

Client and Program Characteristics Associated with Wait Time to Substance Abuse Treatment Entry

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Background: Wait time is among the most commonly cited barriers to access among individuals seeking entry to substance abuse treatment, yet relatively little is known about what contributes to it.

Objectives: To address this gap, this study draws from a national sample of substance abuse treatment clients and programs to estimate the proportion of clients entering treatment who waited more than 1 month to receive it (outpatient, residential, or methadone) and to identify client and program characteristics associated with wait time. **Methods:** This study used data from the National Treatment Improvement Evaluation Study (1992–1997). The data include 2920 clients from 57 substance abuse treatment programs. Generalized linear modeling was used to identify client and program characteristics associated with wait time to treatment entry. **Results:** Results of modeling indicate that being African-American (OR: 1.40; CI: 1.04, 1.88), being referred by criminal justice (OR: 1.70; CI: 1.18, 2.43), and receiving methadone (OR: 3.90; CI: 1.00, 15.16) were associated with increased odds of waiting more than 1 month. Conversely, having a diagnosis of HIV/AIDS (OR: 0.38; CI: 0.19, 0.77) was associated with decreased odds of waiting for more than 1 month. **Conclusion:** A significant proportion of clients waited more than 1 month on enter treatment. Greater odds of such wait times were associated with being African-American, criminal justice-referred, and receiving methadone. **Significance:** This study is the first to use a national sample to examine the prevalence of wait time to substance abuse treatment entry and to identify client and program characteristics associated with it.

Keywords: substance abuse treatment, wait time, treatment entry, access

INTRODUCTION

Few individuals in need of substance abuse treatment receive it. Estimates suggest that in the United States, only 11% of individuals with substance use disorders obtain services for their condition (1). Among the most commonly cited barriers to access among seekers of help for substance use is wait time. When treatment seekers wait to enter treatment, they are more likely to drop out before they actually receive it (2,3). Indeed, individuals in need of treatment cite “long wait lists” as a primary reason for not accessing it (4–6).

There is a growing conviction among stakeholders in substance abuse treatment that this seemingly intractable barrier to access may be difficult but not impossible to address (7). Yet, in the absence of a dramatic increase in funding, administrators and providers must consider other strategies to improve access. Pretreatment attrition prevention programs hold out promise to reduce wait time and pretreatment dropout but, to date, have not demonstrated strong evidence of efficacy (8–10). More recently, the Network for the Improvement of Addiction Treatment (NIATx) Initiative has shown greater success, assisting treatment programs to use process improvement techniques to reduce wait times (7). Further research could complement these successes by exploring national patterns of treatment delay to examine the specific program characteristics associated with more rapid entry to treatment, and identify client populations who may be particularly vulnerable to pretreatment dropout.

BACKGROUND

The study draws upon Aday and Andersen’s model of access to healthcare to identify client and program characteristics related to wait time to treatment entry (11). The model identifies three domains that affect access. The first, characteristics of the *population at risk*, focuses on

individual characteristics that may affect treatment across three dimensions: predisposing characteristics, or the “propensity” of individuals to get treatment; enabling characteristics, which represent the “means” people have through which to access it; and assessment of need for treatment—as perceived by the client and health providers. The second domain, the *health delivery system*, refers to the programs in which clients are treated and includes financial resources and organizational structure and services. The final domain, *health policy*, shapes the availability and distribution of resources across treatment programs.

Impact of Wait Time on Treatment Entry

Being placed on a wait list has been cited as a principal barrier to treatment access among people with substance use disorders. In one such study of treatment seekers, 45% indicated that they did not seek treatment because “they had to wait too long to get in where they wanted to go,” and 42% indicated that “intake was generally unavailable” (4). Another study examining perceived barriers to access among treatment-seeking substance users found that lack of room in a program was the most common reason for not entering treatment (5). Similarly, in a sample of drug users who overdosed and then sought treatment unsuccessfully, 67% of participants said being placed on a wait list was the primary reason for not subsequently entering a treatment program (6).

Empirical studies corroborate these findings, suggesting a positive association between wait time and pretreatment dropout. Festinger and colleagues found that wait time was the *only* predictive factor of likelihood of treatment entry (3). Similarly, a study of individuals seeking entry to alcohol treatment found that clients who waited longer to enter treatment after assessment were significantly less likely to show up when it became available (12). In a study of individuals waiting to enter a methadone program, individuals who received rapid admission (within 1 day after request) were six times more likely to enter treatment than individuals who waited longer (24% vs. 6%, respectively) (13). Finally, Claus and Kindleberger found that clients who were offered treatment more rapidly after initial request were more likely to receive it (2).

Client and Program Characteristics Related to Wait Time

Several client characteristics have been associated with delay to substance abuse treatment entry in prior research. In a study of 577 individuals with substance use disorders, clients who were unemployed, younger, homeless, court-referred, and had severe alcohol use disorders waited longer to enter treatment after contact with a centralized intake unit (14). Moreover, at least two studies have found that women wait longer than men to enter treatment. In a study of individuals referred to state-funded substance abuse treatment in the state of Washington, Downey, Rosengren, and Donovan found that women waited twice as long as for treatment; while men entered treatment in 15 days, women waited over a month (15). Another—using data from individuals referred to treatment in Detroit—showed that women were more likely to wait over 1 month

for treatment (16). While no studies to date have explicitly examined the causes of longer waiting times among women, several potential reasons related to parenting may help to explain this disparity have been identified. The majority of women who enter treatment are caretakers (17) who may face special challenges to accessing treatment. Such difficulties have been linked to pregnancy (18); lack of childcare (19,20); transportation challenges (20); and fear of losing custody if a drug problem is exposed (18,21).

Prior research has identified several program-level factors associated with wait time to substance abuse treatment. Wait time has been positively associated with treatment staff case overload (14,22), the program’s total number of active cases (12), and the average length of treatment in the program (16). Conversely, shorter wait was predicted by having a case manager external to the program who interacts with program staff at the substance abuse treatment program on behalf of the client (22). Moreover, in a nationally representative study of outpatient treatment programs that examined aggregate rates of entry among treatment seekers, Friedmann, Lemon, Stein, and D’Aunno found that methadone maintenance programs were less likely to provide treatment on demand (23). Indeed, in a related study, Gryczynski and colleagues found that clients entering methadone maintenance facilities faced unusually long waits to enter treatment; only 20% of clients entered treatment within 4 months after initial request (24).

Overall estimates of wait time have varied widely in prior research. Carr and colleagues reported a mean wait time of 70 days, the majority of which occurred post-assessment (14). Downey, Rosengren, and Donovan reported an average of 20 days (15), and Maddux, Desmond, and Esquivel (13) found a mean waiting period of 7 days in a sample of individuals seeking methadone maintenance services (13). Finally, Arfken and colleagues (2002) found that roughly 50% of clients waited over 30 days to enter substance abuse treatment (16), and Claus and Kindleberger (2) found that 75% waited more than 30 days to enter treatment (2).

METHODS

Research Questions

This study will examine three research questions, informed by the Aday and Andersen model. First, among a sample of clients who entered substance abuse treatment, what proportion of clients waited over 1 month to receive it? Second, what client characteristics—including predisposing, enabling, and need-related factors—are associated with waiting more than 1 month to enter treatment after initial request? And third, what treatment program characteristics—both of programs’ resources and structure—are associated with waiting more than 1 month to enter treatment after initial request?

Analytic Sample

This study uses data from the National Treatment Improvement Evaluation Study (NTIES) (1992–1997)

(25). NTIES is a longitudinal multisite survey of substance abuse treatment programs serving underserved populations including racial and ethnic minorities, youth, and those individuals in the criminal justice system. The study was conducted by the National Opinion Research Center with assistance from Research Triangle Institute. It was designed to evaluate the effectiveness of treatment programs in U.S. metropolitan areas receiving funding from the Center for Substance Abuse Treatment. Client and service data were acquired through computer-assisted personal interviews conducted by seventy trained interviewers. Data were obtained at treatment intake (1992–1993), treatment exit (1992–1993), and 12 months after treatment exit (1993–1994). Administrative data were collected by a team of approximately 15 research assistants, who were responsible for conducting interviews with treatment program administrators and clinical directors at two time points during a 12-month period. The NTIES sample includes the following cities and regions: Philadelphia, Baltimore, Milwaukee, Atlanta, Chicago, Albuquerque, Los Angeles, Seattle, Cleveland, El Paso, Hartford, Tucson, Boston, The Bronx, Long Island, and portions of Alabama, Arkansas, northern California, Nevada, Oregon, and Wisconsin. Consequently, although the study is national scope, it is not nationally representative. More information with regard to NTIES design and sampling can be found elsewhere (25,26).

NTIES includes 4526 clients who completed all intake, treatment discharge, and follow-up interviews. The study excluded clients from correctional facilities ($N = 1384$), as well as 222 clients for whom data were missing on the wait time measure, leading to a final analytic sample consisting of 2920 clients from 57 service delivery units. NTIES is largely comparable (e.g., in terms of distributions by gender, education, prior treatment experience) with other large-scale treatment studies, except that NTIES contains higher proportions of African-Americans and Latinos (20). The sample includes 1744 African-Americans, 417 Hispanics, and 759 Whites.

Study Variables

Outcome Variable

The outcome in this study is a dichotomous variable indicating whether the study participant waited more than 1 month to enter treatment. The question posed to participants was “how long ago was your name put in for treatment this time?” Respondents were asked to select one of six categorical responses [1 day (17.0%), 2–6 days (15.9%), 1–4 weeks (34.5%), 1–3 months (21.9%), 4–12 months (5.3%), more than 1 year (0.5%)]. The variable was dichotomized to facilitate ease of interpretation of results. To ensure that collapsing the outcome into two values did not result in the loss of ability to detect significant relationships that would have been found when using the multinomial form of the variable, the multivariate models described below were run using both dichotomized (binary) and non-dichotomized (six categories, multinomial) versions of the outcome measure. No differences were found across models using the two different versions of the variable.

Explanatory Variables

At the client level, *predisposing characteristics* included race/ethnicity (African-American, Latino, and White), age, education (years in school), and employment status. *Enabling characteristics* included referral source (social service, self, criminal justice) and insurance (private, public, uninsured). *Need-related characteristics* included primary substance used (alcohol, crack/cocaine, heroin, alcohol, marijuana, other), number of prior substance abuse treatment episodes, severity of use (number of days in the past 30 each of the five most common drugs were used), health (whether health hinders work), mental health (whether troubled by emotions), pregnancy, number of dependent children, injection drug use, HIV/AIDS diagnosis, motivation (an ordinal variable measuring the importance of entering treatment), and mandated status (whether treatment required).

At the program level, *structural characteristics* included modality (methadone maintenance, outpatient non-methadone, short-term residential, long-term residential program), high client admissions (more than 250 in past year), female admissions (any females admitted in past year), African-American admissions (more than 100 in past year), and Latino admissions (more than 50 in past year). Programs' *resource characteristics* included total revenue received by programs in the year prior to the study (high/low), the number of counseling staff, and the average active caseload (high/low). All of the abovementioned program-level variables were originally constructed as ordinal. They were dichotomized to facilitate ease of interpretation and to support adequate statistical power at the program level. All variables were selected based on their congruence with the characteristics of population at risk and health delivery system indicated in the Aday and Andersen model. Policy-level characteristics—also identified in the authors' model—were not available for inclusion.

Statistical Analysis

Missing Data Imputation

A multiple imputation procedure was conducted to fill in the missing values by assuming the data were missing at random (27). Each missing value was replaced with five plausible values using the Markov Chain Monte Carlo (MCMC) method (28). Imputation was conducted for the program variables and client variables independently. The resulting five imputed datasets for program- and client-level data were merged for further statistical analysis, using generalized linear mixed models to account for potential within-treatment organization correlation. All analyses were conducted in SAS 9.1.

Descriptive Analyses

Comparisons of client- and program-characteristics were made for two groups: clients who waited 1 month or less and clients who waited more than 1 month. Chi-square tests and analysis of variance (ANOVA) were used to test for differences.

Characteristics Associated with Outcome

To identify associations between client and program characteristics and wait time, generalized linear mixed models (GLMM) were used. A random intercept model was selected: a simple form of the multilevel model that is commonly used to account for potential intra-class correlation among clients in the same program. A binomial distribution was assumed with a log link function for dichotomized wait time (more than 1 month or 1 month or less). The model investigated the main effects of all explanatory variables.

FINDINGS

Descriptive and Bivariate Statistics

Table 1 includes descriptive statistics for the sample. Twenty-eight percent—or 810 clients—reported waiting more than 1 month to enter treatment. Among the *predisposing characteristics*, male gender ($p < .001$) and lower education ($p < .05$) were associated with greater likelihood of waiting more than 1 month to enter treatment. All of the *enabling characteristics* were significant predictors of outcome. Clients who waited more than 1 month to enter treatment were more likely to have public or private insurance ($p = .021$) than to lack insurance, as well as to be referred by criminal justice or social services as opposed to self-referred ($p = .003$). Clients who waited more than 1 month also differed from those with shorter waits with regard to several *need-related characteristics*; they were more likely to enter treatment for use of heroin, marijuana, or other drugs than for alcohol ($p = .003$), more likely to be mandated to treatment ($p < .001$), and less likely to be HIV-positive ($p = .001$) or have co-occurring mental health problems ($p = .005$). The frequency of substance use was higher among respondents who waited less than 1 month to enter treatment.

Program Characteristics

At the bivariate level, features of both organizational structure and resources were associated with wait time. Clients who waited over 1 month to enter treatment were more likely to enter programs that admitted women ($p < .001$), had admissions of over 100 clients annually ($p < .001$), admitted at least 50 Latino clients in the past year ($p < .001$), had a higher average number of full-time counselors ($p < .001$), and reported average counselor caseloads of more than 100 clients ($p < .001$). Compared with clients entering outpatient programs, clients who waited more than 1 month were also significantly more likely to enter methadone maintenance and less likely to residential programs ($p < .001$).

Model Results

Table 2 presents the results of a generalized linear mixed model to identify client and program characteristics associated with outcome. At the client level, variables from the predisposing, enabling, and need-related categories were all associated with odds of waiting more than 30 days to enter

TABLE 1. Descriptive statistics: Comparison by wait time (≤ 1 month or >1 month).

Variable	≤ 1 month ($n = 2110$)	>1 month ($n = 810$)	All ($n = 2920$)
Predisposing characteristics			
Women***	39.10	30.74	36.78
Age (in years)	33.32	33.51	33.37
Race			
African-American	60.43	57.90	59.72
Latino	14.12	14.69	14.28
White	25.45	27.41	26.00
Education (in years)*	11.45	11.29	11.41
Employed	19.94	22.33	20.61
Enabling characteristics			
Payment source*			
Free care	8.09	5.10	7.25
Public insurance	68.97	70.90	69.69
Private insurance	22.94	24.00	25.24
Referral source			
Criminal justice**	14.81	20.27	16.37
Social service	6.07	6.86	6.30
Self referral	79.11	72.87	77.33
Need-related characteristics			
Injection drug use	14.98	17.04	15.56
HIV positive**	4.50	1.98	3.80
Primary substance**			
Crack/cocaine	53.77	47.55	52.06
Heroin	22.64	28.11	24.15
Alcohol	15.35	13.93	14.96
Marijuana	3.48	5.02	3.90
Other	4.77	5.40	4.94
Pregnant	6.75	7.72	6.97
Mental health problems**	57.91	52.22	56.34
Physical health problems*	32.89	37.65	34.21
Dependent children (total number)	0.27	0.25	0.27
Pretreatment use (number of days)**	16.70	14.48	16.09
Treatment motivation	80.09	78.15	79.55
Prior treatment (episodes)	2.52	2.66	2.56
Treatment mandated***	23.98	34.44	26.88
Structural characteristics			
Treatment modality***			
Outpatient	39.34	49.38	42.12
Residential	49.43	29.26	43.84
Methadone	11.23	21.36	14.04
Greater admissions***			
Any female admissions***	68.86	77.28	71.20
>100 African-American clients admissions	50.71	52.35	51.16
>50 Latino client admissions ***	50.47	57.04	52.29
Resource characteristics			
High program revenue	52.35	48.27	51.16
Full-time counselors (total number)***	8.27	10.18	8.82
High ave. counselor caseload***	65.59	82.59	70.31

Notes: All values reported as percentages except variables indicated with associated measurement units.

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

TABLE 2. Results of generalized linear mixed model.

Variable	OR	CI	
		lower	upper
Intercept	0.0957	0.0216	0.4235
Predisposing characteristics			
Women	0.9668	0.7402	1.2625
Age (in years)	1.0122	0.9972	1.0275
Race/ethnicity			
African-American*	1.3986	1.0386	1.8837
Latino	1.2529	0.8549	1.8362
Education	0.9807	0.9271	1.0374
Employed	1.3122	0.9710	1.7732
Enabling characteristics			
Payment source			
Private insurance	1.0126	0.6378	1.6077
Public insurance	0.9127	0.5965	1.3965
Referral source			
Criminal justice**	1.6967	1.1825	2.4345
Social service	0.9415	0.5842	1.5173
Need-related characteristics			
Injection drug use	0.9192	0.6039	1.3991
HIV-positive**	0.3830	0.1895	0.7739
Primary substance			
Crack/cocaine	0.9884	0.7751	1.2604
Heroin	0.7894	0.5240	1.1892
Alcohol	1.1364	0.8743	1.4772
Other	0.9752	0.5902	1.6114
Pregnant	1.1322	0.6318	2.0293
Mental health problems	0.9100	0.7280	1.1375
Physical health problems	1.2504	0.9788	1.5976
Dependent children (total number)	0.8617	0.6603	1.1248
Pretreatment use (number of days)**	0.9890	0.9809	0.9971
Treatment motivation	0.8859	0.6496	1.2078
Prior treatment (episodes)	1.0366	0.9696	1.1080
Treatment mandated	1.1147	0.7961	1.5610
Structural characteristics			
Modality			
Residential	0.5070	0.1614	1.5927
Methadone*	3.9026	1.0043	15.1656
Total admissions	1.0051	0.3442	2.9355
Any female admissions	1.7243	0.6910	4.3024
> 100 African-American client admissions	1.1480	0.3745	3.5191
> 50 Latino client admissions	0.7264	0.2012	2.6224
Resource characteristics			
High program revenue	0.9282	0.4610	1.8688
Full-time counselors (total number)	1.0720	0.9663	1.1891
Average counselor caseload	0.9620	0.3296	2.8077

Note: All measures are indicator variables unless otherwise noted in the table.

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

treatment. Being African-American (OR = 1.40, $p = .028$) as opposed to White and being referred by the criminal justice system (1.70, $p = .003$) as opposed to self-referred were both associated with greater odds of waiting more than 30 days to enter treatment. Being HIV positive (OR = 0.38, $p = .010$) and reporting more days of substance use in the month prior to treatment (OR = 0.99, $p = .010$) at intake were associated with lower odds of waiting more than 30 days. Each increase of about 14 days of use of one of the

five most common drugs within the past 30 days was associated with a decreased odds of waiting more than 1 month of about 15%.

Only one program-level characteristic was associated with outcome. Clients entering a methadone program—a core aspect of organizational structure—had a significantly higher probability of waiting more than 1 month to enter treatment, as compared with clients entering other outpatient programs. Clients entering methadone maintenance were almost three times more likely than clients entering outpatient programs to wait more than 1 month to enter substance abuse treatment.

DISCUSSION

The findings of this study indicate that some treatment-seekers may wait longer than others to enter treatment. African-Americans were significantly more likely than Whites to wait more than 1 month to enter substance abuse treatment. This finding is consistent with prior research, which has found that African-Americans are more likely than Whites to cite wait lists as a barrier to access (29), and to report economic and logistical barriers to treatment, including childcare difficulties and lack of insurance (30). African-Americans are also less likely to enter treatment (31), and when they do, are more likely to drop out before completing (32).

Clients referred by the criminal justice system were also significantly more likely to wait over 1 month to enter substance abuse treatment, even when accounting for clients' mandated status and personal motivation to reduce substance use. This finding corroborates a similar result reported by two earlier studies, which found that clients referred by the criminal justice system reported longer wait times to enter treatment than other clients (13,33). At first glance, this seems to conflict with existing research, which has suggested *better* access outcomes for clients who were referred by the criminal justice system. Clients referred by criminal justice have higher rates of entry to substance abuse treatment after referral (34), and lower odds of dropout once in treatment (35). However, this disparity in wait time could be driven by selective pretreatment attrition. As many individuals involved in the criminal justice system are under court supervision, they may have greater motivation to enter treatment than other individuals—and thus be willing to wait longer to enter treatment before dropping out of the queue.

Frequency of substance use was associated with lower odds of waiting more than 1 month to enter treatment. While the reasons for this finding are not clear, one possibility is that programs are informally triaging clients—that is, determining the individuals for whom substance use is most severe and giving them priority entry to treatment. However, it is also possible that the observed relationship between substance use frequency and odds of waiting more than 1 month to enter treatment may be the result of selective attrition. Prior research has found that individuals with more frequent substance use are more likely to drop off of wait lists before receiving treatment (12).

The results also suggest that methadone treatment programs were significantly less likely than other treatment modalities to admit clients to treatment within 1 month. This finding is congruent with two earlier studies that explored how wait time to treatment entry varies across treatment modality (23,24). Like this study, Friedmann and colleagues found that methadone maintenance programs had lower rates of access than other substance abuse treatment modalities (23). The results of this study also line up with the results of prior research indicating that individuals seeking methadone maintenance services may face special barriers to treatment access, including lack of available treatment “slots,” related waiting time to enter treatment, and disparities in the availability of methadone maintenance programs across different geographic regions (36,37). Yet, it is also possible that clients seeking methadone maintenance may be willing to wait longer to receive services than clients entering outpatient treatment.

Finally, in contrast to prior research, this study did not find a significant association between gender and wait time to entry to substance abuse treatment. Although the reasons for this unclear, we speculate that incongruence may be driven by differences in the samples on which these studies were based. The three prior studies focused on county- and state-level populations, while this study, though not representative, is national in scope.

Study Limitations

Like most studies, this one is not without limitations. First, the sample selection procedure used for the NTIES data employed purposive sampling of treatment programs at the first sampling stage and probability sampling of clients within programs at the second stage. Purposive sampling at the first stage eliminates the capacity to assess coverage bias. However, a comparison of the NTIES response rate to other large-scale follow-up studies found limited bias introduced at the first sampling stage (25). Another is the age of the dataset. There have been significant changes in the substance abuse treatment system since the time that the NTIES data were collected, including an increasing emphasis on outpatient treatment, growing admissions for “newer” drugs of abuse such as methamphetamines and prescription drugs, and broadening use of medications such as naltrexone and buprenorphine to treat addiction. Clearly, this analysis cannot account for these changes or address how they may have affected wait times. Despite this limitation, the dataset was selected because it is—to the authors’ knowledge—the only national study to collect individual-level data with regard to wait time to enter substance abuse treatment. Although the Treatment Episode Data Set also includes client-level data on wait time, it suffers from a large proportion of missing data for this variable (roughly 50% among years 2005–2007).

Third, the study’s outcome measure—whether the client waited more than 1 month to enter treatment after making an initial request for help—is based on clients’ self-report. As such, the measure relies on clients’ ability to accurately recall the date on which they initially requested treatment and to calculate the amount of time waited since that date.

Both actions present possibilities for human error in reporting. Additionally, the NTIES sample only includes individuals who entered 1 of the 57 substance abuse treatment programs included in the study. As such, individuals who entered a wait list at one of these programs but never actually entered treatment are not included. In light of this, it is important to emphasize that the results of this study only pertain to individuals who *enter* the treatment system. Because no data were available with regard to individuals who sought but did not ultimately enter treatment is not possible to accurately account for selective attrition in this study. As a consequence, it is likely that the study may underreport the actual waiting time experienced by treatment seekers. For example, Festinger and colleagues found that length of time to first scheduled appointment was inversely associated with odds of attendance (3).

A final limitation is that health policy characteristics—one of three major domains identified by Aday and Andersen—were not available for inclusion in this study. It is certainly possible that inclusion of these characteristics could influence the relationships identified at the client and program levels.

Implications for Further Research

Certainly, further research is required to clarify, corroborate, and expand upon these findings. In light of the finding that Blacks face longer average delays to treatment entry than Whites, it will be important to examine the process of treatment seeking across racial lines to identify the specific mechanisms that may drive this disparity. Similarly, further research is needed to understand how and why clients who are criminal justice referred have longer delays to treatment. And, in light of the heterogeneity within the criminal justice system, more research is needed to understand how treatment delay may vary across different types of criminal-justice referred clients, including those on parole, probation, and other forms of legal surveillance. More work is also needed to understand the relationship of severity of need to treatment priority in the substance abuse treatment system. In this sample, clients with more severe substance use problems got treatment more quickly. But, it remains unclear whether this is related to some aspect of motivation or availability on the part of the client, or a process of formal or informal triaging on the part of treatment programs. Finally, the finding that individuals entering a methadone maintenance facility were over twice as likely as individuals entering other treatment modalities warrants further exploration.

Finally, it will be important to explore how the Affordable Care Act (ACA)—if it is not repealed before 2014—may affect client wait times and their impact on eventual entry into treatment. The ACA is expected to result in dramatic changes to the substance abuse treatment system that will have profound implications for accessibility of treatment services. For example, the ACA will require all states to provide at least some basic insurance coverage for substance abuse treatment through their Medicaid programs and Health Insurance Exchanges. However, in light of concerns about the substance abuse

treatment system's capacity to respond effectively to a rapid increase in demand (38), it will be important to examine how increases in access to health insurance may influence wait times. The ACA also introduces new incentives for integration of primary care, mental health, and substance abuse treatment services. Research will be needed to track wait times and substance abuse treatment access in increasingly common sites for treatment such as Federally Qualified Health Centers and mental health clinics, and to document whether increased coordination of these services may help or hinder access to treatment.

CONCLUSION

In this national sample of clients who entered substance abuse treatment, nearly 30% waited more than 1 month to enter treatment after making an initial request for services. The study findings suggest that certain groups may be waiting longer to enter treatment and, consequently, may be at special risk for pretreatment attrition. When accounting for client and treatment program characteristics among this sample of clients who entered treatment, those who were African-American, referred by the criminal justice system, and entering methadone maintenance were significantly less likely than others to receive treatment in less than 1 month.

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Declaration of Interest

The authors report no conflicts of interest. The authors alone are responsible for the content and writing of the paper.

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