# Repeat Admissions to Residential Substance Abuse Treatment Programs: A Descriptive Study

Lorraine S. Roth, MD

The VHA has requested more than \$453 million to treat substance abuse in fiscal year 2009. When the most recent data indicate nearly half of the admissions to state-funded substance abuse treatment programs are repeat admissions, this author asks whether allocation of resources to residential treatment should be revisited.

ental health providers who treat patients with substance abuse often observe the same individuals going through multiple treatment programs—and often repetitively through the same program. Repeat patients are seen as being readmitted through a "revolving door" to medicine units or the intensive care unit (ICU) for detoxification treatment and to psychiatric units for treatment of the depression, suicidal ideation, homicidal ideation, and auditory or visual hallucinations that accompany their relapses to drug and alcohol use. 1 Once these patients' conditions are stabilized, bed availability at residential substance abuse treatment programs is explored in discharge planning, generally without regard to previous admissions to the same or similar programs.<sup>2</sup>

This article explores the problem of repeat admissions by looking at the substance abuse treatment histories of patients enrolled in two separate substance abuse treatment programs at one VA medical center. Additionally, the extent of the problem is discussed according to national data on utiliza-

**Dr. Roth** is an attending psychiatrist in the department of psychiatry at North Chicago VA Medical Center, North Chicago, IL.

tion and cost of substance abuse services, with a more detailed look at VA data and services. The implications for the treatment of substance abuse in the future also are examined.

## REVIEW OF PATIENTS' READMISSION HISTORIES IN TWO TREATMENT PROGRAMS

## The programs

North Chicago VA Medical Center (NCVAMC), North Chicago, IL offers two substance abuse treatment programs, the Drug Dependency Treatment Center (DDTC) and the Drug and Alcohol Rehabilitation Unit (DARU). Both programs offer a full range of treatment services that include residential care, general medical care, psychiatric care (including psychotropic medication, when indicated, but excluding opiate replacement therapy), individual and group psychotherapy sessions, psychological and vocational testing, vocational training, social services, aftercare appointments and meetings, and behavioral tools for relapse prevention.

The DDTC has a 90-day duration and is considered a long-term residential program. The DARU is considered to be a short-term residential program, providing 35 days of basic instruction to help patients recog-

nize the characteristics of addiction and their own particular "triggers" that lead to substance abuse and relapse. Patients may be admitted to the short-term program directly from the street or transferred in from another facility after a short detoxification or stabilization period. Many of the patients in this program go on to transfer to a longer-term program following completion.

The primary difference between the DDTC and the DARU is the length of treatment—the short-term program is considered specifically for "early" postdetoxification and the long-term program for extended postdetoxification rehabilitation and community reintegration. Patients frequently transition from the former to the latter, especially if they were homeless or unemployed at the time of initial admission.

## **Readmission history review**

The roster of patients in admission at the long-term DDTC program on a single day in the summer of 2005 was reviewed to determine their prior admissions to NCVAMC substance abuse treatment programs and to the hospital or emergency department for substance abuse–related treatment (such as detoxification and psychiatric or medical stabilization

of symptoms directly related to drug or alcohol abuse). Treatment received outside of the NCVAMC was not reviewed. The present admission to the DDTC was included in each patient's total admissions. For each admission, the length of stay was determined.

A second review was conducted of all the discharges at the short-term DARU program over a five-year period (January 2001 to December 2005). Multiple discharges from the DARU were tabulated. Whether any of these patients had received treatment through additional substance abuse treatment programs outside of this VA facility was not explored.

These two programs were evaluated differently (single-day prevalence versus five-year retrospective) with the rationale that a long-term program would be expected to have been preceded by detoxification or psychiatric stabilization and, possibly, a short-term substance abuse treatment program; whereas a shortterm program would be considered more as a first step in treatment, and the basic or elementary instruction learned therein should not need to be repeated. Therefore, the long-term program was evaluated by single-day prevalence in order to identify patients with any previous substance abuse program admissions and the short-term program was reviewed in order to identify patients with histories of being treated in the same program more than once.

## **DDTC** results

As expected, admissions for patients in the long-term program represented several different kinds of treatment: detoxification, ICU (for example, for chest pain secondary to cocaine use), psychiatric (for example, for patients who expressed suicidal or homicidal thoughts or hallucinations that the patients attributed directly

Table 1. Age, admissions, and days of care for 23 patients in residence at the 90-day DDTC<sup>a</sup>

Patient no.	Age (years)	No. of admissions <sup>b</sup>	Total days of care <sup>c</sup>
1	54	6	839
2	42	5	368
3	51	4	273
4	44	6	416
5	42	5	221
6	38	4	528
7	55	3	162
8	47	12	562
9	52	7	342
10	51	12	741
11	46	21	520
12	44	12	242
13	45	11	410
14	51	25	475
15	51	9	794
16	58	24	519
17	28	2	40
18	56	8	157
19	58	17	1,392
20	56	1	145
21	44	88	817
22	52	8	456
23	39	8	210
Total	-	298	10,629
Average	48	12.9	462
Adjusted average	48.9 <sup>d</sup>	9.5 <sup>e</sup>	438 <sup>f</sup>

<sup>a</sup>DDTC = Drug Dependency Treatment Center. <sup>b</sup>Admissions to North Chicago VA Medical Center substance abuse treatment programs, as well as all admissions to this hospital and emergency department that indicated substance abuse as the primary diagnosis or primary contributing factor (includes the present admission). <sup>c</sup>Total days of care through the day of review. <sup>d</sup>Excluding outliers (patient 17, aged 28). <sup>e</sup>Excluding outliers (patient 21, 88 admissions). <sup>f</sup>Excluding outliers (patient 17 and 19, 40 days and 1,392 days, respectively).

to their substance abuse), and formal treatment through a substance abuse program.

On the day of the review, 23 veterans were in residence at the DDTC.

Only one patient (4.3%) was currently in his first substance abuse–related admission (Table 1). All of the patients ranged in age from 38 to 58 years, except one who was 28.

Continued on next page

## REPEAT SUBSTANCE ABUSE TREATMENT

Continued from previous page

The 23 patients had a total of 298 admissions among them, with 119 (40%) greater than 21 days (Table 2). The number of admissions per patient ranged from one to 88, for a mean of 12.9 admissions per patient. If the 88-admission outlier is eliminated, the mean drops to 9.5 admissions per patient.

The total days of care for each patient ranged from 40 to 1,392. The total number of days of care for all 23 patients amounted to 10,629—or approximately 462 days per patient. If the two outliers (40 and 1,392) are eliminated, the remaining 21 patients received 9,197 days of treatment among them, or 438 days per patient.

Fifteen patients (65.2%) had at least one previous admission of 90 days or more. Of these, seven (30.4% of the entire group) had multiple admissions of three to 10 months at a time (Table 3).

## **DARU** results

Between January 1, 2001 and December 31, 2005, there were a total of 2,847 discharges from the 35-day DARU program (Table 4). A total of 406 patients had multiple admissions to the DARU, accounting for 937 (33%) of the total discharges. Of the 406 patients with multiple discharges, 316 had two (accounting for 632, or 22%, of the discharges), 64 had three (accounting for 192, or 7%, of the discharges), 17 had four (accounting for 68, or 2.5%, of the discharges), and nine had five (accounting for 45, or 1.5%, of the discharges).

## THE LARGER PICTURE

The problem with repeat substance abuse treatment admissions found at the NCVAMC is reflected nationwide. According to the Drug and Alcohol Services Information System (DASIS), of the 1.3 million annual admissions to state-funded substance

abuse treatment programs in 1999, approximately 40% were first treatment episodes, approximately 45% were readmissions of people who had been in treatment one to four times previously, and 13% were readmissions of those who had been in treatment five or more times previously.<sup>3</sup>

## Cost of substance abuse in the VA

The National Drug Control Strategy Fiscal Year (FY) 2009 Budget for the VHA indicates that over \$435 million was enacted for expenditure on substance abuse treatment services through the VA's 19 inpatient, 155 outpatient, and 66 residential rehabilitation and treatment programs in FY 2008, and \$453.8 million has been requested for FY 2009.4 More than \$180 million of the requested amount for FY 2009 account for inpatient and residential rehabilitation and treatment programs.

Inpatient treatment includes costs associated with "care, treatment and support of inpatients in a locally designated subacute substance abuse psychiatry bed; diagnosis and treatment of patients admitted to a drug, alcohol, or combined alcohol and drug treatment unit; a Psychiatric Residential Rehabilitation Treatment Program focusing on the treatment and rehabilitation of substance abuse patients; and staff and contract costs associated with the Alcohol and Drug Contract Residential Treatment Program." Inpatient programs typically treat patients for 14 to 28 days.4

The rest, and the majority, of the VA's 24-hour substance abuse treatment care is provided through residential rehabilitation and treatment programs. These programs "are based in on-site VA domiciliaries and in on-and off-site residential rehabilitation centers. They are distinguished from inpatient programs as having less

# Table 2. No. of admissions,<sup>a</sup> according to LOS,<sup>b</sup> for patients in residence at the DDTC<sup>c</sup>

LOS (days)	No. of admissions
≤21	170
21–34	34
35–89	59
90–179	4
180–199	6
200–249	13
250–299	2
≥ 300	1

<sup>a</sup>Admissions to North Chicago VA Medical Center substance abuse treatment programs, as well as all admissions to this hospital and emergency department that indicated substance abuse as the primary diagnosis or primary contributing factor (includes the present admission). <sup>b</sup>LOS = length of stay. <sup>c</sup>DDTC = Drug Dependency Treatment Center.

medical staff and services and longer lengths of stay (about 50 days)."<sup>4</sup>

## RETHINKING THE TREATMENT STRATEGY

The findings of the DASIS report tend to support the perception of practitioners that patients with substance abuse disorders who have access to treatment programs tend to go through them more than once.<sup>1,5</sup> Consideration should be given to whether we are using our public dollars (federal and state) wisely.

Beyond that, it is reasonable to ask the question of whether residential treatment programs help patients with substance abuse problems. Are they actually contributing to the problem? "Enabling" and "codependent" are two terms frequently used in the substance abuse treatment arena. The definition of enabling is

"doing for another what they need to do for themselves." And a codependent is "one who tries to 'take care' of situations caused by the [drug user], and protects the drug user from the negative consequences of [his or her behavior]."6 It can be argued that residential treatment programs-which accept patients who are court-ordered to receive substance abuse treatment with the potential for a dismissal of legal charges upon program completion—are fulfilling the role of codependent. In this, as well as in other situations, residential treatment may be triggering the "rescuing-enabling" and "codependency" phenomena that tend to reinforce substance abuse rather than alleviate it.

The substance abuse literature reveals a wide variety of approaches to studying these issues. Studies that compile the statistics of substance abuse treatment programs with differing parameters abound.7-26 In addition to comparing long-term with short-term residential treatment in general, specific residential treatment programs for women who receive social support and employment services have been compared to residential treatment programs for women who do not receive social support and employment services, 7,8 residential treatment settings have been compared to inpatient treatment settings, 18,27 and types of posttreatment care have been compared to one another. 12,13 Several outcomes are evaluated in these studies, as well, but with wide variation in how success and recidivism are defined. Success, for example, often is relative and defined according to the length of follow-up for that particular study. Only one article reviewed made the observation that "treatment gains are often short lived and even multiple treatment episodes do not always succeed in breaking the addiction cycle."5

Despite these ambiguities, sobriety clearly is only successful if it is maintained outside the hospital walls, in the community. Perhaps that is where treatment should be focused. Future research is needed to elucidate the issue by following a cohort who receives outpatient treatment only and a similar group who receives inpatient or residential treatment.

In the past, such studies have provided differing conclusions. For example, in a 1986 review of 26 controlled studies on inpatient alcoholism treatment. Miller and Hester concluded that residential treatment consistently showed no "overall" advantage over treatment in nonresidential settings and that "the outcome of alcoholism treatment is more likely to be influenced by the content of interventions than by the settings in which they are offered."27 Five years later, Cummings noted that "controlled studies have replaced the previous research literature, which was largely composed of uncontrolled studies," and went on to advise that "A research consensus is developing that states inpatient rehabilitation has no advantages over outpatient treatment and that even hospitalization for detoxification is unnecessary for 90% of patients."<sup>28</sup> In 1993, Pettinati's group disagreed with Miller and Hester's recommendations. identifying "shortcomings such as the use of random assignment designs, which excluded psychiatrically-complicated patients."29 They concluded, "Patients with high psychiatric severity and/or a poor social support system are predicted to have a better outcome in inpatient treatment, while patients with low psychiatric severity and/or a good social support system may do well as outpatients without incurring the higher costs of inpatient treatment."

Homelessness and unemployment are part and parcel of alcohol and

Table 3. Admissions<sup>a</sup> that exceeded 90 days' duration (LOS<sup>b</sup>) for patients in residence at the DDTC<sup>c</sup> as of the date of review

LOS (in days) of admissions	
315, 219, 193 <sup>d</sup>	
230	
239	
113	
232, <sup>d</sup> 228	
192, 121, 118 <sup>d</sup>	
219	
231, 192	
208	
153, <sup>d</sup> 96	
255, 246, 165	
268, 246, 225, 141, 123	
96	
240	
122	

<sup>a</sup>Admissions to North Chicago VA Medical Center substance abuse treatment programs, as well as all admissions to this hospital and emergency department that indicated substance abuse as the primary diagnosis or primary contributing factor. <sup>b</sup>LOS = length of stay. <sup>c</sup>DDTC = Drug Dependency Treatment Center. <sup>d</sup>Present admission through the date of review.

drug abuse. Of the 23 patients in the DDTC review, all were unemployed and 21 were homeless. Providing patients with help in those areas will continue to be a requisite for successful treatment.

There may be patients who go through a residential treatment program only once, learn how to recognize and avoid their relapse triggers; find or renew their employment,

## REPEAT SUBSTANCE ABUSE TREATMENT

Table 4. Patients with single and multiple discharges from the 35-day DARU<sup>a</sup> between January 2001 and December 2005

No. (%) of patients	Total no. (%) of discharges
1,910 (82.5)	1,910 (67.0)
316 (13.6)	632 (22.0)
64 (2.8)	192 (7.0)
17 (0.7)	68 (2.5)
9 (0.4)	45 (1.5)
2,316 (100.0)	2,847 (100.0)
	of patients 1,910 (82.5) 316 (13.6) 64 (2.8) 17 (0.7) 9 (0.4)

<sup>a</sup>DARU = Drug and Alcohol Rehabilitation Unit.

housing, and support systems; and remain clean and sober for the rest of their lives. What is unclear—and warrants firm study—is whether repeated admissions to residential programs are useful or, in fact, reinforce relapse.

As the study presented here was an informal admissions/discharge review, the data herein are limited. Nevertheless, they suggest that the practice of repeated residential treatment for substance abuse should be revisited, with consideration toward more outpatient treatment and more effective use of ancillary resources.

### Author disclosures

The author reports no actual or potential conflicts of interest with regard to this article.

#### Disclaimer

The opinions expressed herein are those of the author and do not necessarily reflect those of Federal Practitioner, Quadrant HealthCom Inc., the U.S. government, or any of its agencies. This article may discuss unlabeled or investigational use of certain drugs. Please review complete prescribing information for specific drugs or drug combinations—including indications, contraindications, warnings, and adverse effects—before administering pharmacologic therapy to patients.

### REFERENCES

- Tomasson K, Vaglum P. The role of psychiatric comorbidity in the prediction of readmission for detoxification. Compr Psychiatry. 1998;39(3):129– 136.
- Roth L. I feel safe here—Discharging the undischargeable patient. Fed Pract. 2006;23(3):43–54.
- The DASIS Report: New and Repeat Admissions to Substance Abuse Treatment. Office of Applied Studies, Substance Abuse and Mental Health Services Administration, Department of Health and Human Services. Arlington, VA: Synectics for Management Decisions, Inc; April 26, 2002. http://oas.samhsa. gov/2k2/RepeatTX/RepeatTX.htm. Accessed April 18, 2008.
- Office of the National Drug Control Policy. National Drug Control Strategy—FY 2009 Budget Summary. Washington, DC: Office of the National Drug Control Policy, The White House; February 2008: 159–162. http://www.whitehousedrugpolicy.gov/publications/policy/09budget/veterans\_affairs.pdf. Accessed April 18, 2008.
- Laudet AB, Savage R, Mahmood D. Pathways to long-term recovery: A preliminary investigation. J Psychoactive Drugs. 2002;34(3):305–311.
- Rotunda RJ, West L, O'Farrell TJ. Enabling behavior in a clinical sample of alcohol-dependent clients and their partners. J Subst Abuse Treat. 2004;26(4):269–276.
- Greenfield L, Burgdorf K, Chen X, Porowski A, Roberts T, Herrell J. Effectiveness of long-term residential substance abuse treatment for women: Findings from three national studies. Am J Drug Alcohol Abuse. 2004;30(3):537–550.
- Gregoire TK, Snively CA. The relationship of social support and economic self-sufficiency to substance abuse outcomes in a long-term recovery program for women. J Drug Education. 2001;31(3):221–237.
- Drake RE, Xie H, McHugo GJ, Shumway M. Threeyear outcomes of long-term patients with cooccurring bipolar and substance use disorders. Biol Psychiatry. 2004;56(10):749–756.
- Satre DD, Mertens JR, Arean PA, Weisner C. Five-year alcohol and drug treatment outcomes of older adults versus middle-aged and younger adults in a managed care program. Addiction. 2004;99(10):1286–1297.
- Brennan PL, Nichols KA, Moos RH. Long-term use of VA mental health services by older patients with substance use disorders. Psychiatr Serv. 2002;53(7):836–841.
- 12. McKay JR. Effectiveness of continuing care inter-

- ventions for substance abusers. Implications for the study of long-term treatment effects. *Eval Rev.* 2001;25(2):211–232.
- Greenberg GA, Rosenheck RA, Seibyl CL. Continuity of care and clinical effectiveness: Outcomes following residential treatment for severe substance abuse. Med Care. 2002;40(3):246–259.
- McKay JR, Foltz C, Stephens RC, Leahy PJ, Crowley EM, Kissin W. Predictors of alcohol and crack cocaine use outcomes over a 3-year follow-up in treatment seekers. J Subst Abuse Treat. 2005;28(suppl 1): S73–S82.
- Keen J, Oliver P, Rowse G, Mathers N. Residential rehabilitation for drug users: A review of 13 months' intake to a therapeutic community. Fam Pract. 2001;18(5):545–548.
- Saleh SS, Vaughn T, Hall J, Levey S, Fuortes L, Uden-Holmen T. The effect of case management in substance abuse on health services use. *Care Manag* J. 2003;4(2):82–87.
- Fleming E, Lien H, Ma CT, McGuire TG. Managed care, networks and trends in hospital care for mental health and substance abuse treatment in Massachusetts: 1994–1999. J Ment Health Policy Econ. 2003;6(1):3–12.
- Humphreys K, Horst D. Datapoints: Moving from inpatient to residential substance abuse treatment in the VA. Psychiatr Serv. 2002;53(8):927.
- Wenzel SL, Burnam MA, Koegel P, et al. Access to inpatient or residential substance abuse treatment among homeless adults with alcohol or other drug use disorders. Med Care. 2001;39(11):1158–1169.
- Kertesz SG, Horton NJ, Friedmann PD, Saitz R, Samet JH. Slowing the revolving door: Stabilization programs reduce homeless persons' substance use after detoxification. J Subst Abuse Treat. 2003;24(3):197–207.
- Asche SE, Harrison PA. The relationship between problem severity and ancillary treatment services: Is substance abuse treatment responsive to client need? J Behav Health Serv Res. 2002;29(3):345–356.
- Zhang Z, Friedmann PD, Gerstein DR. Does retention matter? Treatment duration and improvement in drug use. Addiction. 2003;98(5):673–684.
- Moos RH, Moos BS. Stay in residential facilities and mental health care as predictors of readmission for patients with substance use disorders. *Psychiatr Serv.* 1995;46(1):66–72.
- Brunette MF, Drake RE, Woods M, Hartnett T. A comparison of long-term and short-term residential treatment programs for dual diagnosis patients. *Psychiatr Serv.* 2001;52(4):526–528.
- Simpson DD, Joe GW, Fletcher BW, Hubbard RL, Anglin MD. A national evaluation of treatment outcomes for cocaine dependence. Arch Gen Psychiatry. 1999;56(6):507–514.
- Franken IH, Hendriks VM. Predicting outcome of inpatient detoxification of substance abusers. Psychiatr Serv. 1999;50(6):813–817.
- Miller WR, Hester RK. Inpatient alcoholism treatment: Who benefits? *Am Psychol*. 1986;41(7):794–805.
- Cummings NA. Inpatient versus outpatient treatment of substance abuse: Recent developments in the controversy. Contemp Fam Ther. 1991;13(5):507–520.
- Pettinati HM, Meyers K, Jensen JM, Kaplan F, Evans BD. Inpatient vs outpatient treatment for substance dependence revisited. *Psychiatr Q*. 1993;64(2):173– 193