



Contents lists available at [ScienceDirect](http://www.sciencedirect.com)

Drug and Alcohol Dependence

journal homepage: www.elsevier.com/locate/drugalcddep



Full length article

Classifying substance use disorder treatment facilities with co-located mental health services: A latent class analysis approach

Pia M. Mauro^{a,b,*}, C. Debra Furr-Holden^a, Eric C. Strain^c, Rosa M. Crum^{d,a}, Ramin Mojtabai^{a,c}

^a Department of Mental Health, Johns Hopkins Bloomberg School of Public Health, 624 N. Broadway, Baltimore, MD 21205, USA

^b Department of Epidemiology, Columbia University Mailman School of Public Health, 722 W 168th Street, New York, NY 10032, USA

^c Department of Psychiatry and Behavioral Sciences, Johns Hopkins School of Medicine, 733 N. Broadway, Baltimore, MD 21205, USA

^d Department of Epidemiology, Johns Hopkins Bloomberg School of Public Health, 615 N. Wolfe St., Baltimore, MD 21205, USA

ARTICLE INFO

Article history:

Received 18 August 2015

Received in revised form 29 March 2016

Accepted 3 April 2016

Available online xxx

Keywords:

Substance use disorder

Treatment

Co-occurring disorders

Mental health

ABSTRACT

Background: The Affordable Care Act calls for increased integration and coordination of behavioral health services, as people with co-occurring disorders (CODs), meeting criteria for both substance use and psychiatric disorders, are overrepresented in treatment samples. Nationwide estimates of mental health (MH) service co-location in substance use disorder (SUD) treatment facilities are needed. We empirically derived a multiple-indicator categorization of services for CODs in SUD treatment facilities.

Methods: We used latent class analysis to categorize 14,037 SUD treatment facilities in the United States and territories included in the 2012 National Survey of Substance Abuse Treatment Services. Latent class indicators included MH screening and diagnosis, MH support services, psychiatric medications, groups for CODs, and psychosocial approaches. Multinomial logistic regression compared facility-identified primary focus (i.e., SUD, MH, mix of SUD-MH, and general/other) and other facility characteristics across classes. **Results:** A four-class solution was chosen with the following classes: Comprehensive MH/COD Services (25%), MH without COD Services (25%), MH Screening Services (21%), and Limited MH Services (29%). The former two classes with co-located MH services were less likely to report a SUD-primary focus than the latter classes reporting only MH screening or Limited MH Services. Only the Comprehensive MH/COD Services class also had a high probability of providing special groups for CODs.

Conclusions: Approximately half of SUD treatment facilities were in classes with co-located mental health services, but only a quarter provided comprehensive COD services. Future studies should assess differences in patient experiences and treatment outcomes across facilities with and without COD services.

© 2016 Elsevier Ireland Ltd. All rights reserved.

1. Introduction

Substance use disorders (SUDs) often occur with other psychiatric disorders; when presenting together, these are considered co-occurring disorders (CODs). In the 2014 United States (US) National Survey of Drug Use and Health (NSDUH), 41% of individuals with a SUD had a COD in the past year, representing 3.3% of the US population (Han et al., 2014). When untreated, CODs are associated with worse symptoms and treatment outcomes than

SUDs without a COD (Center for Substance Abuse Treatment; CSAT, 2005). As CODs are common in treatment samples (Minkoff and Cline, 2004), mental health (MH) screening is a recommended standard practice in SUD treatment (Kleber et al., 2006) to ensure targeted use of resources (Flynn and Brown, 2008). In order to meet the basic needs of people with CODs, treatment facilities can have a plan to connect individuals with CODs to services if indicated following MH screening (CSAT, 2005). However, relying on referrals places the burden of receiving appropriate treatment on the individual and is inconsistent with “patient-centered care” (Burnam and Watkins, 2006; Institute of Medicine, 2006). Indeed, many referrals to treatment do not actually translate to receipt of treatment, or timely receipt of treatment (Ducharme et al., 2006).

One way to reduce reliance on referrals and increase the likelihood of addressing CODs in a treatment setting is through integrated or co-located services (Kleber et al., 2006; Ziedonis, 2004),

* Corresponding author at: Department of Epidemiology, Columbia University Mailman School of Public Health, 722 W 168th Street #R228D, New York, NY 10032, USA.

E-mail addresses: pm2838@cumc.columbia.edu, pmauro1@jhu.edu (P.M. Mauro), cfurrho1@jhu.edu (C.D. Furr-Holden), estrain1@jhmi.edu (E.C. Strain), rcrum1@jhu.edu (R.M. Crum), rmojtab1@jhu.edu (R. Mojtabai).

which has been inconsistently defined in the literature (Heath et al., 2013). The American Society of Addiction Medicine (ASAM) differentiated SUD treatment providers with *addiction only services* that do not provide any MH treatment services, *dual diagnosis capable programs* that included MH assessment and policies that directly incorporate CODs in their planning, and *dual diagnosis enhanced programs* that provide integrated treatment for CODs (Mee-Lee et al., 2001). An updated framework distinguishes practices based on location and provision of coordinated, co-located, and integrated care (Heath et al., 2013). Coordinated care practices provide no or limited collaboration at a distance. Co-located care practices provide both services in the same facility with varying levels of collaboration. Integrated care practices provide services as part of a team with high levels of collaboration, evolving into a fully merged practice with a single integrated treatment plan (Heath et al., 2013). As service co-location is an important step towards service integration, further understanding of the availability of co-located MH services in SUD treatment settings is needed.

Estimates of the degree to which SUD facilities co-locate and integrate treatment for CODs range widely based on the methodology and data source utilized (Bond and McGovern, 2013; Ducharme et al., 2006, 2007; Gil-Rivas and Grella, 2005; Gotham et al., 2010; Guerrero et al., 2014; Knudsen et al., 2004; Lambert-Harris et al., 2013; McGovern et al., 2006, 2007, 2014; Timko et al., 2005). Data collected from program providers typically utilize a single item to assess the capability to treat CODs. These estimates indicate that about half (50–58%) of providers are capable of treating CODs, measured as having special groups for people with CODs (Mojtabai and Olfson, 2004), offering integrated care (Ducharme et al., 2006), or providing a psychiatric program (Knudsen et al., 2004). Facility identified primary focus, particularly indicating a mixed SUD and MH primary focus, has also been used as a proxy measure for integration (Guerrero and Kao, 2013). Advantages of single-indicator methods include ease of measurement and availability of nationwide estimates using facility data. However, single-indicator methods can introduce measurement error, often do not capture the heterogeneity of services provided, or are used inconsistently across studies.

Multiple-indicator methods can be used to address limitations of single-item estimates. One such approach is the Dual Diagnosis Capability in Addiction Treatment (DDCAT), which utilizes multiple indicators collected via site visits, interviews and document reviews by independent raters (McGovern et al., 2007). The DDCAT ratings correspond with (Mee-Lee et al., 2001). In one study, only 18% of a sample of US-based SUD treatment providers were *dual diagnosis capable* using the DDCAT (McGovern et al., 2014). The comprehensive DDCAT data collection uses external raters, which can be resource-intensive and cost-prohibitive, therefore limiting the sample sizes of studies (McGovern et al., 2014; Sacks et al., 2013). Despite its increased uptake across the US (e.g., Sacks et al., 2013) and internationally, DDCAT data are not available for facilities nationwide.

Using existing data to ascertain the degree of COD service co-location could be helpful to better understand current practices and future service needs. Empirical studies are needed to compare single and multiple indicator classification models to differentiate facilities with and without MH service co-location, without relying on external raters. In addition, a classification model utilizing multiple indicators could provide a more comprehensive measure of COD services at a national level. Practitioners could use such a classification when matching patients based on clinical need to complement existing treatment facility descriptions.

The National Survey of Substance Abuse Treatment Services (N-SSATS) provides a unique opportunity to assess the co-location of services in all known SUD treatment facilities in the US and territories (Substance Abuse and Mental Health Services Administration;

SAMHSA, 2013). Before 2006, the N-SSATS included very limited data on MH services (Ducharme et al., 2006). The 2006–2007 N-SSATS introduced measures of MH screening, MH support services, psychiatric medications, and clinical or therapeutic approaches utilized in SUD treatment (SAMHSA, 2012). Facilities in the N-SSATS can also self-identify their primary focus (SAMHSA, 2013). These measures allow for studies to categorize facilities utilizing multiple MH service indicators, while also accounting for facility-level factors that may facilitate or hinder service co-location (Burnam and Watkins, 2006; Croft and Parish, 2013; Gotham et al., 2010; McFarland and Gabriel, 2004; Mojtabai and Olfson, 2004).

This study aimed to: (a) use latent class analysis (LCA) to develop a measurement model with data from the 2012 N-SSATS that explicitly incorporated MH service indicators; and (b) compare this multiple-indicator classification to a single-indicator approach using primary focus of the facility. The model can contribute to an empirically based approach to assessing the capability of SUD services to care for patients with CODs. In particular, this study aimed to improve on single-indicator measures by using multiple indicators accounting for latent variable measurement error, and to use secondary data to provide nationwide estimates of co-location.

2. Material and methods

2.1. Data source

The N-SSATS is a voluntary survey of all known public and private SUD treatment facilities operating in the US and its territories, and is sponsored by the SAMHSA Center for Behavioral Health Statistics and Quality and collected by Mathematica Policy Research. Facilities are identified through the SAMHSA Treatment Facility Locator, states, or survey staff (SAMHSA, 2013). Facilities are defined by their physical location, point of service delivery, or state license. Facilities exclusively operating within correctional settings, halfway houses not providing SUD treatment, and independent individual providers are excluded (SAMHSA, 2013).

2.2. Data collection

The 2012 N-SSATS survey captured facility characteristics and services provided. Invitations to participate via mail or online were sent before the March 31, 2012, reference date. Facility administrators failing to respond after four months were asked to complete a computer-assisted telephone interview (SAMHSA, 2013). In 2012, there were 16,114 active SUD treatment or detoxification facilities in the US and territories. A total of 93% of the facilities eligible to participate completed the 2012 N-SSATS, and 89% were included in the public dataset. After excluding 185 facilities that reported not providing SUD treatment services, the final sample included 14,037 facilities located in the 50 states and District of Columbia ($n = 13,873$) and US territories ($n = 164$).

2.3. Measures

The N-SSATS reported services that were offered on-site (i.e., co-located or integrated) at the SUD treatment facility. These included MH assessment, supportive services, medications, COD groups, and psychosocial interventions provided in the SUD treatment facility.

2.3.1. Mental health assessment. Facilities reported various assessment and pre-treatment services, including “screening for mental health disorders,” and “comprehensive mental health assessment or diagnosis (e.g., psychological or psychiatric evaluation and testing).” We created a categorical variable coded 0 if the facility did not screen or comprehensively assess MH disorders, 1 if the facil-

Download English Version:

<https://daneshyari.com/en/article/7503872>

Download Persian Version:

<https://daneshyari.com/article/7503872>

[Daneshyari.com](https://daneshyari.com)