001.

—: Indicates not applicable.

### Outpatient Programs

Among outpatient programs, substance abuse programs served patients more days per week, and more hours per treatment day, than did psychiatric programs (Table 1). Nevertheless, psychiatric programs had a longer wait list. As for residential programs, outpatient substance abuse programs had a higher average addiction therapist-to-patient ratio. Psychiatric programs had a somewhat higher ratio of other direct care staff (e.g., non-psychiatrist M.D.) per 100 patients. Again, in the outpatient modality, substance abuse programs adhered more strongly to a cognitive-behavioral treatment orientation.

### Management Practices

#### Residential programs

Almost two-thirds of both psychiatric and substance abuse programs used clinical practice guidelines (Table 2). Substance abuse programs were more likely than psychiatric programs to assign a single case manager to follow each patient's care throughout treatment. Otherwise, psychiatric and substance abuse programs did not differ on management prac-

tices. In both systems, a high percentage of programs regularly obtained patient satisfaction data.

#### Outpatient Programs

Although the majority of both psychiatric and substance abuse programs used clinical practice guidelines, substance abuse programs were more likely to do so. As in residential programs, substance abuse programs were more likely than psychiatric programs to assign a single case manager to each patient. In addition, substance abuse programs were more likely to engage in regular performance monitoring of clinicians, and to have a quality review committee and weekly staff meetings to review cases.

### Services

#### Residential Programs

The majority of both psychiatric and substance abuse programs assessed and diagnosed patients, but substance abuse programs were more likely to offer this service (Table 3). The great majority of both program types also offered crisis intervention

**Table 2.** Management Practices of Psychiatric and Substance Abuse Programs Treating Dual Diagnosis Patients

	Residential			Outpatient		
	Psychiatric %	Substance abuse %	$X^2$	Psychiatric %	Substance abuse %	$X^2$
Management practice						
Use clinical practice guidelines	61	64	.14	56	66	3.72*
Use American Psychiatric Association Guidelines	42	36	.64	36	49	4.40*
Performance monitoring and feedback for each clinician	70	76	1.23	64	75	5.12*
Regularly used practice						
Single case manager coordinates care throughout treatment	61	77	8.53***	69	78	4.62*
Patient satisfaction surveys	86	85	.01	81	82	.10
Client outcome follow-up	68	75	1.52	60	60	.00
Quality review committee	60	62	.06	41	57	10.38***
Weekly staff meetings and case review	94	97	1.18	86	94	8.08**

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

and both psychiatric and substance abuse counseling. Substance abuse programs were more likely to offer peer counseling, 12-step groups, non-12-step self-help groups, and family counseling and edu-

cation. Specifically, 53% of substance abuse programs, compared to 25% of psychiatric programs, had both 12-step and non-12-step self-help groups ( $X^2 = 40.19, p < .001$ ). Substance abuse programs

**Table 3.** Services Offered in Psychiatric and Substance Abuse Programs Treating Dual Diagnosis Patients

	Residential			Outpatient		
	Psychiatric %	Substance abuse %	$X^2$	Psychiatric %	Substance abuse %	$X^2$
Services offered						
Assessment and diagnosis	93	99	4.91*	90	97	8.06**
Crisis intervention <sup>a</sup>	87	94	2.84			
Individual/group counseling						
Psychiatric	98	100	3.66	99	100	1.93
Alcohol and drugs	100	99	2.39	99	99	.02
Peer counseling <sup>a</sup>	35	66	23.12***			
Couples or family counseling	73	94	16.71***	76	94	79.41***
12-step groups	51	99	75.31***	26	53	30.68***
Non-12-step self-help groups <sup>a</sup>	25	53	19.74***			
Medications	86	94	3.82*	63	91	23.18***
Education <sup>a</sup>						
For patients	87	99	11.62***			
For family members	62	84	14.07***			
HIV screening and counseling	92	100	11.21***	76	87	8.91**
Detoxification	53	47	.81	15	42	36.75***
Rehabilitation <sup>a</sup>						
Daily living skills	74	73	.02			
Stress management	70	90	4.73*			
Social skills	81	87	1.59			
Vocational rehabilitation and training	46	70	13.50***	46	37	2.95
Vocational/educational counseling	79	90	4.73*	76	55	18.89***
Organized recreation <sup>a</sup>	65	83	9.20**			
Religious services	90	84	1.34			
Medical care	83	87	1.19	84	66	17.34***
Aftercare services	65	91	21.79***			

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

<sup>a</sup>Not asked of outpatient programs.

were also more likely to offer medications, as well as education, including HIV screening and counseling.

For rehabilitation services, substance abuse programs were more likely to offer stress management training, vocational/educational counseling, and vocational training; they were also more likely to have organized recreation available. Further, substance abuse programs were more likely to offer aftercare services than were psychiatric programs.

### Outpatient Programs

Essentially all outpatient programs offered both psychiatric and substance abuse counseling. As for residential programs, substance abuse programs were more likely to offer assessment and diagnosis, 12-step groups, family counseling, medications, HIV screening and counseling, detoxification, and vocational/educational counseling. Similar proportions of patients in both psychiatric (26.0%) and substance abuse (24.8%) programs lived in a residential facility during outpatient treatment (not tabled). Psychiatric programs were more likely to offer services for medical problems.

## Policies

### Residential Programs

On the whole, psychiatric and substance abuse programs had similar policies (Table 4). Substance abuse programs were more likely to require that patients who drop out wait a designated period of time before they are allowed to be readmitted to the program. Psychiatric programs were somewhat more likely to have an early bedtime, but also more likely to allow patients to go out in the evenings.

### Outpatient Programs

Substance abuse programs were likelier (92%) than psychiatric programs (66%) to regularly test patients for alcohol and drug use ( $X^2 = 41.24$ ,  $p < .001$ ).

## Summary Index of Key Components

On the 12-point summary index, in residential settings, substance abuse programs had more of the key characteristics (Mean = 8.6;  $SD = 1.5$ ) than

**Table 4.** Policies of Residential Psychiatric and Substance Abuse Programs Treating Dual Diagnosis Patients

	Residential		$X^2$
	Psychiatric %	Substance abuse %	
Policies			
Patients who drop out must wait a designated period to re-enter	25	62	39.92***
Program regulates			
Wake up time	92	84	3.31
Bed time	87	90	.49
Curfew	95	94	.11
Wake up time is 6 a.m. or earlier	30	41	2.69
Bed time is before 10 pm	16	6	5.19*
Patients are tested regularly for alcohol or drug use	91	95	1.49
Program allows			
Smoking in program	26	17	2.63
Moving furniture around in room	38	40	.14
Skip breakfast to sleep late	12	9	.49
Have TV in room	16	16	.02
Have radio/stereo in room	65	57	1.53
Hang pictures in, decorate room	60	69	1.80
Prepare own meal in kitchen	23	31	1.97
Go out in evenings	58	38	9.02**
Spend weekend away from program	54	54	.00

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

did psychiatric programs (Mean = 7.7;  $SD = 1.8$ ) ( $t = -4.53, p < .001$ ). Similarly, in outpatient settings, substance abuse programs had more of the key characteristics (Mean = 7.9;  $SD = 1.7$ ) than did psychiatric programs (Mean = 7.1;  $SD = 1.9$ ) ( $t = -4.17, p < .001$ ).

## DISCUSSION

Programs within both the psychiatric and substance abuse systems had some of the most important components of integrated treatment for dually diagnosed patients. However, substance abuse programs were more likely to offer some key services. Outpatient psychiatric programs in particular were lacking on key services relative to the other types of programs.

### Organizational Factors

In these programs with treatment regimens oriented specifically to dually disordered patients, the proportions of dually diagnosed clients were similar (roughly 45%) in residential and outpatient psychiatric and substance abuse programs. However, it is likely that patients in psychiatric programs had more severe psychiatric disorders than those treated in addiction programs (Primm et al., 2000); as noted, more patients were diagnosed with schizophrenia in psychiatric programs. Even though psychiatric programs were treating more severely ill patients, outpatient psychiatric programs were less intensive (i.e., offered fewer treatment days and hours per day of services) than substance abuse programs, perhaps due to the need to accommodate more patients and the somewhat lower staffing ratio.

On staffing, the main finding was the employment of more addiction therapists in substance abuse programs. Addiction therapists, who are often in recovery and draw on personal experiences to pursue a wide range of treatment goals (Kemker, Kibel, & Mahler, 1993; Mulligan, McCarty, Potter, & Krakow, 1989; Stoffelmayr, Mavis, & Kasin, 1998), may help to create a beneficial treatment milieu. Programs with more addiction therapists have treatment environments with more patient support, autonomy, and personal expression, and provide more practical guidance about how to manage life in the community (Timko & Moos, 1998a).

In both the residential and outpatient modalities, substance abuse programs were more likely than psychiatric programs to adhere to a cognitive-behavioral orientation. Because cognitive-behavioral therapy is more effective than other therapies when patients' clinical status is more complex (Brooks & Penn, 2003; Cooney, Kadden, Litt, & Getter, 1991; Triffleman, Carroll, & Kellogg, 1999), greater reliance on it in psychiatric programs would be appropriate (Drake et al., 2001). Future studies should also assess the extent to which programs are oriented toward motivational approaches, which prepare clients for more definitive interventions aimed at illness self-management (Barrowclough, Haddock, Tarrier, Moring, & Lewis, 2000; Carey, 1996; McHugo, Drake, Burton, & Ackerson, 1995). Motivational interventions can help dually disordered individuals establish abstinence and motivation to manage psychiatric symptoms and pursue employment or other goals (Drake et al., 2001).

### Management Practices

Outpatient psychiatric programs were least likely to use clinical practice guidelines, which were used by roughly two-thirds of residential programs and outpatient substance abuse programs. In light of current efforts to adopt evidence-based practices (American Psychiatric Association, 1995; Kent & Hersen, 2000; Manderscheid, 1998; Rosenheck & Cicchetti, 1998; Walker, Howard, Walker, Lambert, & Suchinsky, 1995), it is somewhat surprising that more programs did not use clinical practice guidelines. Recently, researchers have been identifying barriers to such use by mental health staff, such as lack of knowledge and skills, and organizational dynamics that undermine the implementation of new techniques (Corrigan, Steiner, McCracken, Blaser, & Barr, 2001; Rosenheck, 2001). These researchers have also identified strategies to overcome these barriers such as user-friendly packaging of practices and addressing organizational dynamics within treatment staff teams. Outpatient psychiatric programs were also least likely (64%) to use performance monitoring and feedback for clinicians. As more programs use clinical practice guidelines and monitor performance it will be important to evaluate their effect on staff morale, effectiveness and patient outcomes.

Regular patient satisfaction surveys and client outcome follow-ups, which are recommended ingredients of integrated treatment (Minkoff et al., 1998),

were conducted by the majority of programs, suggesting that patients' views and outcomes are considered in planning care. Having a single case manager coordinate care throughout a patient's treatment, also recommended for patients in integrated dual diagnosis programs (Minkoff et al., 1998; Mowbray et al., 1995), was more common in substance abuse than in psychiatric programs. Drake, Bond, and Torrey (2000) noted that case management may not be provided in psychiatric settings, despite research showing that it improves patients' symptoms and functioning and reduces their inpatient utilization (Burger, Calsyn, Morse, & Klinkenberg, 2000; Noordsy, O'Keefe, Mueser, & Xie, 2001; Preston & Fazio, 2000). In addition to supportive functions such as service linkage and client advocacy, case management for patients in psychiatric programs may emphasize monitoring the client's mental state and social functioning and may reduce client satisfaction because clients perceive case managers to be controlling or even harassing (Schaedle & Epstein, 2000; Ziguras & Stuart, 2000; but see Rosenheck et al., 1998). Reconciling the monitoring and support functions of case management remains an important issue within programs treating dual diagnosis patients.

### Services

High proportions of each type of program offered the key services of assessment and diagnosis, crisis intervention, individual or group counseling targeted at psychiatric and substance abuse problems, medications, patient education, HIV screening and counseling, and family counseling and education. Fewer programs offered other services also deemed important for treating dual diagnosis patients, such as peer counseling and non-12-step self-help groups. Substance abuse programs were more likely to offer most of these services. Psychiatric system planners should observe, adapt, and implement models by which substance abuse planners are able to provide the fuller range of services to their dually diagnosed clients.

Regarding addiction-focused services, roughly one-half of residential psychiatric and substance abuse programs and outpatient substance abuse programs offered detoxification services, in contrast to only 15% of outpatient psychiatric programs. Even in well integrated programs some ancillary services, such as detoxification, may be most effectively provided elsewhere, a practice that may be especially

common in outpatient psychiatric programs. Substance abuse programs were more likely to offer 12-step groups than were psychiatric programs. However, residential programs were considerably more likely to offer 12-step groups than were outpatient programs. Residential programs' offer of 12-step groups may be linked to the more severe addictions of patients in those programs relative to outpatients. In VA inpatient psychiatry and substance abuse programs, almost half of patients had both alcohol and drug diagnoses, whereas this was true of only about 13% in VA outpatient programs (Greenberg & Rosenheck, 2003; McKeller et al., 2003).

Residential psychiatric and outpatient programs should consider actively linking dual diagnosis patients to 12-step, or non-12-step self-help groups in the community. Dual diagnosis patients derive advantages from traditional (i.e., substance use-focused) 12-step groups for both their substance use and psychiatric problems (Kurtz et al., 1995; Meissen, Powell, Wituk, Girrens, & Arteaga, 1999; Ouimette, Gima, Moos, & Finney, 1999; Rychtarik et al., 2000). However, because individuals with severe and persistent mental illness, such as those with schizophrenia or affective or paranoid psychoses, often experience barriers to participation in such groups (e.g., difficulty obtaining and maintaining social support in group settings, use of psychotropic medications), they may need more assistance to assimilate into self-help groups than dually disordered patients with less severe psychiatric disorders (Jordan, Davidson, Herman, & BootMiller, 2002; Ouimette et al., 1999). Dual-focused 12-step groups (e.g., Double Trouble) may be of more benefit to dually diagnosed individuals than is attendance at traditional 12-step meetings (Laudet, Magura, Vogel, & Knight, 2000). Unfortunately, as is the case for non-12-step groups, dual-focused 12-step groups are not yet as widely available as are traditional 12-step groups such as Alcoholics Anonymous.

With regard to rehabilitation services, most residential programs offered training in daily living skills, stress management, and social skills. In addition, most residential and outpatient programs offered vocational or educational counseling. However, less than one-half of residential psychiatric and outpatient programs offered vocational rehabilitation, which has been shown to be beneficial for dual diagnosis patients (Humphreys & Rosenheck, 1998; Laudet, Magura, Vogel, & Knight, 2002; Quimby, Drake, & Becker, 2001). Psychiatric and outpatient substance abuse planners might learn from their

counterparts in inpatient substance abuse as to how to develop and implement vocational rehabilitation programs; 70% of residential substance abuse programs offered this service.

Medical, housing, and aftercare services are needed to care for dual diagnosis patients (Drake et al., 2001). In keeping with this need, most programs offered medical services. Regarding housing, comparable proportions (about 25%) of both psychiatric and substance abuse outpatients lived in residential facilities. Despite strong recommendations that inpatient and residential services should provide the key component of linkage with outpatient dual diagnosis interventions (Drake et al., 2000), about one-third of residential psychiatric programs did not offer aftercare services. Again, psychiatric program planners should look to the substance abuse system for methods to improve continuity of care, given that 91% of residential programs in this system provided the recommended linkage.

### **Policies**

Residential psychiatric and substance abuse programs had similar policies with the exception that substance abuse programs were more likely to have a waiting period to re-enter the program after dropping out. Consistent with this result, Grella (2003) found that psychiatric and substance abuse treatment providers disagreed on how strict policies should be, with substance abuse staff more strongly endorsing traditional addiction approaches with strict rules. On the whole, as recommended by experts in dual disorder treatment, patients had limited options for making decisions about their daily routine (Burnam et al., 1995). About one-half of programs allowed patients to spend the weekend away, and psychiatric programs more frequently allowed patients out in the evenings (Blankertz & Cnaan, 1994). The majority of programs tested patients for alcohol and drug use, but outpatient psychiatric programs were least likely to do so.

### **Limitations and Conclusions**

The findings must be considered in light of the fact that psychiatric and substance abuse programs were compared within one integrated public sector health care institution. Research is needed that compares VA mental health care to the care in other publicly funded systems that, because they are not part

of a nationwide system, may have poorer funding and less oversight of constituent programs. For example, because most VA psychiatric and substance abuse programs are located within medical centers and the VA supports patient satisfaction surveys, our findings that most programs offered medical services and collected patient satisfaction data may not generalize to community programs. Studies comparing VA to private mental health care suggest that VA-based findings may generalize somewhat better to nonprofit than to for-profit settings (Calsyn, Saxon, Blaes, & Lee-Meyer, 1990; Rodgers & Barnett, 2000; Rosenheck, Desai, Steinwachs, & Lehman, 2000), although all three systems share similarities (Leslie & Rosenheck, 2000, 2003). Our findings may not generalize to, and need to be replicated in, private and other public health care systems that maintain separate agencies for psychiatric and substance abuse care (Frayne, Freund, Skinner, Ash, & Moskowitz, 2004), and that serve patients with different amounts of economic and social resources and different levels of disorder severity and chronicity (Druss & Rosenheck, 2000).

In light of the overall shift from inpatient/residential to outpatient care, and evidence that dual disorder patients are as likely to be treated in outpatient as in inpatient/residential settings, outpatient psychiatric programs in particular need to provide more of the key components of integrated programs. Outpatient psychiatric programs are especially lacking in certain management practices (i.e., use of clinical practice guidelines, performance monitoring and feedback for providers, weekly staff meetings for case reviews) and services (i.e., medication provision, HIV screening and counseling, 12-step meetings). In addition, both residential and outpatient psychiatric programs lack some of the key components of integrated programs relative to substance abuse programs, namely, having a cognitive-behavioral treatment orientation, assigning a single case manager to follow each patient, and the critical services of assessment, diagnosis, and family counseling.

More generally, it appears that differences between psychiatric and substance abuse programs involve the systems' difficulties in developing treatment that is fully oriented toward the co-occurring diagnosis. That is, substance abuse programs are more likely to lack elements emphasized in psychiatric care (e.g., substance abuse programs less frequently offered medical services and had stricter policies about allowing patients to go out in the

evenings), and psychiatric programs lack elements specifically for substance use disorder patients (e.g., addiction therapists, 12-step groups, or regular testing for substance use). Although the two systems of care are gradually becoming more integrated, each system is encountering some obstacles in serving the patient group that is new to it. As noted by Grella (2003), even when staff members have received supplemental training specific to treating dually diagnosed patients, differences in the two treatment systems still reflect differences in staff's prior training and education.

Notwithstanding their limitations, our findings can be used to inform program managers about the current state of dual-focused treatment within the psychiatric and substance abuse systems and refine their understanding of what constitutes an ideal integrated program. The findings can aid discussions to clarify when there may be acceptable deviations from guidelines for integrated programs (such as providing detoxification off-site to patients in psychiatric outpatient programs), to identify barriers to implementing specific program components, and to plan future program change. Case studies of well-integrated programs in each system and modality of care can demonstrate realistic options for how to engage in improvements.

Information about the range of variation in dual diagnosis programs can be used to identify alternative models of integrated care for patients with different combinations of disorders. In this vein, current evidence for the effectiveness of fully integrated care is largely limited to studies of severely mentally ill patients with substance use disorders. Much less is known about the value of integrated treatment for severely mentally ill patients with mild substance use problems or for patients with severe substance use disorders and depression, anxiety, or personality disorders. The summary measure we developed can be used to assess the level of service integration and relate it to proximal outcomes, such as patient satisfaction and improvement in coping strategies, and ultimate outcomes, such as changes in symptoms and quality of life.

To further facilitate the integration of psychiatric and substance abuse treatment, system planners and managers should emphasize cross-system and interdisciplinary teamwork, as well as staff's long-term commitment to improve the quality of care (Kirchner, Cody, Thrush, Sullivan, & Rapp, 2004; Lambert, 2002; Meterko, Mohr, & Young, 2004). Tools such as Minkoff's (2001) Comprehensive Con-

tinuous Integrated System of Care (CCISC) may be helpful in facilitating integration using teamwork and commitment building. CCISC is designed to improve treatment capacity for dually disordered individuals in systems of any size and complexity, ranging from entire regions to programs. Based on eight principles (e.g., dual diagnosis is an expectation, not an exception), implementation of the CCISC requires utilization of system change strategies (e.g., continuous quality improvement) in the context of organized strategic planning. Minkoff (2001) described a 12-step program for implementation of the CCISC, covering the planning process, gaining consensus, coordinating services, and staff training. Similarly, as described by Torrey et al. (2001), a toolkit is under production to help systems and agencies implement evidence-based practices for adults with severe mental illness and co-occurring substance use disorders. Use of these tools by psychiatric treatment system planners and program managers should be helpful in creating truly integrated treatment.

## ACKNOWLEDGMENTS

This research was supported by the Department of Veterans Affairs, Veterans Health Administration, Health Services Research and Development Service.

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