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Duane C. McBride

Andrews University, mcbride@andrews.edu

J. Chriqui

University of Illinois at Chicago

Y. Terry-McElrath

University of Michigan - Ann Arbor

M Mulatu

MayaTech Corporation

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Drug treatment program ownership, Medicaid acceptance, and service provision

Duane C. McBride, (Ph.D.)^{a,*}, Jamie F. Chriqui, (Ph.D.)^b,
Yvonne M. Terry-McElrath, (M.S.A.)^c, Mesfin S. Mulatu, (Ph.D.)^d

^a*Institute for Prevention of Addictions, Andrews University, Berrien Springs, MI 49104-0211, USA*

^b*Institute for Health Research and Policy, University of Illinois at Chicago, Chicago, IL 60608, USA*

^c*Institute for Social Research, University of Michigan, Ann Arbor, MI 48106-1248, USA*

^d*The MayaTech Corporation, Silver Spring, MD, 20910-3921, USA*

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Abstract

The Institute of Medicine noted that effective substance abuse treatment (SAT) programs integrate individual therapeutic approaches with transitional/ancillary services. In addition, research suggests that type of ownership impacts SAT services offered and that Medicaid plays a key role in SAT access. Data from the National Survey of Substance Abuse Treatment Services for the years 2000 and 2002–2006 were used to examine relationships among SAT program Medicaid acceptance, program ownership, and transitional/ancillary service accessibility. Multivariate logistic regression models controlling for state- and program-level contextual factors were used to analyze the data. Nonprofit SAT programs were significantly more likely to offer transitional/ancillary services than for-profit programs. However, programs that accepted Medicaid, regardless of ownership, were significantly more likely to offer most transitional/ancillary services. The data suggest that Medicaid may play a significant role in offering key transitional/ancillary services related to successful treatment outcome, regardless of program ownership type. © 2012 Elsevier Inc. All rights reserved.

Keywords: Substance abuse treatment centers; Medicaid; Treatment outcome; Health care

1. Introduction

Significant effort has been put into documenting evidence-based treatment methods associated with improved substance abuse treatment (SAT) outcomes (Substance Abuse and Mental Health Services Administration [SAMHSA], 2011). As part of such efforts, there has been a focus on the importance of transitional and ancillary services. Transitional/ancillary services have been found to be essential to successful SAT access and retention as well as short- and long-term treatment outcomes (Institute of Medicine [IOM], 2006; SAMHSA, 2009). It is the purpose of this article to examine how the accessibility of specific

SAT program transitional/ancillary services relates to two other key SAT issues: treatment program ownership and program acceptance of Medicaid payment for SAT services. A more thorough discussion of transitional/ancillary services in the context of SAT will be provided, followed by a discussion of program ownership and Medicaid acceptance.

1.1. SAT transitional/ancillary services

SAT in the United States involves a wide variety of services including core components of assessment, screening, testing, pharmacotherapies, and various forms of counseling. Along with such services, two other main forms of services may be offered: transitional and ancillary services (SAMHSA, 2009). Ancillary services are those that give added support to clients, such as substance abuse education, case management, and social services assistance. Transitional services are those that aid in an individual

* Corresponding author. Institute for Prevention of Addictions, Andrews University, Berrien Springs, MI 49104-0211, USA. Tel.: +1 269 471 3558; fax: +1 269 471 6611.

E-mail address: mcbride@andrews.edu (D.C. McBride).

successfully transitioning out of treatment and back into the community. This includes services such as discharge planning and aftercare or continuing care. Research has indicated that ancillary services are related to treatment program retention (Krupski, Campbell, Joesch, Lucenko, & Roy-Byrne, 2009) and long-term outcomes (Comiskey & Stapleton, 2010). Asche and Harrison (2002) found generally that those with higher substance abuse problem severity were more likely to need and receive ancillary services. Transitional/ancillary services have been shown to be particularly important for successful outcomes in specific populations such as drug-abusing females (Morgenstern, Hogue, Dauber, Dasaro, & McKay, 2008; Lewandowski & Hill, 2009) and female criminal offenders (Oser, Knudsen, Staton-Tindall, & Leukefeld, 2009), as well as criminal justice populations in general (Taxman, Byrne, & Thanner, 2002). The National Institute on Drug Abuse (NIDA, 2009) specifically noted that a key principle of effective drug addiction treatment is to include ancillary/transitional services as a core part of treatment services.

In its 2006 Report entitled “Improving the Quality of Health Care for Mental and Substance-Use Conditions,” the IOM made a number of specific recommendations noting the importance of transitional/ancillary services that directly link treatment services with important community resources. For example, Recommendation 3-1 called for “maintaining effective, formal linkages with community resources...” (p. 12). The IOM report went on to note that mental health and SAT providers need to “coordinate their services and education agencies, such as schools, housing and vocational rehabilitations agencies, and providers of services for older adults” (p. 17). Community service linkages have shown themselves to be a core part of programs that successfully monitor proven treatment outcomes (Rush, Corea, & Martin, 2009). One method of ensuring service coordination is the ancillary service of case management. In 1998, SAMHSA issued a Treatment Improvement Protocol outlining core elements of effective case management in an attempt to move the SAT field toward implementing coordinating services (Cook et al., 1998). Comprehensive case management has been shown to be an important SAT component (Siegal et al., 1996), and clients with such case management have been found to receive significantly more transitional/ancillary services and to have significantly higher abstinence rates (Morgenstern et al., 2009). Overall, research and IOM/NIDA policy positions make the case for the importance of SAT transitional/ancillary services.

1.2. Medicaid payment acceptance for SAT

As Aday, Begley, Lairson, and Balkrishnan (2004) have argued, access is a key health care system goal. Medicaid has played a major and increasing role in SAT service access as private insurance involvement has decreased (Mark et al., 2007). A recent study illustrated that Medicaid is more likely to be accepted by outpatient SAT programs if the program is

publicly funded (e.g., nonprofit) and located in a state that allows SAT coverage under its Medicaid policy (Terry-McElrath, Chriqui, & McBride, 2011). State policy allowing Medicaid SAT coverage has been shown to strongly and positively relate to both SAT admission rates (Deck & Gabriel, 2011; Deck, Wiitala, & Laws, 2006) and pharmacotherapy access (Heinrich & Hill, 2008; Ducharme & Abraham, 2008). However, no research has examined if treatment program-level acceptance of Medicaid for SAT significantly relates to the accessibility of transitional/ancillary SAT services.

1.3. Treatment program ownership

Health care facility ownership varies significantly across the United States. The federal government has a long history of providing health care through government-owned hospitals for veterans and Native Americans and through the Public Health Service (Jaffe, 2009). In addition, a variety of state, county, and city hospitals have provided care for the poor. The private nonprofit sector also has had a long tradition of providing hospital care (see Powell & Steinberg, 2006). However, with the increasing availability of capital to build hospitals under the Hill-Burton Act of 1947¹ and the emergence of a cost pass through reimbursement system where hospitals and physicians are able to obtain reimbursement from public and private insurance based on their documented costs (Morey & Dittman, 1996), the private for-profit sector also has become a significant provider of health care in recent decades. There has been considerable debate about differences in the quality of services offered and treatment outcomes between for-profit systems (that must please investors and return profit) compared with private nonprofit providers (that have often been perceived to focus on care quality). An important study by Sloan, Picone, Taylor, and Chou (2001) argued that there were no significant differences in survival or many other quality of life indicators by hospital ownership. However, other researchers have argued that the for-profit sector is less likely to serve the poor (Crampton et al., 2004) and that, overall, the nonprofit sector delivers higher quality care for Medicaid and Medicare patients (Aaronson, Zinn, & Rosko, 1994; Amirkhanyan, Kim, & Lambright, 2008). Schlesinger, Gray and Bradley (1996) found that the nonprofit sector was more likely than the for-profit sector to be involved in community prevention, education, and linkages. In a major attempt to analyze two decades of studies examining quality differences between for-profit and nonprofit health care systems, Roseanau and Linder (2003) concluded that nonprofits were superior to for-profit health care facilities in providing charity care, service access and quality, and cost-efficiency.

Although much of the discussion of the comparative impact of organizational ownership has focused on health

¹ Public Law 725, Hospital Survey and Construction Act.

care systems in general, SAT programs also have a variety of ownership models. Wheeler and Nahra (2000) found that for-profit SAT facilities were less likely to serve poorer clients. The nonprofit sector appears to be an important part of increasing access to SAT for the poor and providing the extent of treatment services required by vulnerable populations (Wheeler, Fadel, & D'Aunno, 1992; Nahra, Alexander, & Pollack, 2009). Type of ownership has also been found to be significantly related to the offering of ancillary services in SAT programs. Researchers have found that for-profit SAT facilities have been significantly less likely to offer key ancillary/transitional services than nonprofits (Olmstead & Sindelar, 2004; Alexander, Wells, Jiang, & Pollack, 2008; Ducharme, Mello, Roman, Knudsen, & Johnson, 2007). However, it is not known if or how program ownership may interact with Medicaid acceptance relative to the likelihood of transitional/ancillary service provision. The analyses that follow examine the possible interplay between type of SAT program ownership, Medicaid acceptance, and ancillary/transitional service provision.

2. Materials and methods

2.1. Data sources

The primary data source for this study was SAMHSA's National Survey of Substance Abuse Treatment Services (N-SSATS) for the years 2000 and 2002 through 2006 (N-SSATS were not conducted in 2001). Each year, an average of 13,561 programs was surveyed. Publically available N-SSATS data do not contain program identifiers; thus, it is not possible to track individual programs over time. Given this, the current analysis refers to program "cases." Use of the 2000 and 2002–2006 data included a total of 81,367 cases over the 6-year period. For purposes of this study, the sample was limited to cases that (a) had a primary focus on SAT (62%); (b) provided regular and/or intensive outpatient treatment to adults aged 18 years or more (86%); (c) were located in the 50 states and the District of Columbia (99%); and (d) were not affiliated with hospitals (86%). This reduced the total number of cases to 28,771. Of these, an additional 1,802 (6%) cases were excluded because of missing data on predictor or control measures used (described below). Thus, the analytical sample was 26,969 cases. The sample was set up as stacked cross sections because, as noted previously, public-use N-SSATS files do not enable program-level linkages across data file years.

2.1.1. Outcome variables

Eight dichotomous any/none N-S SATS transitional and ancillary service variables were used as outcomes: case management, child care assistance, discharge planning, employment assistance, housing assistance, outcome follow-up, social service linkages, and transportation assistance.

2.1.2. Predictor variables

The two primary predictors were also N-SSATS measures: program acceptance of Medicaid payment for SAT services (nonaccepting vs. accepting) and program ownership type (private for-profit, private nonprofit, and government).

2.1.3. Control variables

A series of dichotomous year variables were included to account for time trends. In addition, a variety of program- and state-level control variables were included. Five N-SSATS program-level control variables were included: (a) payment assistance provision (no vs. yes); (b) existence of managed care arrangements or contracts (no vs. yes); (c) any earmark reception (i.e., federal, state, county, or local government funds for SAT programs; no vs. yes); (d) provision of methadone treatment (no vs. yes); and (e) past-year client count quartiles of regular and intensive outpatient patients (0–16, 17–44, 45–99, and 100+).

State-level controls included aggregated SAT client characteristics, state-level policy/expenditure variables, and demographic and socioeconomic characteristics. State-level adult regular/intensive outpatient client admissions data were obtained from the Treatment Episode Data Set (TEDS), a companion data system to N-SSATS consisting of SAT admissions to programs across the United States (SAMHSA, 2010). The following SAT admissions TEDS measures were aggregated to the state level: percentage non-Hispanic African American, percentage Hispanic, percentage female, percentage married, percentage with some college education, percentage homeless (recoded into deciles), percentage with multiple drug problems, percentage reporting daily drug use, percentage with a history of prior SAT admissions, and percentage with co-occurring psychiatric disorders. Missing data on TEDS-based state-level aggregate variables were handled in two ways depending on whether the states had collected data on these variables on one or more years. For states that had collected data on a given variable during some but not all years, missing data were replaced by the mean values over available years of the respective variables on a state-by-state basis. Some states opted not to collect data on specific variables during all study years: co-occurring psychiatric disorders ($n = 11$), marital status ($n = 4$), living arrangement ($n = 2$), frequency of primary drug use ($n = 2$), history of prior treatment ($n = 1$), and educational attainment ($n = 1$). In these cases, missing data were replaced with the national average on the specific variable under consideration for each specific year.

State-level SAT policy/expenditure-related variables included three measures. First, a four-level variable reflecting state outpatient SAT program authorization type based on 2004 state laws (Chriqui, Terry-McElrath, McBride, Edison, & Vander Waal, 2007) coded as follows: 1 = licensure only, 2 = certification/accreditation only, 3 = licensure and deemed status, and 4 = certification/accreditation and deemed status. This variable accounts for recent research suggesting that a combination of state treatment

program authorization type (i.e., licensure vs. certification/accreditation) combined with state recognition of “deemed status” (i.e., state recognition of accreditation by national accrediting bodies such as the Joint Commission or the Commission on the Accreditation of Rehabilitation Facilities [CARF] in lieu of state authorization) is related to differential service offerings (Chriqui et al., 2007). Second, outpatient

SAT Medicaid policy eligibility criteria (no Medicaid coverage; coverage for categorically needy only; coverage for medically needy; coverage for both categorically and medically needy) were based on primary legal research using data from the Kaiser Family Foundation’s Online Database of Medicaid Benefits and through verification efforts with state Medicaid offices. Third, per capita SAT expenditures

Table 1
Sample characteristics

Characteristic	<i>M</i>	<i>SE</i>	Range
Program-level outcomes: transitional/ancillary services			
Case management (<i>n</i> = 26,901)	0.674	0.018	0–1
Child care (<i>n</i> = 26,757)	0.109	0.013	0–1
Discharge plan (<i>n</i> = 26,931)	0.843	0.011	0–1
Employment assistance (<i>n</i> = 26,754)	0.335	0.031	0–1
Housing assistance (<i>n</i> = 26,742)	0.356	0.019	0–1
Outcome follow-up (<i>n</i> = 26,853)	0.541	0.029	0–1
Social service linkages (<i>n</i> = 26,803)	0.446	0.029	0–1
Transportation assistance (<i>n</i> = 26,810)	0.309	0.020	0–1
Program-level independent predictors			
Medicaid payment acceptance for SAT	0.484	0.054	0–1
Program ownership			
Private for-profit	0.344	0.028	0–1
Private nonprofit	0.540	0.027	0–1
Government	0.115	0.014	0–1
Control measures			
Program-level measures			
Managed care arrangement	0.480	0.046	0–1
Outpatient client count quartiles			
0–16	0.249	0.019	0–1
17–44	0.248	0.013	0–1
45–99	0.246	0.010	0–1
100+	0.257	0.019	0–1
Payment assistance	0.802	0.017	0–1
Provides methadone maintenance	0.103	0.008	0–1
Receives earmarks	0.659	0.023	0–1
State-level measures			
Outpatient SAT admission characteristics (in percentages)			
Non-Hispanic African American	21.35	7.30	0.53–86.42
Hispanic	13.30	7.24	0.00–49.88
Female	33.98	2.71	22.22–49.72
Married	20.63	2.71	9.08–32.49
Homeless (in 10s)	5.17	1.72	1.00–10.00
Some college education	20.77	3.02	8.13–83.41
Multiple drug problems	54.28	5.73	0.00–75.44
Using drugs daily	24.99	6.45	8.72–81.37
Psychiatric comorbidity	21.53	9.29	0.00–100.00
Prior SAT history	50.23	10.36	0.00–99.95
Outpatient SAT program authorization policy requirements			
Licensure only	0.347	0.097	0–1
Certification/accreditation only	0.287	0.128	0–1
Licensure and deemed status	0.129	0.060	0–1
Certification/accreditation and deemed status	0.236	0.077	0–1
Outpatient SAT Medicaid policy eligibility criteria			
No coverage	0.207	0.070	0–1
Categorically needy only or medically needy only	0.255	0.081	0–1
Both categorically and medically needy	0.538	0.107	0–1
Per capita SAT expenditures (in dollars)	2.36	0.00	2.03–3.39
State population characteristics			
Median household income	\$46,159.77	39.63	\$29,052–\$65,144
Percentage unemployed	5.21	0.01	2.30–8.10

Note. Data for Years 2000 and 2002–2006. For all variables other than program service outcomes, *n* = 26,969. Numbers for program service outcomes reported separately.

Table 2
Multivariate models examining transitional/ancillary service accessibility by program acceptance of Medicaid payment for SAT for Years 2000 and 2002–2006

Transitional/ancillary service	Percentage of programs offering service by program Medicaid SAT payment acceptance		OR	95% CI	<i>p</i>
	% without	% with			
Case management	62.0	73.3	1.31	1.06–1.63	<.05
Child care assistance	6.3	15.7	2.00	1.49–2.68	<.001
Discharge plan	79.2	89.7	1.47	1.14–1.89	<.01
Employment assistance	28.6	38.6	1.08	0.86–1.36	
Housing assistance	28.8	43.0	1.38	1.05–1.81	<.05
Outcome follow-up	49.9	58.6	1.15	0.98–1.34	<.10
Social service linkages	29.9	60.2	2.29	1.64–3.20	<.001
Transportation assistance	21.8	40.6	1.85	1.38–2.47	<.001

Note. Number of cases per service as reported in Table 1. All models controlled for state-level clustering effects, year, and program- and state-level controls as listed in Table 1. OR = odds ratio; CI = confidence interval.

for each federal fiscal year of interest were computed by obtaining annual state-level allocations for the Substance Abuse Prevention and Treatment Block Grant from SAMHSA's annual Congressional Budget Justifications and then dividing by each state's total population (the nonnormal distribution of the resulting measure was addressed by using the square root transformation).

State-level demographic and socioeconomic controls included yearly median household income from the U.S. Census Bureau and yearly unemployment rates from the U.S. Bureau of Labor Statistics.

2.2. Statistical analysis

All data were analyzed using *svy* commands in Stata v.11 to account for state clustering effects. Multivariate logistic regression models were run examining the accessibility of each transitional/ancillary service by (a) program acceptance of Medicaid for SAT and (b) program ownership (private for-profit, private nonprofit, or government entities), controlling for other program- and state-level measures. Additional multivariate logistic regression models then examined relationships between transitional/ancillary service

accessibility and program Medicaid acceptance within categories of program ownership, controlling for other program- and state-level measures.

3. Results

Descriptive statistics for all outcomes can be found in Table 1. Discharge planning was the most commonly accessible transitional/ancillary service among these programs that reported SAT as their primary focus (84% of cases reported this service), followed by case management (67%). Roughly half of the cases reported outcome follow-up (54%) and social service linkages (45%). Only approximately one third of cases reported having employment, housing, or transportation assistance (34%, 36%, and 31%, respectively), whereas child care was rarely accessible (11%). Approximately half (48%) of all cases reported accepting Medicaid payment for SAT services. Just over half of cases reported private nonprofit ownership (54%), followed by private for-profit (34%) and government ownership (12%). Looking at Medicaid acceptance for SAT services within ownership categories, approximately one quarter of private for-profit cases reported accepting

Table 3
Multivariate models examining transitional/ancillary service accessibility by type of program ownership for Years 2000 and 2002–2006

Transitional/ancillary service	Private for-profit	Private nonprofit	Government	Private nonprofit vs. private for-profit ^a			Government vs. private for-profit ^b			Private nonprofit vs. government ^c		
	%	%	%	OR	95% CI	<i>p</i>	OR	95% CI	<i>p</i>	OR	95% CI	<i>p</i>
Case management	56.2	73.4	72.9	1.51	1.34–1.70	<.001	1.72	1.21–2.46	<.01	1.11	0.83–1.49	
Child care assistance	2.2	15.4	15.3	3.75	2.69–5.24	<.001	3.61	1.71–7.64	<.01	1.07	0.67–1.70	
Discharge plan	78.1	87.9	86.0	1.33	1.11–1.59	<.01	1.27	0.86–1.87		1.15	0.95–1.40	
Employment assistance	22.2	40.9	32.2	1.73	1.52–1.97	<.001	1.11	0.79–1.55		1.55	1.17–2.06	<.01
Housing assistance	23.7	43.4	35.0	1.84	1.48–2.30	<.001	1.34	0.84–2.12		1.43	1.11–1.85	<.01
Outcome follow-up	44.6	60.2	53.8	1.47	1.25–1.72	<.001	1.17	0.87–1.57		1.36	1.07–1.73	<.05
Social service linkages	26.8	54.4	51.6	1.87	1.65–2.12	<.001	1.69	1.13–2.53	<.05	1.11	0.85–1.43	
Transportation assistance	15.2	37.6	46.2	1.93	1.50–2.49	<.001	2.95	1.48–5.87	<.01	0.69	0.50–0.95	<.05

Note. All models controlled for state-level clustering effects, year, and program- and state-level controls as listed in Table 1. OR = odds ratio; CI = confidence interval.

^a Multivariate model *ns* ranged from 23,656 to 23,827 cases.

^b Multivariate model *ns* ranged from 12,307 to 12,377 cases.

^c Multivariate model *ns* ranged from 17,521 to 17,658 cases.

Medicaid for SAT (27%), whereas more than half of both private nonprofit and government cases reported Medicaid acceptance (60% and 59%, respectively; data not shown).

3.1. Medicaid acceptance and ancillary/transitional service provision

The direct effect relationships of acceptance of Medicaid payment for SAT services on transitional/ancillary service accessibility are shown in Table 2. Acceptance of Medicaid for SAT was related to significantly higher odds of accessibility for six of the eight transitional/ancillary services examined: case management (73% of cases had this service if Medicaid was accepted for SAT vs. 62% of cases if Medicaid was not accepted), child care assistance (16% vs. 6%), discharge planning (90% vs. 79%), housing assistance (43% vs. 29%), social service linkages (60% vs. 30%), and transportation assistance (41% vs. 22%). Accessibility of employment assistance and outcome follow-up also were higher (but not significantly so) for cases with Medicaid acceptance.

3.2. Program ownership and ancillary/transitional service provision

Table 3 shows results of multivariate models examining the relationships between service accessibility and program ownership. Private for-profit ownership was associated with significantly lower accessibility for all services examined compared with private nonprofit ownership. For example, 56% of private for-profit cases provided case management, compared with 73% of private nonprofit cases. Private for-profit ownership was also associated with lower accessibility of four of the eight services compared with government ownership (case management, child care assistance, social service linkages, and transportation assistance). Differences between private nonprofit and government ownership were

mixed. Employment assistance, housing assistance, and outcome follow-up were significantly more likely to be accessible with private nonprofit ownership than with government ownership. However, transportation assistance was more likely to be accessible with government ownership than with nonprofit ownership.

3.3. Medicaid acceptance, program ownership, and ancillary/transitional service provision

Table 4 presents the results for multivariate models focused on the effect of Medicaid payment acceptance for SAT within program ownership type. Medicaid acceptance for SAT services was associated with significantly higher odds of accessibility for many of the services examined in both private nonprofit and for-profit environments. Child care services, discharge planning, social service linkages, and transportation assistance were significantly more likely to be accessible to clients in programs with private nonprofit and private for-profit ownership if Medicaid was accepted for SAT. Medicaid acceptance was associated with higher odds of housing assistance in private for-profit programs and with higher odds of case management within private nonprofit programs. Within government-owned programs, Medicaid acceptance for SAT services was not significantly associated with transitional/ancillary service accessibility.

A final set of multivariate models was run to investigate to what degree program ownership still retained the previously observed significant relationships with service accessibility among only cases that accepted Medicaid for SAT. Results (data not shown) indicated that ownership retained a significant relationship with the likelihood of service provision; however, the magnitude of the differences was somewhat reduced. Private nonprofit cases continued to offer significantly more transitional and ancillary services. However, differences were no longer significant between the following: (a) private nonprofit and for-profit cases and the

Table 4

Multivariate models examining the effect of program acceptance of Medicaid payment for SAT on relationships between transitional/ancillary service accessibility and program ownership for Years 2000 and 2002–2006

Transitional/ancillary service	Private for-profit ^a			Private nonprofit ^b			Government ^c		
	OR	95% CI	<i>p</i>	OR	95% CI	<i>p</i>	OR	95% CI	<i>p</i>
Case management	1.18	0.89–1.58		1.48	1.20–1.83	<.001	0.85	0.60–1.22	
Child care services	2.77	1.72–4.45	<.001	2.09	1.54–2.84	<.001	1.17	0.79–1.74	
Discharge planning	1.37	1.08–1.73	<.01	1.58	1.21–2.06	<.01	1.75	0.97–3.15	<.10
Employment assistance	1.36	0.92–2.01		1.00	0.78–1.28		0.93	0.71–1.21	
Housing assistance	1.66	1.23–2.24	<.01	1.21	0.96–1.51		1.13	0.67–1.90	
Outcome follow-up	1.20	0.94–1.53		1.11	0.92–1.34		1.09	0.88–1.35	
Social service linkages	3.09	2.25–4.26	<.001	1.96	1.48–2.59	<.001	2.01	0.95–4.28	<.10
Transportation assistance	2.61	1.90–3.58	<.001	1.67	1.32–2.10	<.001	1.23	0.81–1.87	

Note. Multivariate logistic regressions were conducted for each ownership type separately. The reference group for all models were programs that did not accept Medicaid payment for SAT services. All models controlled for state-level clustering effects, year, and program- and state-level controls as listed in Table 1. OR = odds ratio; CI = confidence interval.

^a Multivariate model *ns* ranged from 9,221 to 9,273 cases.

^b Multivariate model *ns* ranged from 14,435 to 14,554 cases.

^c Multivariate model *ns* ranged from 3,086 to 3,104 cases.

likelihood of offering discharge planning or outcome follow-up; (b) private nonprofit and government cases and the likelihood of offering outcome follow-up or transportation assistance; and (c) private for-profit and government cases and the likelihood of offering case management, social services linkages, or transportation assistance.

4. Discussion

An examination of the data showed that three of the ancillary/transitional services (case management, discharge planning, and outcome follow-up) were offered by most of the cases studied. However, services that may be of particular importance to women, the poor, and those most in need of services, including child care, employment, housing assistance, transportation assistance, and social service linkages, were not offered by most SAT cases. Analysis showed that program acceptance of Medicaid for SAT services was significantly related to offering most of the ancillary/transitional services examined. The greatest differences between cases that accepted Medicaid for SAT and those that did not were for social service linkages, child care assistance, and transportation assistance—all services that may be of most need to women, the poor, and those with the most severe problems. Only 30% of cases that did not accept Medicaid offered social service linkages compared with 60% of those who did accept Medicaid. Social service linkages focus on meeting additional, non-SAT health and human service needs of drug treatment populations and are core to the IOM (2006) recommendations and NIDA's (2009) definition of best practices for SAT programs. The poor and minorities often have limited access to child care and transportation. Such limited access to these services has been found to be significantly related to problems with SAT service access (Comiskey & Stapleton, 2010). The data suggest that SAT cases that accept Medicaid significantly improve treatment access by being more likely to offer these crucial services. Regardless of ownership, accepting Medicaid for SAT is related to a significant increase in the provision of most ancillary/transitional services and may especially be important for both the poor in general and women in particular.

As was noted in the Introduction, there has been considerable debate in the health services literature on quality and access differences between for-profit and nonprofit ownership (Rosenau & Linder, 2003). The data in the current study show consistent and significant differences between nonprofit and for-profit SAT cases. SAT cases that were owned by private nonprofit organizations were significantly more likely than cases owned by private for-profit organizations to provide each of the eight ancillary/transitional services examined. Such results clearly suggest that the nonprofit sector is much more likely to be consistent with IOM (2006) recommendations to have community linkages that provide wraparound services found to relate to improved SAT outcomes. The magnitude

of the differences between nonprofit and for-profit ownership of the various services was stark: from just over 30% greater case management provision to two times greater provision of social service linkages and transportation assistance to seven times greater provision of child care assistance. Private nonprofit cases also were significantly more likely than cases with government ownership to offer employment and housing assistance. From the perspective put forth by Aday et al. (2004), the nonprofit sector appears to be playing a major role in improving SAT access for vulnerable populations, perhaps especially so for economically disadvantaged women. These findings are consistent with findings by Berkman, Roussel, Wechsberg, and Diesenhuis (2001), which showed that nonprofits were more likely than for-profit SAT programs to meet the special needs of women such as child care. However—of key importance—the results of this study indicate that acceptance of Medicaid for SAT resulted in cases with for-profit ownership looking more like the nonprofit sector. For both for-profits and nonprofits, accepting Medicaid was related to significant increases in the odds of providing social service linkages, discharge planning, child care services, and transportation assistance. The data suggest that from a policy perspective, Medicaid may play a crucial role in offering ancillary/transitional services consistent with IOM recommendations and NIDA definitions of best practices that help meet the needs of vulnerable populations.

Although it may be speculative, it is important to consider what it is about accepting Medicaid that relates to these significant differences. Analyses by (Terry-McElrath et al., 2011, p. 3) concluded that "...Medicaid increases substance abuse treatment access..." The study found that programs that accepted Medicaid were significantly more likely to be accredited by the CARF. An examination of the criteria for accreditation by CARF includes continuity of care that involves social service linkages, discharge planning, and the other ancillary/transitional services examined in this article (Meisenheimer, 1997; Chriqui et al., 2007). Accepting Medicaid may well be a part of an overall organizational commitment, regardless of type of ownership, to offering a wide range of evidence-based services that include ancillary and transitional services. Importantly, research indicates that only about half of states allowed Medicaid to pay for outpatient SAT services as part of Medicaid benefit offerings (Terry-McElrath et al., 2011). The data presented in this article suggest that state implementation of Medicaid policies allowing payment for SAT services may play a major role in improving the quality of treatment through facilitating core ancillary/transitional services and improving access for vulnerable populations.

However, given state budget constraints, there is major concern regarding the ability of Medicaid to adequately fund SAT services. The Patient Protection and Affordable Care Act of 2010² will likely result in a considerable expansion of

² 111 HR 3590; PI 111-148.

Medicaid. Holahan and Headen (2010) estimate up to almost 16 million new enrollees in the Medicaid program by 2019. Further, Buck (2011) reminds the field that the Act only provides Medicaid coverage for outpatient services and very likely will result in a decrease in needed inpatient services for those who require higher levels of care. Buck further argues that the expansion of Medicaid may result in states using managed care for outpatient Medicaid SAT and that managed care has not advanced quality SAT services (Knopf, 2011). Caring for substance-abusing individuals involves the reality that such individuals often require high levels of care. Clark, Samnaliev, and McGovern (2009) have documented that substance-abusing individuals on Medicaid have significantly higher health care costs than Medicaid beneficiaries who do not have substance abuse problems.

The results from this article indicate that Medicaid acceptance is related to increased likelihood of best-practices transitional/ancillary SAT service provision, which in turn has been linked with improved SAT retention and short- and long-term treatment outcomes. The analyses further suggest that it may be important for the SAT field to be actively engaged in the implementation of the Patient Affordability Act to ensure that Medicaid service expansion enhances and does not diminish the quality of ancillary/transitional services currently associated with program acceptance of Medicaid.

These findings should be viewed within their limitations. N-SSATS data are cross sectional, and findings should not be construed to indicate causality. Further, because N-SSATS' publicly available data do not include unique facility identifiers, individual client data (such as that from the public-use TEDS) cannot be matched with N-SSATS data to investigate if Medicaid acceptance for SAT services relates to improved treatment outcomes or the degree to which the provision of transitional/ancillary services relates to actual use of such services. Future analysis using data sets that directly capture measures of program accreditation, service provision frequency, and individual treatment outcomes, as well as Medicaid payment acceptance for SAT, are needed to examine direct testing of a mediator hypothesis connected with Medicaid payment acceptance. Such limitations notwithstanding, the current analyses allow an examination of how SAT Medicaid acceptance and program ownership relate to SAT program provision of transitional/ancillary services using national data.

In conclusion, the analyses undertaken for this article were within the context of evolving drug policy that has focused increasingly on access to comprehensive quality services. The analytical model examined two major issues: (a) the relationship between accepting Medicaid and the provision of key ancillary/transitional services and (b) the relationship between type of ownership and offering these services. Results showed that ownership did make a significant difference in offering key ancillary/transitional services, supporting concerns about the ability and/or interest of the for-profit sector to meet the needs of those

most in need of these services. In the last century, U.S. and state drug policy have evolved through a complex series of laws, regulations, and practices. One of the major policy initiatives in the last decade has been a focus on treatment service quality. A core part of such quality is the accessibility of transitional/ancillary services. Perhaps the most significant finding reported here is that acceptance of Medicaid for SAT services on the part of for-profit programs relates to these programs behaving more like the nonprofit sector in that they are more likely to offer core ancillary/transitional services. The data may suggest that Medicaid can play a major role in ensuring the offering of needed ancillary/transitional services and suggest the importance of federal and state policy makers working with all program ownership types to reduce barriers to Medicaid acceptance and develop policies that facilitate acceptance. These endeavors may be an important part of the implementation of health care reform and the implementation of IOM/NIDA policy recommendations.

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