



# The Network for the Improvement of Addiction Treatment (NIATx): Process Improvement in Addiction Treatment

Chioma Uzoigwe, M.P.H., *Rutgers/Robert Wood Johnson Foundation Policy Analyst*

Number 4, April 2007

## Research Brief

QUALITY IMPROVEMENT FOR  
THE TREATMENT OF ALCOHOL  
AND DRUG DISORDERS IS  
OF PARAMOUNT CONCERN  
AMONG DRUG AND ALCOHOL  
TREATMENT FACILITIES.  
NIATx—NETWORK FOR THE  
IMPROVEMENT OF ADDICTION  
TREATMENT—IMPLEMENTED  
EVIDENCE-BASED DECISION-  
MAKING PRACTICES TO SHOW  
THAT PROCESS IMPROVEMENT  
CONTRIBUTES TO THE  
IMPROVED EFFICIENCY OF  
TREATMENT FACILITIES.

### The Issue

The Network for the Improvement of Addiction Treatment (NIATx) teaches drug and alcohol treatment centers to use process improvement strategies to improve access to and retention in addiction treatment. NIATx provides treatment organizations with collaborative learning opportunities and technical support using the PDSA (Plan, Do, Study, Act) change cycle to meet the following aims:

- Reduce waiting time between the first request for service and the first treatment session
- Reduce the number of patients who do not keep an appointment
- Increase the number of people admitted to treatment
- Increase continuation from the first through the fourth treatment session.<sup>1</sup>

NIATx is a partnership between the Robert Wood Johnson Foundation's *Paths to Recovery* national program and the Substance Abuse and Mental Health Services Administration's Center for Substance Abuse Treatment's Strengthening Treatment Access and Retention (STAR) program. The national program office for this network is based at the University of Wisconsin-Madison and its evaluation activities are conducted by a team at Oregon Health & Science University.

### Findings

NIATx conducted a cross-site evaluation of addiction treatment facilities. The results of the first 18 months are summarized in this brief. Examples from Acadia Hospital, a freestanding mental health and addictions treatment facility in Bangor, Maine, illustrate some of the changes that treatment programs are making.

- **Significant reductions in days to treatment were observed among programs that attempted changes in residential, intensive outpatient or outpatient care.** Strategies that reduced days to treatment included on-demand scheduling, next-day admissions, simplification of intake procedures, expanded hours of operation, elimination of redundant paperwork, cross-training and enhanced telephone responsiveness. Over 15 months, mean days from first contact to first treatment declined 37 percent.<sup>2</sup> The number of days between assessment and first treatment declined 33 percent during this period to 7.9 days from 11.8 days.<sup>2</sup> At Acadia Hospital, clients were instructed to go in at 7:30 a.m. the morning after initial contact, which reduced waiting time between first contact and initial assessment. As a result, 65 percent of clients went in for assessment, compared to 25 percent before changes were implemented.<sup>1</sup>
- **The number of “no-shows” decreased significantly.** The following key changes made at Acadia Hospital through NIATx aimed to provide outreach to no-shows: Using scripted calls for no-shows, inviting no-shows to next-day programs, strategizing on how to overcome treatment attendance barriers and offering to greet clients in person. The overall show rate increased 16 percent to 66 percent from 57 percent.<sup>1</sup> Clients making it in to treatment increased to 52 percent from 19 percent.<sup>1</sup>

1 RWJF Research Brief – NIATx: Process Improvement in Addiction Treatment

- **Retention in care increased significantly.** The increase in patient continuity between the first and fourth sessions is attributable to several facets of process improvement throughout treatment facilities. Among those improvements is a better intake process. For example, rather than using the common solution of creating wait lists, treatment facilities are advised to take steps to eliminate processes that contribute to missed appointments so that patients will remain in care. In a cross-site evaluation that examined the first 15 months of NIATx impacts on retention in care, the completion rate from the first treatment session to the second treatment session increased 18 percent to 85 percent from 72 percent.<sup>2,3</sup> Between the first and the third treatment sessions, the retention rate increased to 73 percent from 62 percent.<sup>2,3</sup>

Addiction treatment providers struggle to operate effectively and efficiently. Barriers to improvement include a lack of decision-making based on data, the complexity of the treatment system and resistance to change. These barriers contribute to long waiting periods between the patients' initial contact for treatment and assessment for treatment, missed appointments or "no shows," and a lack of continuity between the first and fourth treatments. NIATx documents the applicability of process improvement to treatment for alcohol and drug disorders, and demonstrates that treatment agencies can increase access to care and enhance retention in care.

Changes in Retention by Level of Care							
Level of care	Improvement (%/month)	F	p-Value	Estimated baseline	Estimated end	% change	Model
<i>% continuation from session 1 to session 2</i>							
Overall	0.85	8.34	0.01	72.09	84.84	18	L
Outpatient	0.74	3.64	0.08	63.08	74.12	17	L
Intensive outpatient	0.92	5.01	0.04	78.37	92.24	18	L
Residential	1.00	2.39	0.11	74.40	89.34	20	L
<i>% continuation from session 1 to session 3</i>							
Overall	0.69	4.77	0.05	62.43	72.78	17	L
Outpatient	0.54	6.69	0.20	46.20	54.28	17	L
Intensive outpatient	0.52	1.22	0.29	74.14	82.01	11	L
Residential	1.07	2.06	0.14	66.58	82.71	24	L
<i>% continuation from session 1 to session 4</i>							
Overall	0.39	1.44	0.25	54.17	60.02	11	L
Outpatient	-0.43	0.95	0.35	35.30	28.85	-18	L
Intensive outpatient	0.34	5.36	0.02	80.79	85.88	6	Q
Residential	1.00	1.83	0.16	61.54	76.47	24	L

In the model column, Q means quadratic trend model and L means linear trend model. p-Values are based on F statistics for regression models with degrees of freedoms of 1 and 13 for linear trend model and 2 and 12 for quadratic trend model. Baseline estimated for 1 October 2003; end date was 31 December 2004.

- 1 Cappocia VA, Cotter F, Gustafson DH, Cassidy EF, Ford JH, Madden L, Owens BH, Farnum SO, McCarty D and Molfenter, T, "Making 'Stone Soup': Improvements in Clinic Access and Retention in Addiction Treatment." *Journal on Quality and Patient Safety*, 33(2):95-103, 2007. Full text of this article may be available for fee or registration: [http://www.ingentaconnect.com/search/article?title=Making+Stone+Soup&title\\_type=tka&year\\_from=1998&year\\_to=2007&database=1&pageSize=20&index=1](http://www.ingentaconnect.com/search/article?title=Making+Stone+Soup&title_type=tka&year_from=1998&year_to=2007&database=1&pageSize=20&index=1)
- 2 McCarty D, Gustafson DH, Wisdom JP, Ford J, Choi D, Molfenter T, Capocchia V and Cotter F, "The Network for the Improvement of Addiction Treatment (NIATx): Enhancing Access and Retention." *Drug and Alcohol Dependence*, 88(2,3): 138-145, 2007. Full text of this article may be available for fee or registration: <http://dx.doi.org/10.1016/j.drugalcdep.2006.10.009>
- 3 Wisdom JP, Ford JH, Hayes RA, Edmundson E, Hoffman K and McCarty D, "Addiction Treatment Agencies' Use of Data: A Qualitative Assessment." *Journal of Behavioral Health Services and Research*, 33(4): 394-407, 2006. Full text of this article may be available for fee or registration: <http://www.fmbi.usf.edu/jbhsr/toc/33.html#4>