ELSEVIER

Journal of Substance Abuse Treatment 42 (2012) 346–355

Journal of Substance Abuse Treatment

Regular article

Adolescent treatment initiation and engagement in an evidence-based practice initiative

Margaret T. Lee, (Ph.D.)[a,*], Deborah W. Garnick, (Sc.D.)[a], Peggy L. O'Brien, (M.A., J.D.)[a], Lee Panas, (M.S.)[a], Grant A. Ritter, (Ph.D.)[a], Andrea Acevedo, (M.S., M.A.)[a], Bryan R. Garner, (Ph.D.)[b], Rodney R. Funk, (B.S.)[b], Mark D. Godley, (Ph.D.)[b]

[a]*Institute for Behavioral Health, Schneider Institutes for Health Policy, Heller School for Social Policy and Management, Brandeis University, Waltham, MA 02454-9110*
[b]*Chestnut Health Systems, Normal, IL 61761-5405*

Received 8 April 2011; received in revised form 9 September 2011; accepted 15 September 2011

Abstract

This study examined client and program factors predicting initiation and engagement for 2,191 adolescents at 28 outpatient substance abuse treatment sites implementing evidence-based treatments. Using Washington Circle criteria for treatment initiation and engagement, 76% of the sample initiated, with 59% engaging in treatment. Analyses used a 2-stage Heckman probit regression, accounting for within-site clustering, to identify factors predictive of initiation and engagement. Adolescents treated in a pay-for-performance (P4P) group were more likely to initiate, whereas adolescents in the race/ethnicity category labeled *other* (Native American, Asian, Pacific Islander, Native Alaskan, Native Hawaiian, mixed race/ethnicity), or who reported high truancy, were less likely to initiate. Race/ethnicity groups other than Latinos were equally likely to engage. Among White adolescents, each additional day from first treatment to next treatment reduced likelihood of engagement. Although relatively high initiation and engagement rates were achieved, the results suggest that attention to program and client factors may further improve compliance with these performance indicators.

Keywords: Adolescent substance abuse treatment; Performance measures; Treatment engagement; Evidence-based practices; Pay-for-performance

1. Introduction

Although treatment is recognized as effective for recovery from a substance use disorder, substantial numbers of adolescents referred to outpatient care do not return for more treatment after the first visit (Szapocznik, Lopez, Prado, Schwartz, & Pantin, 2006; Szapocznik et al., 1988; Waldron, Kern-Jones, Turner, Peterson, & Ozechowski, 2007). Increasing the likelihood of retaining an adolescent in substance abuse treatment is recognized as challenging (Campbell, Weisner, & Sterling, 2006; Dakof, Tejeda, & Liddle, 2001; Henggeler, Pickrel, Brondino, & Crouch, 1996; Simpson, 2001; Waldron et al., 2007). However, because the steepest dropout occurs during the first few sessions (Dakof et al., 2001), focusing on treatment processes at the beginning of a new episode of care could make a difference.

1.1. Adolescent treatment initiation and engagement

Treatment initiation and engagement are recognized as important benchmarks on the path to recovery from a substance use disorder (Garnick et al., 2007; Godley, Hedges, & Hunter, 2011; Harris, Kivlahan, Bowe, Finney, & Humphreys, 2009; Harris, Humphreys, Bowe, Tiet, & Finney, 2008; Lee et al., 2007). Performance measures that measure provision of timely substance abuse services at the start of a new outpatient treatment episode were developed by the Washington Circle (WC), a group focused on developing performance measures for substance abuse treatment in both the private (Garnick et al., 2002) and public sectors (Garnick, Lee, Horgan, & Acevedo, 2009).

* Corresponding author. Waltham, MA 02454-9110, USA. Tel.: +1 781 736 3966, fax: +1 781 736 3985.
E-mail address: mlee@brandeis.edu (M.T. Lee).

0740-5472/11/$ – see front matter
doi:10.1016/j.jsat.2011.09.005

Clients who initiate receive another treatment service within 2 weeks after beginning a new episode, and those who engage receive two additional services within the month after initiation. These measures are already being used extensively by, among others, the National Committee for Quality Assurance (2010), the Department of Veterans Affairs (Harris, Humphreys, Bowe, Tiet, & Finney, 2010; Harris, Humphreys, & Finney, 2007), and several states (Garnick et al., 2011), and have been endorsed by the National Quality Forum (2009). Performance measures that assess the extent that clients initiate and engage in treatment can be useful tools for providers to monitor the delivery of quality care.

The WC initiation and engagement measures were developed for an adult population, but the WC specification of the number and timing of treatment sessions may be applicable for adolescents as well. The WC measures specify a minimum floor of services that is consistent with previous research focused on adolescent treatment. Dakof et al. (2001) report that the period when we would most likely see high dropout for adolescents is during the first few sessions and that participation in less than four sessions is not enough to engage adolescents in treatment. Waldron et al. (2001) considered adolescents as enrolled with one therapy session and engaged in treatment with four or more sessions. Thus, although the WC measures were developed for an adult population, prior research with adolescents suggests that they should be tested for use with adolescents as indicators of timely service delivery at the beginning of a new treatment episode.

1.2. Influences on adolescent treatment initiation and engagement

There are both client and program factors that influence adolescent initiation and engagement in treatment. Research focused on client-level factors has examined a variety of client characteristics including the nature of the individual's substance use, demographic characteristics, homelessness, and indicators of problem severity. One study by Lee et al. (2007) found that type of substance used and frequency of use were associated with treatment initiation. They found adolescents who used alcohol frequently (three or more times) in the past week were more likely to initiate treatment than those who used less frequently, whereas those who used marijuana frequently in the past week were less likely to initiate treatment. Another recent study examining the impact of gender and race/ethnicity on engagement in outpatient adolescent treatment found no significant difference by gender or race/ethnicity (Godley, Hedges, et al., 2011).

Factors like victimization or homelessness that render adolescents more vulnerable also may add to the challenges of engaging them in treatment. For example, adolescents who have been victimized tend to have more substance-related problems and thus may be more difficult to treat and keep in treatment (Shane, Diamond, Mensinger, Shera, & Wintersteen, 2006). Homeless youth also tend to present with greater problems and intensified severity (Bantchevska, Bartle Haring, Dashora, Glebova, & Slesnick, 2008) and are more likely to have trouble utilizing care for many reasons, including limited transportation, lack of insurance, and social barriers (Ensign & Bell, 2004; Hudson et al., 2010; Slesnick, Kang, & Aukward, 2008), although one study found that homeless adolescents with a history of sexual abuse and suicide attempts demonstrated higher substance abuse treatment attendance (Slesnick et al., 2008). The higher attendance by homeless youth in this study was accomplished through an open door policy, which made it easier for the adolescent to meet with the therapist. When adolescents have other problems, it may be more difficult for them to stay in treatment, and they may require supportive services to keep them in treatment.

In addition to client factors, programs also could adopt new approaches and/or make changes in how they conduct their business to bring about improvements that increase the chances of adolescents entering and returning for more treatment (Slesnick et al., 2008). Two program factors that research has found to be related to initiation and engagement are included in this study: time to initiation and incentives.

First, we include the time that lapses from first treatment service to the subsequent service because it has been shown that a shorter window of time improves the chances of a client keeping an appointment and returning for more services (Carr et al., 2008; Claus & Kindleberger, 2002). Second, many programs are beginning to use incentives to improve quality of care, especially since the Institute of Medicine (2001, 2007) recommended pay-for-performance (P4P) as an approach for enhancing adherence to treatment processes and interventions that are associated with more effective treatment. Providers are paid based on their performance on a specified set of measures with a goal of bringing about increased adherence to recommended practices or clinical or business outcomes. P4P is increasingly becoming more prevalent in health care organizations, and more recently, the approach has been adopted for behavioral health care (Bremer, Scholle, Keyser, Houtsinger, & Pincus, 2008). Experience with P4P in substance abuse/mental health agencies in Connecticut, Maine, and Delaware have shown the importance of timely payments of incentives linked to performance (Commons, McGuire, & Riordan, 1997; McLellan, Kemp, Brooks, & Carise, 2008; Stewart, 2009), including utilization targets (McLellan et al., 2008; Stewart, 2009), and considering programs' abilities to influence continuity of care outside their own organization (Daley et al., 2010).

1.3. Study goals and hypotheses

Because past research shows that client and program factors both contribute to treatment initiation and engagement, this study examines the impact of each on the likelihood of initiation and engagement among adolescents using WC measures. In view of a current focus on therapist-level incentives to improve treatment (Garner, Godley, &