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Predictors of Change in the Provision of Services within Outpatient Substance Abuse Treatment Programs

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Abstract

The current study examines patterns and predictors of change over a 2-year period in whether outpatient core and wraparound services are offered onsite or by referral. A sample of 69 outpatient non-methadone programs from four US regions provided organizational information across a 2-year period. Services provided within outpatient substance abuse programs were relatively stable over time, particularly with regard to core therapeutic services. The use of referral networks to provide a broader array of wraparound services increased, with programs adding services that reflect recent national initiatives toward program improvement, namely pharmacotherapy, medical diagnosis and treatment, and psychiatric services. Organizational factors such as parent affiliation, counselor caseload, staff size, budget change, and proportion of dually-diagnosed clients were related to change in core and wraparound services. Dynamic organizational factors, such as staff size and budgets can serve as barriers to and/or facilitate change in service provision over time and have managerial and policy implications.

Keywords

Substance abuse treatment; core services; wraparound services; organizational structure

Because substance abuse represents a significant public health issue,[1] the adequate provision of services to address the emotional and physical needs of clients is paramount. Guidelines constituting best practices for substance abuse treatment promote a comprehensive approach that includes both “core” services related directly to diagnosis and treatment (e.g., assessment, counseling, treatment planning) and “wraparound” services aimed at addressing co-occurring problems and increasing treatment access and retention (e.g., medical, child care, transportation).[2–4] Treatment programs that offer wraparound in addition to core services are more effective in engaging and retaining clients,[5–7] achieving desired outcomes,[7–10] and producing sustained change.[11] Clients receiving wraparound services have better outcomes than those who receive only core services,[7, 9, 12, 13] and clients corroborate this finding, reporting that counseling alone is not sufficient in addressing their needs.[14]

While there is general consensus among providers about what services should comprise the treatment experience, there exists considerable variation in the number and type of services

offered and method of delivery across agencies. Most core services are provided onsite, however compared to core services, a higher proportion of wraparound services are provided by referral.[15] While referring out may be the only available option for some agencies, doing so can hamper client access because clients are less likely to utilize services when they are provided off site.[16] Clients must arrange for their own transportation to off-site services or rely on transportation provided by their primary treatment agency.[17] Accessing services through multiple agencies can be challenging for any client attempting to overcome an addiction, but particularly so for those who also suffer from severe mental illness.[18] Nevertheless, offering services by referral is better than offering nothing to address a client's need for ancillary services.

Several studies suggest that provision of core and wraparound services in general has declined over the past decades,[14, 19, 20] but that provision of select services such as medical exams and screenings has increased.[21] Declines in services are often associated with decreases in funding/revenue sources and increased pressures to limit length of stay in treatment in order to contain costs,[14] whereas increases may reflect program management's attempts at meeting the needs of targeted populations[22] or improving service quality.[23]

Reasons for the wide variation can also be attributed in part to organizational factors that can limit or facilitate access to services.23, 24 Accredited programs, for instance, offer more services in general25 and more physical exams and medical care in particular.[21] Likewise, programs in states with ideal standards (program certification or accreditation rather than minimal licensure standards) are more likely to offer wraparound services.[26] Census and budgetary factors are also important determinants of service offerings. Due to financial constraints and budgetary reductions, agencies may not have the resources needed to offer and manage a truly wraparound treatment approach.20, 27 Increasing revenue by expanding client census may facilitate program efficiency, enabling programs to offer increased services. As organizations grow larger, they tend to increase internal specialization,28 enabling them to broaden onsite offerings, albeit in larger groups with potentially less individual attention. A likely negative bi-product of census growth can include larger caseloads – a factor associated with less service provision.[25] While larger staff size is associated with greater service provision,[24] cost-effective alternatives to onsite provision, such as the outsourcing of specialized services, are sometimes sought by programs with smaller staff size or restricted financial resources.[29]

Another potentially important factor includes client composition. Programs aimed at treating special populations, such as dual-diagnosis and female clients, strive to provide services that meet their unique needs.[30, 31] While in general, more options are available within outpatient drug-free programs for female-specific and higher problem severity client populations,[22] offerings for special populations have declined in the past decade.[19]

The purpose of this study is to examine patterns and correlates of change over a 2-year period in whether outpatient core and wraparound services are offered onsite or by referral. Using a longitudinal design that included outpatient non-methadone programs from four US regions, change in onsite and referral offerings of core and wraparound services was examined, with particular emphasis on the role of organizational factors on change in services. Analyses address (a) the extent to which outpatient service offerings changed over time, (b) if growth has occurred, the degree to which programs incorporate more services into onsite offerings versus referral networks, (c) the specific areas in which changes occur, and (d) whether organizational structure factors that impact service provision also predict change. We expect organizational structure to be primarily stable, but with some notable exceptions, including accreditation, budget, and census. These potentially dynamic aspects of an organization in turn are expected to influence change in service offerings. Specifically, increased pressures/opportunities prompted by governance boards (e.g., accreditation), funding sources (budget),

and client needs (e.g., increased census, proportion of dual-diagnosis clients) will produce changes in the types of services offered and methods through which they are delivered.

Method

Sample

The sample consists of 69 outpatient substance abuse treatment programs drawn from the Treatment Costs and Organizational Monitoring project (TCOM).[32, 33] Aims of the 5-year TCOM project included (1) developing and demonstrating the utility of a set of field instruments for assessing organization functioning and resources for use within substance abuse treatment programs, (2) monitoring organizational changes over time and relating them to client-level indicators of program effectiveness, (3) training program directors on how to use assessment information for improving program management and functioning, and (4) studying the process of program change and the long-range implementation of these new assessment technologies. All programs provided organizational structure data at two points in time: at the start of the project (in late 2004/early 2005, depending on the region) and again two years later (in 2006/2007). Programs were located in 9 states: Florida, Idaho, Illinois, Louisiana, Ohio, Oregon, Texas, Washington, and Wisconsin, and provided outpatient drug-free (ODF) treatment for adults. Four Addiction Technology Transfer Centers (ATTCs; Southern Coast ATTC, Great Lakes ATTC, Gulf Coast ATTC, and Northwest Frontier ATTC) assisted with recruitment. A naturalistic quota sampling plan was developed to provide adequate coverage of various program types (e.g., regular, intensive) and geographic regions. All programs that met inclusion criteria were enlisted and were offered monetary compensation, staff training, and individualized feedback reports in exchange for providing organizational data. Research protocols were fully compliant with guidelines to protect human participants and were reviewed and approved by Texas Christian University's Institutional Review Board (IRB).

Procedure

Data collection procedures were designed to obtain a cross-sectional view of treatment program functioning annually over the course of multiple years. At each administration, a program director or clinical manager completed a Survey of Structure and Operations (SSO),[33] eliciting information about general program characteristics, clinical assessment and practices, services provided, staff and client characteristics, and recent program changes. The initial administration of the SSO took approximately 40 minutes to complete. Respondents were encouraged to refer to existing agency reports or databases (i.e., annual reports) to answer questions. Subsequent administrations utilized an abbreviated SSO and were completed in approximately 20 minutes.

Measures

Program structure—Parent organization affiliation was defined as belonging to a larger organization or agency of which the clinic or program is a part (with either shared or separate financial accounting practices). Primary catchment area was identified by the program director as rural, suburban, or urban and then collapsed into two categories representing rural versus non-rural. Ownership was assessed by asking whether the facility was operated by a (a) private for-profit, (b) private not-for-profit, or (c) public ownership (i.e., state, local, county, tribal, or federal).

Directors were also asked to indicate how many clients were referred from the criminal justice (CJ) system in the last year, and how many were dually diagnosed (DD; e.g., having both mental health and substance abuse problems) during that same period. Numbers were then divided by the total annual client count, resulting in a proportion of CJ-referred clients and a

proportion of DD clients. Proportions of female, Hispanic, and African American clients were calculated using the same method.

Caseload reflects the average number of clients per counselor (as reported by directors), and staff size was defined as the number of counseling staff (staff members with direct client contact, including counselors, social workers, case managers, clinical supervisors, and therapists) employed by the program at the time of the survey plus one director. Program directors were asked how many hours a "typical" client spends in case management per week. For this study, programs that responded with 30 minutes or more were coded as offering case management hours.

Accreditation—To assess accreditation, directors were asked to indicate whether the program was accredited by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) or the Commission on Accreditation of Rehabilitation Facilities (CARF). Programs that responded "yes" to one or both were coded as "accredited." Subsequent analyses indicated that none of the programs lost accreditation status between times 1 and 2. Therefore, programs were further categorized into one of three groups representing Accredited (at both time points), Gained Accreditation (not accredited at Time 1, but accredited at Time 2), or Not Accredited (at either time point).

Budget and census changes—At each time point, directors reported on census and budget changes using a 5-point Likert scale representing "rapidly decreasing," slowly decreasing," "stable," slowly increasing," or "rapidly increasing." Because the researchers were interested specifically in identifying how increases in census and budget related to changes in service provision, responses were categorized into two groups: "increasing" versus "stable or decreasing."

Services offered—Directors were provided with a list of services and asked to indicate whether or not each was (a) not provided, (b) provided by the program onsite, or (c) provided by referral only. The list of services measured is comparable to the National Survey of Substance Abuse Treatment Services (N-SSATS). [34] Core services included assessment (e.g., mental health assessment/diagnosis), therapeutic (e.g., individual and group counseling, relapse prevention groups), and drug monitoring (e.g., drug/alcohol urine screening). Wraparound services included health screening (e.g., HIV testing), transitional (e.g., discharge planning), medical (e.g., smoking cessation, detoxification), and specialized (e.g., family therapy, financial services).

Analytic Approach

To examine change over time in mean number of services provided within each subcategory, difference scores (Time 1 – Time 2) were compared to zero using the t-statistic. Changes in the proportion of programs providing specific services were examined using McNemar's chi square. These sets of analyses were run separately for onsite and referral offerings. Change in organizational structure was examined using chi square (for categorical measures) or t-statistics (for continuous measures).

To examine the potential impact of organizational characteristics on change in service offerings, two types of analyses were conducted. When independent variables were categorical, repeated-measures ANOVAs were used, with number of services offered at Times 1 and 2 as dependent measures. When measures were continuous (e.g., % CJ referral), correlations were run between the structure measure and change in number of services between Times 1 and 2 (i.e., difference scores). To reduce the likelihood of Type I error, the number of analyses was

reduced by examining change in four broad categories: core onsite, core by referral, wraparound onsite, and wraparound by referral.

Because no programs lost accreditation between Time 1 and Time 2 (and running a 2-way ANOVA would result in a mean of zero in the corresponding cell), the relationship between accreditation and service offerings was examined using one-way, repeated measures ANOVAs with three levels of accreditation (i.e., accredited at both times, gained accreditation, not accredited) as the independent variable. Furthermore, because budget and census are closely related (change in one often affects change in the other), the potential effects of budget and census change on services offered were examined simultaneously using two-way, repeated measures ANOVAs.

Results

Programs were generally private-non-profit (71%) and located in urban or suburban settings (29% rural). Twenty-five percent of directors described their programs as regular outpatient (less than 6 hours of structured programming per week), 16% as intensive (minimum of 2 hours of structured programming on 3 days per week), and 59% as mixed (both regular and intensive). Seventy-two percent were affiliated with a parent organization. Programs provided an average of 6.2 hours of counseling per client per week, with an average of 7.3 counseling staff and an average caseload of 28.7 clients. Counseling staff were predominantly female (64%), white (76%), in their mid-forties (M = 46, SD = 10.78), held a Bachelors (24%) or Masters Degree (40%), and had over 5 years of experience in drug abuse counseling (58%). On average, programs reported that 56% of clients were referred to treatment from criminal justice agencies, 56% were dually-diagnosed, 40% were female, 18% were African-American, and 9% were Hispanic. Means for the 69 programs with complete data (at Time 1 and Time 2) were compared to the 115 programs comprising the original TCOM sample and no significant differences were found for organizational structure or services measures. Programs with both time measures did, however, offer significantly more core services by referral at Time 1 ($M = .84$, $SD = 1.18$) than did programs that only completed the Time 1 assessment ($M = .48$, $SD = .66$).

Change in Service Offerings over Time

Means and standard deviations of services offered within each subcategory and delivery method across the 2-year period are presented in Table 1. T-statistics comparing mean difference scores to 0 revealed significant change in only one onsite service subcategory: drug monitoring ($t = 3.38$, $p < .05$). Closer examination of services that comprised this group indicated that 10 programs added blood alcohol testing, representing a 28% increase from 52.2 to 66.7% ($t = 4.0$, $p < .05$; see Table 2 for the proportion of programs providing specific services).

With regard to referrals, t-statistics revealed statistically significant change in three subcategories: therapeutic ($t = 2.13$, $p < .05$), transitional ($t = -2.14$, $p < .05$), and medical ($t = 3.07$, $p < .05$). Increases in therapeutic services were due primarily to 6 programs that added referral to 12-step/support (55% increase; $t = 2.25$, $p = .13$) and 9 programs that added referral to pharmacotherapy (53% increase; $t = 3.0$, $p = .08$). Medical services increased because 15 programs added referral to detoxification (125% increase; $t = 13.24$, $p < .001$), 13 added referral to medical diagnosis/testing/treatment (81% increase; $t = 7.35$, $p < .01$), and 11 added referral to psychiatric services (31% increase; $t = 4.84$, $p < .05$). Transitional services, however, decreased. Eight programs no longer referred clients for assistance obtaining social services (67% decrease; $t = 5.33$, $p < .05$) and 9 fewer programs referred clients to employment counseling/training (32% decrease; $t = 4.26$, $p < .05$).

Change in Organizational Structure

Results indicated that 10 programs gained accreditation between the two time points, representing an increase of 37%, from 39% to 54% ($\chi^2 = 10.0$, $p < .01$). The percentage of programs with a growing census decreased 31% over time, from 70% at Time 1 to 48% at Time 2 ($\chi^2 = 6.82$, $p < .01$). The percentage with an increasing budget also decreased (32%) from 45% at Time 1 to 31% at Time 2 ($\chi^2 = 5.0$, $p < .05$). There was no statistically significant change in parent affiliation, catchment area, ownership, director change, service approach, staff size, caseload, or case mix (i.e., percentages of CJ-referred, dual diagnosis, female, African American, or Hispanic clients).

Relationship between Organizational Measures and Change in Onsite and Referral Services

Core services onsite—Analyses indicated that programs with higher caseloads reported decreased core services onsite over time. Parent affiliation, rural catchment, ownership, staff size, accreditation, and increased budget or census was not related to changes in core services onsite. None of the client composition measures (i.e., percentages of CJ-referred, dual diagnosis, female, or minority clients) were related to change in core onsite services offered (see Table 3 for results of repeated measures ANOVAs and Table 4 for correlations).

Core services by referral—Results revealed a significant main effect for ownership ($F_{(1, 67)} = 19.5$, $p < .001$) and an interaction for parent affiliation ($F_{(1, 67)} = 8.3$, $p < .01$). Publicly-owned programs provided more core services by referral across both time points than did privately-owned programs. Programs with no parent affiliation added (on average) one additional core service by referral, from .4 to 1.5, while those affiliated with a parent remained stable (offering 1 on average). Programs with a larger staff size reported increased use of referral networks. Results also revealed a main effect for accreditation ($F_{(2,66)} = 3.1$, $p < .05$), with programs accredited at both time points providing more services than programs not accredited or those that gained accreditation by Time 2. Analyses of census and budget increases indicated a statistically significant interaction between census and time ($F_{(1, 64)} = 5.1$, $p < .05$), but no significant relationship for budget. Programs with increasing census increased services over time, whereas service offerings among those with decreasing/stable census did not change. Programs with a higher proportion of dual diagnosis clients increased their use of referral to core services over time. All other client composition measures, as well as rural catchment and caseload, were not significantly related to changes in core services by referral.

Wraparound services onsite—Results revealed a significant main effect for ownership ($F_{(1, 67)} = 7.1$, $p < .01$). Programs that were publicly owned provided fewer wraparound services onsite across both time points. Analyses of census and budget increases revealed a main effect for census ($F_{(1, 64)} = 4.4$, $p < .05$) as well as an interaction between budget and time ($F_{(1, 64)} = 4.2$, $p < .05$). Programs with an increasing census offered more services than programs with a decreasing/stable census, respectively). Programs reporting budget increases reported corresponding increases in onsite wraparound services, whereas programs with decreasing/stable budgets reported decreases. As with core by referral, programs with a higher proportion of dual diagnosis clients also increased onsite wraparound offerings over time. All other client composition measures were not statistically significant. Parent affiliation, rural catchment, staff size, caseload, and accreditation were not related to changes in wraparound services onsite.

Wraparound services by referral—Results were similar to those for core by referral, revealing a significant main effect for ownership ($F_{(1, 67)} = 7.4$, $p < .01$) and an interaction for parent affiliation ($F_{(1, 67)} = 4.2$, $p < .05$). Publicly-owned programs provided more wraparound services by referral at both time points than privately-owned programs. Programs with parent affiliation decreased service offerings by an average of .5 services (from 6.2 to 5.7) while those

not affiliated with a parent added an average of 3 wraparound services by referral (from 3.2 to 6.3). Consistent with findings for core onsite services, programs with a larger staff size reported increased use of referral networks for wraparound services. Results also revealed a main effect for accreditation ($F_{(2,66)} = 3.1$, $p < .05$), with programs accredited at both time points providing more services than programs not accredited or those that gained accreditation by Time 2. As with core by referral and wraparound onsite, programs with a higher proportion of dual diagnosis clients also increased wraparound offerings by referral over time. All other client composition measures, as well as rural catchment, caseload, and increased budget or census, were not related to changes in wraparound services by referral.

Discussion

Results of this study suggest that onsite service offerings were relatively stable during the 2-year period. A significant number of programs added drug monitoring (i.e., blood alcohol testing), but the number of all other onsite core and wraparound services remained unchanged. Furthermore, no declines in onsite services were observed. There was change, however, in services offered by referral. A significant number of programs began offering some core therapeutic services as well as wraparound medical services by referral. These increases consisted primarily of additions in 12-step support groups, pharmacotherapy, detoxification, medical diagnosis/testing/treatment, and psychiatric services. The only decrease occurred within wraparound transitional services. Several programs no longer referred clients for social service assistance or employment counseling/training.

These findings corroborate those of Friedmann and colleagues,21 documenting an increase in medical services, and suggesting that outpatient programs are indeed responding to federal and state initiatives to improve the quality of treatment and to link primary care to substance abuse treatment.[35] The types and number of services provided onsite were generally stable, and increases in use of referral networks were observed in several key service areas (i.e., therapeutic and medical). Furthermore, increases in referral offerings represent growth and were accompanied by similar onsite trends. For instance, 11 programs added psychiatric services through referral and 4 added psychiatric services onsite, representing expansion in that specific area for 22% of the sample. Most appear to be broadening service offerings through referral networks rather than utilizing existing staff and in-house financial resources.

As expected, organizations themselves were generally stable, although a sizable proportion (14%) attained accreditation during the 2-year period. Fluctuations in census and budget appear to be a common characteristic of treatment programs. The percentage of programs reporting growth in those areas however, decreased significantly, suggesting resource limitations.

Consistent with previous studies examining provision at a single point in time, in the present study both ownership and accreditation were associated with services averaged across both time points.21, 25, [36] Neither was related, however, to changes in service offerings, perhaps because public programs and those having achieved accreditation were already providing more services at Time 1. Programs that attained accreditation at Time 2 slightly, but not significantly, increased their referral offerings while accredited programs remained stable (core) or decreased slightly (wraparound). A noteworthy limitation is that the accreditation measure did not include an indication of whether or not programs were actively seeking accreditation. Anecdotal evidence indicates that some of the “unaccredited” programs were indeed actively working toward accreditation at the time of the survey. These trends suggest that the act of seeking accreditation may increase service offerings and highlight the potential influence of external monitoring agencies in facilitating program improvement.[37] These trends should be interpreted with caution until replicated in additional studies.

In this study, independently run programs (not affiliated with a parent organization) were more likely to add referral offerings over time, adding on average 1 core and 3 wraparound services by referral during the 2-year period. While programs affiliated with a larger parent organization or hospital generally provide more specialized services onsite[19–21, 38] because of greater access to internal resources,23 smaller independent programs appear to address gaps in onsite services by developing community linkages and referring clients out for specialized services. While these additional services may not be accessed by all clients, particularly when transportation is not readily available,[17] the increased opportunities for clients to have their needs addressed shows greater commitment to and more intentional efforts toward providing comprehensive services in programs where resources may be limited. Future studies should examine additional organizational factors such as the availability of funds and qualifications of staff that may also shape an agency's decision to provide services onsite, by referral, or not at all.

Other organizational elements linked with organizational size and efficiency – namely increased census and caseload – were also related to change in service provision. Consistent with an "efficiency" hypothesis – that organizations pool resources and provide services more efficiently when their census is above a certain threshold[39] – increasing census was associated with more wraparound services onsite (across both time points) and an increase in core services by referral over time (namely 12-step support and pharmacotherapy). As census increases, programs appear to broaden the types of services offered. If caseloads are kept at manageable levels during periods of expansion, the benefits to clients in terms of potential treatment options may likely persist. In this study, when average counselor caseloads were low, there was an increase in core services onsite over time – a finding that is consistent with others documenting that staff engage in specialized programming when caseloads are lower.[40] Similarly, findings suggest that programs with larger staff size increase their use of referrals over time. Programs with larger staff may have access to a wider professional network within the community and may therefore refer clients to external agencies when another provides more specialized services.

These findings also suggest that the provision of wraparound services is directly influenced by budgetary issues. When budgets were reported as increasing, onsite wraparound services increased; when budgets were decreasing or remaining stable, the same services decreased. It appears as though when financial resources are increasing, the preferred method of delivery may be direct, onsite access to ancillary services to facilitate client receipt. However, when budgets are cut or financial resources are limited, onsite wraparound services may be the first to be cut, and clients are referred instead to external agencies. These findings should be interpreted with caution due to the subjectivity of the budgetary and census change measures employed. Examining these issues using actual financial figures would help to validate these findings and establish the utility of subjective measures such as those used herein.

An encouraging finding in this study is that programs comprised largely of dual diagnosis clients increased their offerings over time, both onsite and by referral. Furthermore, programs with a higher proportion of co-morbid clients appear to be making efforts toward broadening their offerings beyond core services. As programs provide greater access to specialized services, the likelihood that clients with mental health problems will receive them increases. These results provide optimism that the trends toward reductions in services for special populations are slowing and potentially reversing. Further work is needed to determine what proportion of these increased services are actually received by co-morbid clients and whether certain transitory or supportive mechanisms (such as transportation or case management) can increase utilization when services are provided by referral.[13, 17, 41]

Findings from this study suggest that specific organizational factors can influence the provision of specialized services. While the implications of budgetary factors are clear – greater or more consistent funding translates to higher quality and more consistent service offerings (through the hiring/maintaining of highly qualified staff or not having to cut services due to budget constraints) – the implications of other organizational factors are more complex. For instance, increasing census may be related to a broader array of service offerings, but unless additional counselors are hired, there is a natural tendency toward larger caseloads which may be counterproductive. Further research is needed to understand how caseloads and counselor/client relationships are affected by increased onsite provision of wraparound services, and conversely, how the outsourcing of specific services to more specialized agencies affects client outcomes, particularly in programs with high proportions of co-morbid clients. As programs move toward the use of referral networks for wraparound services, the provision of support and advocacy through comprehensive approaches such as Coordinated Care Management[42] may be needed to monitor client compliance, enhance motivation for following through with referrals, and ensuring receipt of services.

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Table 1

Mean and Standard Deviation of Services Offered T1 and T2 by Category and Delivery Method

		Onsite		Referral	
	# of	2004–05	2006–07	2004–05	2006–07
	Potential Services	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)
Core Services					
Assessment	2	1.20 (.53)	1.26 (.47)	.28 (.45)	.39 (.49)
Therapeutic	6	4.49 (.82)	4.39 (.96)	.48 (.74)	.72 (.89)*
Drug Monitoring	2	1.39 (.65)	1.58 (.58)**	.09 (.28)	.09 (.29)
Total Core Services	**10**	7.09 (1.38)	7.23 (1.37)	.84 (1.18)	1.20 (1.26)*
Wraparound Services					
Health Screening	4	.55 (1.01)	.51 (.96)	1.61 (1.79)	1.57 (1.79)
Transitional	5	3.06 (1.25)	3.00 (1.07)	1.06 (1.33)	.71 (1.00)*
Medical	4	.51 (.72)	.51 (.93)	.91 (1.44)	1.57 (1.73)**
Specialized	10	3.55 (1.98)	3.45 (1.63)	1.77 (2.64)	2.01 (2.42)
Total Wraparound Services	**23**	7.67 (3.29)	7.46 (2.93)	5.35 (5.99)	5.86 (6.08)
Total Services	**33**	14.75 (3.99)	14.70 (3.57)	6.18 (6.93)	7.06 (7.00)

Note: Significance tests represent change from T1 to T2 in service category or subcategory

* $p < .05$

** $p < .01$

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Table 2

Number and Percentage of Programs Offering Specific Services (by Delivery Type)

	Onsite				Referral			
	2004–05		2006–07		2004–05		2006–07	
Service	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**
Core Services								
Assessment								
Substance Abuse	65	94.20	68	98.55	0	0	1	1.45
Mental Health	18	26.09	19	27.54	19	27.54	26	37.68
Therapeutic								
Individual Therapy	69	100	67	97.10	0	0	1	1.45
Group Therapy	69	100	69	100	0	0	0	0
Aftercare Counseling	65	94.20	61	88.41	1	1.45	4	5.80
Relapse Prevention	60	86.96	58	84.06	4	5.80	2	2.90
12-Step/Support Group	42	60.87	38	55.07	11	15.94	17	24.64
Pharmacotherapy/Rx Meds	5	7.25	10	14.49	17	24.64	26	37.68
Drug Monitoring								
Drug/Alcohol Urine Screen	60	86.96	63	91.30	5	7.25	1	1.45
Blood Alcohol Testing	36	52.17	46	66.67**	1	1.45	5	7.25*
Wraparound Services								
Health Screening								
HIV Testing	17	24.64	18	26.09	25	36.23	28	40.58
TB Screening	13	18.84	9	13.04	26	37.68	25	36.23
Hepatitis Testing	4	5.80	4	5.82	30	43.48	28	40.58
STD Testing	4	5.80	4	5.80	30	43.48	27	39.13
Transitional								
Discharge Planning	67	97.10	69	100	0	0	0	0
Referral: Transitional Services	56	81.16	58	84.06	10	14.49	8	11.59
Assistance Obtaining Social Services	50	72.46	47	68.12	12	17.39	4	5.80*
Employment Counseling/Training	20	28.99	18	26.09	28	40.58	19	27.54*
Housing Assistance	18	26.09	15	21.74	23	33.33	18	26.09

	Onsite				Referral			
	2004–05		2006–07		2004–05		2006–07	
Service	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**
Medical								
Smoking Cessation	13	18.84	12	17.39	13	18.84	19	27.54
Detoxification	10	14.49	9	13.04	12	17.39	27	39.13**
Diagnosis, Testing, Treatment	9	13.04	7	10.14	16	23.19	29	42.03**
Psychiatric	3	4.35	7	10.14	22	31.88	33	47.83*
Specialized								
Family Therapy	56	81.16	49	71.01	9	13.04	10	14.49
HIV/AIDS Education/Counseling	54	78.26	50	72.46	10	14.49	9	13.04
Outcome Follow-up (Post-Discharge)	40	57.97	49	71.01*	2	2.90	1	1.45
Transportation Assistance	28	40.58	29	42.03	12	17.39	8	11.59
Parenting Instructions	25	36.23	24	34.78	15	21.74	13	18.84
Family/Partner Violence Services	17	24.64	11	15.94	21	30.43	25	36.23
Childcare	16	23.19	18	26.09	9	13.04	12	17.39
Education Classes (e.g., GED)	6	8.70	4	5.80	15	21.74	20	28.99
Financial Services	3	4.35	4	5.80	14	20.29	20	28.99
Legal Counseling Services	0	0	0	0	15	21.74	21	30.43

McNemar's significance tests within individual service by delivery method

* $p < .05$

** $p < .01$

Table 3

Change in Core and Wraparound Services by Organizational Structure (Categorical Measures)

	Core Services			
	Onsite		Referral	
	2004–05	2006–07	2004–05	2006–07
	M (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)
Organizational Structure				
Accreditation				
Gain at T2	7.70 (.48)	8.00 (1.25)	.40 (.70)[a]	1.00 (1.25)[a]
Maintain	7.37 (1.39)	7.07 (1.54)	1.33 (1.36)[b]	1.41 (1.37)[b]
None	6.66 (1.45)	7.13 (1.21)	.56 (1.01)[a]	1.09 (1.17)[a]
Parent Affiliation				
Yes	7.08 (1.28)	7.30 (1.34)	1.02 (1.29)	1.08 (1.21)
No	7.11 (1.66)	7.05 (1.47)	.37 (.68)[a]	1.53 (1.35)[b]
Rural				
Yes	7.45 (.83)	7.40 (1.27)	.45 (.83)	1.30 (1.22)
No	6.94 (1.53)	7.16 (1.42)	1.00 (1.27)	1.16 (1.28)
Ownership				
Public	6.67 (1.51)	6.33 (1.21)	2.67 (1.75)[a]	2.33 (1.37)[a]
For-profit	6.14 (1.70)	6.79 (.97)	.71 (1.07)[b]	.93 (1.38)[b]
Not-for-profit	7.41 (1.14)	7.47 (1.43)	.65 (.95)[b]	1.14 (1.15)[b]
Census Increase				
Yes	7.18 (1.40)	7.09 (1.47)	.58 (.94)[a]	1.45 (1.25)[b]
No	7.00 (1.37)	7.36 (1.29)	1.08 (1.34)	.97 (1.23)
Budget Increase				
Yes	6.76 (1.55)	7.10 (1.55)	.90 (1.14)	1.29 (1.23)
No	6.94 (1.43)	7.14 (1.40)	1.08 (1.28)	1.14 (1.29)

	Wraparound Services			
	Onsite		Referral	
	2004–05	2006–07	2004–05	2006–07
	M (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)
Organizational Structure				
Accreditation				
Gain at T2	7.10 (4.25)	7.00 (2.94)	4.00 (5.79)[a]	5.9 (6.84)[a]
Maintain	7.11 (3.12)	6.89 (2.85)	8.89 (5.83)[b]	7.11 (5.92)[b]
None	8.31 (3.08)	8.09 (2.96)	2.78 (4.71)[a]	4.78 (5.96)[a]
Parent Affiliation				
Yes	7.26 (3.27)	7.16 (2.93)	6.18 (6.11)[a]	5.68 (5.82)[b]
No	8.74 (3.17)	8.26 (2.84)	3.16 (5.18)[c]	6.32 (6.85)[a]
Rural				
Yes	8.20 (4.01)	7.75 (3.11)	2.95 (4.32)	5.90 (6.52)

	Wraparound Services			
	Onsite		Referral	
	2004–05	2006–07	2004–05	2006–07
	M (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)
No	7.45 (2.97)	7.35 (2.88)	6.33 (6.33)	5.84 (5.96)
Ownership				
Public	4.67 (3.78)[a]	5.17 (1.93)[a]	11.67 (6.86)[a]	9.67 (3.93)[a]
For-profit	6.29 (1.94)[b]	6.43 (1.40)[b]	3.86 (4.85)[b]	3.21 (6.22)[b]
Not-for-profit	8.43 (3.25)[b]	8.04 (3.16)[b]	5.00 (5.81)[b]	6.14 (6.02)[b]
Census Increase				
Yes	8.45 (2.85)[a]	7.88 (2.97)[a]	4.91 (5.82)	7.15 (6.21)
No	6.94 (3.53)[b]	7.08 (2.88)[b]	5.75 (6.19)	4.67 (5.79)
Budget Increase				
Yes	6.76 (3.01)[a]	7.38 (2.75)[b]	5.19 (6.27)	6.95 (6.22)
No	8.06 (3.31)[c]	7.45 (3.04)[b]	5.53 (5.94)	5.45 (6.06)

Notation using two different superscripts denotes statistically significant main effects; notation using three different superscripts denotes a statistically significant interaction ($p < .05$)

Table 4

Correlations between Organizational Structure and Client Composition (Continuous Measures) and Change in Core/Wraparound Services

	Core Services		Wraparound Services	
	Onsite	**Referral**	**Onsite**	**Referral**
Organizational Structure				
Caseload	−.27*	.11	−.18	−.14
Staff Size	−.12	.38**	.14	.26*
Client Composition				
% Female	.01	.04	.15	.06
% Dual-Diagnosis	−.11	.37**	.24*	.32**
% CJ Referred	.19	.01	−.00	−.02
% African American	.19	−.11	−.16	−.18
% Hispanic	−.11	.07	−.05	−.09

* $p < .05$

** $p < .01$