Wraparound Services in Substance Abuse Treatment: Are Patients Receiving Comprehensive Care?

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Introduction

- Significant attention has been paid to the availability of "comprehensive services" for substance abuse clients, as wraparound services have been shown to improve both retention and treatment outcomes.

- However, availability of only a limited number of services has been studied, and nearly always in isolation from one another.

- In other words, prior research has not measured the actual <u>comprehensiveness</u> of services available, nor the predictors of comprehensiveness.

- As a result, researchers and providers lack a clear understanding of the extent to which programs are meeting patients' many and varied service needs.

Research Questions

- To what extent are various wraparound services being offered in U.S. treatment centers?
- To what extent are programs providing a <u>comprehensive</u> array of wraparound services?
- What are the key predictors of service comprehensiveness?
  - Considerations include:
    - Organizational factors (program structure, funding)
    - Staffing (number, type, credentials)
    - Client case mix
    - Geographic location

Data and Methods

- The National Treatment Center Study is collecting data from separate national samples of public-sector and private-sector addiction treatment centers
  - Samples are differentiated by <u>funding source</u>. "Public" units receive 50% or more of annual operating revenues from government grants or contracts; "private" centers receive <50%.
  - Sampled units vary on program type, profit status, ownership, modality, levels of care, and setting (hospital/freestanding).
  - Data are collected at the organizational (not SDU) level.

- Detailed (2.5 hr) in-person interviews are conducted with treatment center administrators.

- These analyses are based on data from 720 treatment centers interviewed between late 2002 and early 2004.

- Pooled, unweighted data from both samples are reported.

Independent Variables

Variable (and rationale for inclusion)	Sample Mean
Tx Center Size (FTEs) (indicator of resource availability/slack)	35.4 FTEs
% Master's-level counselors (measure of workforce professionalism)	43.4%
% Revenues from public grants (may require/fund specific services)	39.3%
Inpatient only (more severe cases with potentially greater needs; hospitals)	15.7%
Use ASI at intake (identification of need should lead to service linkages)	48.2%
% Primary cocaine clients (potentially greater service needs)	21.5%
% Female clients (greater need for services in various domains)	38.6%
Offer specialty tx tracks (indicator of addressing specific service needs)	76.4%
% Referrals from social service agencies (indicating formal linkages)	19.6%
Environmental scanning (responsiveness to client/buyer needs)	40.4%
Rural (non-metro) location (indicator of community resources)	10.1%

Measuring Wraparound Services

- Administrators reported the extent to which the center provides various services for patients who need them.
- Common "wraparound" services measured:
  - Medical, dental, employment, legal, family/social, psychological & financial services.
  - Reported on 0 to 5 scale of efforts made to connect patients with services.
  - While not a measure of service provision *per se*, this measure taps programs' propensity to link clients with needed services.
- Additional supportive services measured:
  - Integrated care for dual diagnoses; transportation to treatment; child care for clients in treatment.
  - Reported on availability (1=yes, 0=no).
  - These services are not traditionally examined in the context of comprehensive care, but are integral to retention/outcome.

Provision of Wraparound Services

	Overall (Mean or Percent)	Public sector	Private sector	Pub-Priv Sig.
Medical (0-5)	4.09	4.10	4.07	n.s.
Dental (0-5)	3.10	3.24	2.93	p>.05
Employment (0-5)	3.29	3.59	2.94	p>.01
Family/Social (0-5)	4.38	4.37	4.40	n.s.
Psychol/Emotional (0-5)	4.49	4.46	4.52	n.s.
Financial (0-5)	3.10	3.35	2.81	p>.01
Legal (0-5)	3.32	3.62	2.97	p>.01
Treat Dual Dx (yes/no)	57%	51%	65%	p>.01
Transportation (yes/no)	62%	69%	54%	p>.01
Child Care (yes/no)	17%	27%	6%	p>.01

Modeling Availability of Individual Services

- Consistent with other studies, we first examined the key predictors of availability of individual wraparound/ supportive services.

- OLS models were used to regress service linkage efforts (0 to 5 scale) for the 7 traditional wraparound services on organizational, staffing, clinical, and case mix variables.

- Logistic regression models examined these same variables as predictors of availability (yes/no) of: integrated care for dual diagnoses, transportation, and child care services.

- These analyses indicate that different constellations of organizational characteristics predict availability of different service types.

Predictors of Individual Services

Service (Dependent Var.)	Organizational Characteristics (Predictor Vars.)										
	FTEs (log)	% Master's counselors	Receive public grants	Inpatient only	Use ASI at intake	% primary cocaine clients	% female clients	Offer specialty treatment tracks	% social svc agency referrals received	Environmental scanning	Rural (non-metro) location
Medical				(+)			(+)				
Dental				(+)			(+)			(+)	
Employment	(-)		(+)			(+)		(+)			
Family/Social		(+)							(+)		
Psychol/Emotional		(+)					(+)				
Financial			(+)		(+)		(+)	(+)			
Legal	(-)		(+)					(+)			
Integrated Dual Dx Svcs	(+)	(+)									
Transportation	(+)		(+)	(+)		(+)	(+)		(+)		(-)
Child Care	(+)	(-)	(+)	(-)	(+)		(+)	(+)			

Measuring "Comprehensiveness"

- What are the predictors of the <u>number</u> or <u>variety</u> of wraparound services offered?
- Our measure of "comprehensiveness" is the sum of:
  - Any of the 7 traditional wraparound services for which administrator indicated "extensive" efforts were made to link clients (i.e. "5" on 0-to-5 scale) <u>and</u>
  - Availability of any of 3 additional services measured (integrated treatment for dual diagnoses, transportation, childcare)
  - Scores range from 0 (none of the 10 services available/less than extensive efforts made) to 10.
- Sample mean score = 4.14 services offered (sd=2.4)

Service Comprehensiveness: Bivariate Associations

- All variables found to be significant predictors of at least one wraparound service were examined for their association with service comprehensiveness.

- Variables that were positively and significantly (p<.05) associated with comprehensiveness included:

Org Structure/Financing:

- Receipt of any public grant funds

- Collection of satisfaction/outcome data (environmental scanning)

- % referrals received from social services agencies

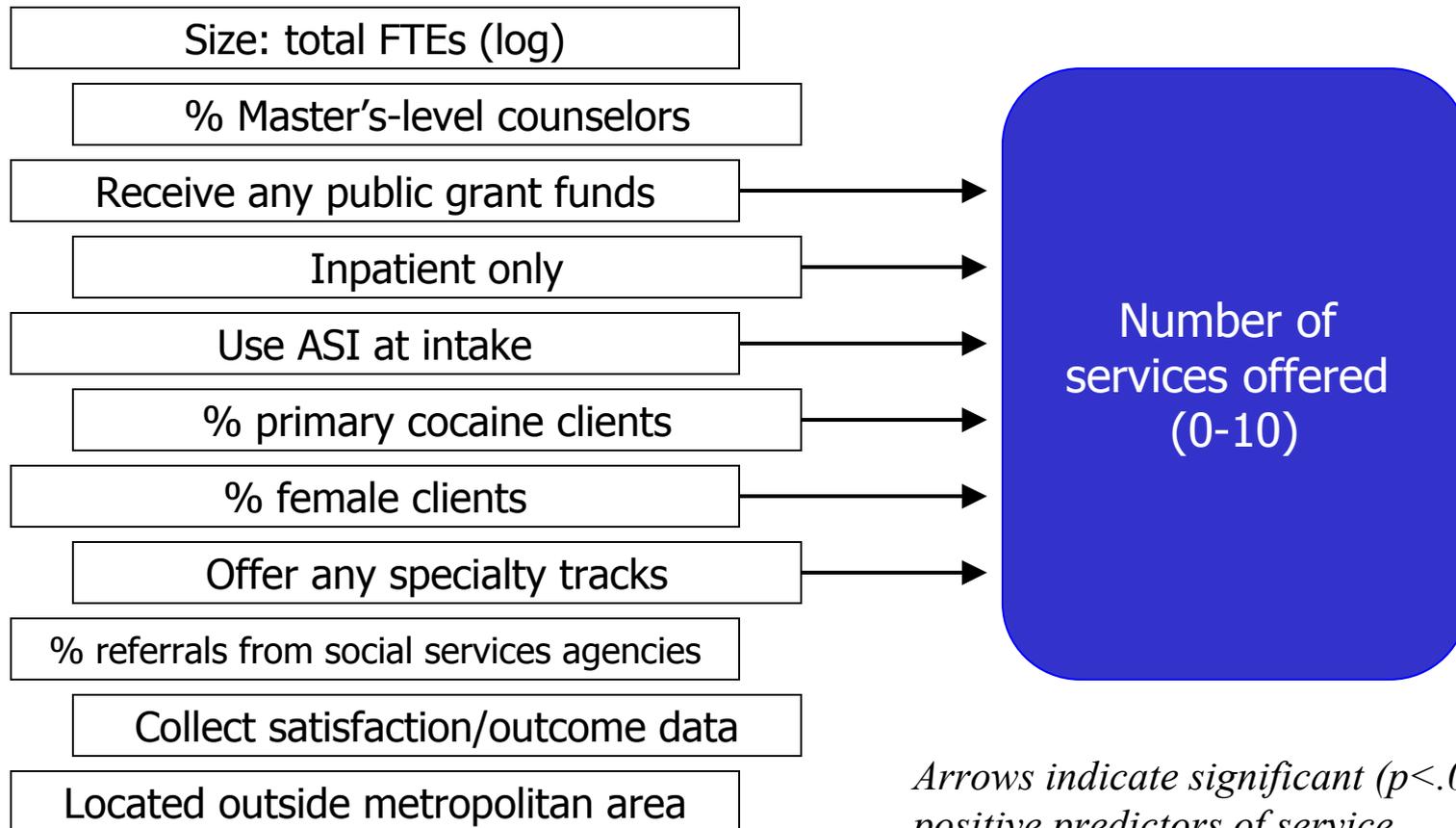- Located in a metropolitan area

Clinical Services:

- Availability of specialty tx tracks

- Use of the ASI at intake

Case Mix:

- % primary cocaine clients

- % female clients

- Next, these variables were incorporated into a multivariate model.

Service Comprehensiveness: Multivariate Predictors

Size: total FTEs (log)

% Master's-level counselors

Receive any public grant funds →

Inpatient only →

Use ASI at intake →

% primary cocaine clients →

% female clients →

Offer any specialty tracks →

Number of services offered (0-10)

% referrals from social services agencies

Collect satisfaction/outcome data

Located outside metropolitan area

Arrows indicate significant (p<.05), positive predictors of service comprehensiveness in OLS model.

Conclusions

- Overall levels of "comprehensiveness" are low, but program and case-mix variables predict service availability.

- Use of standardized assessment criteria (ASI) leads to greater detection of service needs, and is associated with more comprehensive service provision.

- Client case mix is also a significant predictor, indicating that providers are making efforts to meet the varied needs of their clients.

- Funding source is a significant predictor of service availability and comprehensiveness.

- Clients treated in "rural" settings appear to face significant challenges to receiving needed wraparound services.