

Timeliness and Efficiency

Making “Stone Soup”: Improvements in Clinic Access and Retention in Addiction Treatment

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Substance abuse represents a serious, complex public health concern, affecting millions of Americans each year. Approximately 22 million Americans, or 9.4% of the total population of those older than 12 years of age, were classified with substance dependence or abuse in 2002.¹ Addiction not only reduces the quality of life of those directly affected but brings with it enormous social and economic costs. Health care costs associated with the use of tobacco, alcohol, and drugs have been estimated at \$144 billion in 1995, which is 10 times more than what is currently paid to *treat* addiction.² It is estimated that nearly 75% of people who use drugs are employed,³ so that the cost to businesses in terms of absences, turnover, and injury far outweighs the current investment in treatment and prevention.⁴ Alcohol and drug-related deaths are among the leading causes of death in the United States, with alcohol use alone accounting for more than 85,000 lives annually.⁵

However, the capacity of the treatment system is so limited that only one-fifth of those needing care actually receive it.⁶ Some of those who need treatment may lack knowledge of available treatment options, others may be ashamed of their addiction and avoid treatment, and others may seek out treatment but drop out before completing it. Yet research suggests, however, that systemic and programmatic issues under control of the treatment facility—“business processes” such as complicated admission procedures, poorly designed phone

Article-at-a-Glance

Background: The Network for Improvement of Addiction Treatment (NIATx) provides 40 treatment organizations with collaborative learning opportunities and technical support to 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 (no-shows), increase the number of people admitted to treatment, and increase continuation from the first through the fourth treatment session.

Acadia’s Story—Treatment on Demand: Given capacity constraints, only 25% of the clients scheduled for outpatient care at Acadia Hospital (Bangor, Maine) showed up for their assessment appointments, and only 19% made it into treatment. A variety of changes were introduced, including increasing staff availability to provide clients with assessments immediately on arrival (at 7:30 A.M.), establishing a clinician pool to handle client overflow, and allowing for same-day admission to intensive outpatient or chemical dependency services. These process improvements reduced the time from first contact to the first treatment session from 4.1 to 1.3 days (68%), reduced client no-shows, and increased continuation in treatment and transfers across levels of care.

Discussion: The successes experienced by organizations in the NIATx initiative should be useful for implementing change in other fields of service delivery.

systems, and unengaging reception staff—contribute to more than half of the barriers to accessing care.⁷⁻¹⁰ Fifty per cent of individuals who contact a clinic to schedule drug abuse treatment services do not attend their intake appointment.¹¹⁻¹³ For clients who attend their first treatment session, they most commonly discontinue treatment in the initial phases because of the absence of intensive and frequent treatment services,¹⁴ dissatisfaction with treatment,¹⁵ and family responsibilities.¹⁶ Keeping clients in treatment begins with keeping them engaged in the initial phases of treatment.^{17,18}

Some 14,000 addiction treatment programs are nationally distributed across free-standing specialty, mental health, hospital, and governmental settings, but they need more support in order to improve the quality of care they provide. The programs are staffed with counselors, who are often overworked and underpaid or who might not be sufficiently trained to provide certain kinds of evidence-based care to their clients. In addition, few treatment centers are housed in physical structures that are optimally designed for providing treatment. For example, they might be too small for existing caseloads, with little space for waiting rooms or group meetings, or they may be located apart from medical facilities, which can make cross-disciplinary work difficult. Such limitations, along with tight program budgets, limited funding opportunities, and constrained health insurance coverage, contribute to the challenging environment in which addiction treatment must operate. Moreover, payments from health insurance companies are frequently late or significantly discounted.¹⁹ This support, in terms of money to pay for services, is often the first to be cut when funds from governments, insurance companies, and employers become constrained.

Even though it is considered “normal” for individuals with chronic health issues such as diabetes, asthma, or hypertension to “relapse” (for example, nonadherence to treatment and behavior change regimes), many view addiction relapse as a sign of weakness for which the addict should be held accountable.

Faced with the knowledge that many clients fail to comply with treatment expectations and may reenter treatment once they leave, addiction treatment agencies often require clients to prove their commitment to treatment. Even so, it is imperative that addicted people

receive treatment immediately, not hours or days, much less weeks, after they request help. Studies suggest that engaging a client in treatment within 48 hours of request improves treatment initiation,²⁰⁻²⁴ yet few treatment agencies have systems in place to provide treatment with this optimal approach.

Despite these challenges, addiction treatment programs can implement changes to improve service delivery. In the fable “Making Stone Soup,” the hungry traveler and villagers create a meal by adding their meager offerings to a collective pot. Similarly, addiction treatment providers who share a vision of client-centered, systemic improvements can work together to improve treatment quality. This article offers examples of how treatment agencies participating in the Network for the Improvement of Addiction Treatment (NIATx), a group of agencies that work together to improve access to and retention in treatment, have initiated such changes. These agencies demonstrate that successful changes can take place, even when resources, staff, and time are severely limited.

NIATx

It seems unlikely that process improvement techniques would flourish in addiction treatment, when the field is focused on a complex, chronic disease that society attempts to ignore. However, process improvement can flourish in this context, particularly because the field of addiction treatment demonstrates a high level of commitment to ensure client success. Most treatment agencies, therefore, face the challenge of “making stone soup,” or accomplishing challenging tasks with severely limited resources. Yet to improve organizational processes, addiction treatment providers can employ the same skills that they use to help clients.

One national initiative, the Network for the Improvement of Addiction Treatment (NIATx), provides its members with a range of services intended to help them initiate and sustain process improvement approaches, specifically concerning access to and retention in addiction treatment. Jointly sponsored by the Robert Wood Johnson Foundation (RWJF) and the Center for Substance Abuse Treatment (CSAT), it is composed of 40 addiction treatment organizations (members) selected through two different grant processes

Table 1. Agency Selection Process for the Network for the Improvement of Addiction Treatment*

	Robert Wood Johnson Foundation— Paths to Recovery	Center for Substance Abuse Treatment— Strengthening Treatment Access and Retention
Grant Process	<i>Brief Proposal:</i> Outlined view of process improvement, leadership, and conducted a walk-through <i>Full Proposal:</i> Designed and implemented a change, leadership, implementation strategies, and dissemination plans	<i>Response to RFA:</i> Outlined capacity to collect and analyze access and retention data and described two evidence-based practices to facilitate access and retention changes
Award Amount	\$150,000 over 18 Months	\$300,000 per year for 3 years
Number of Applicants	Brief Proposal: 400 Full Proposal: 46	88 Applicants

* RFA, request for application

(Table 1, above). Funded from November 1, 2001 through 2008, NIATx provides collaborative learning opportunities and technical support to agencies (Sidebar 1, page 98) so that they can meet the following aims:

1. Reduce waiting time between the first request for service and the first treatment session.
2. Reduce the number of patients who do not keep an appointment (no-shows).
3. Increase the number of people admitted to treatment.
4. Increase continuation from the first through the fourth treatment session.

Principles of Process Improvement: Five Factors that Contribute to Success

NIATx's underlying assumption is that, by using process improvement techniques to refine the systems used to admit and engage clients, members will build skills that can improve other clinical, management, information, and support systems. In a review of the empirical research comparing change processes in different types of organizations, five key principles of improvement emerged.²⁵ These five principles, which form the core of the NIATx approach, are as follows:

1. Understand and involve the customer (user) of the process an organization is trying to improve.
2. Choose processes for improvement that meet an organization's overarching goal(s).
3. Engage powerful and respected change agents in the change process.
4. Seek ideas and encouragement from outside the field.

5. Quickly but thoroughly test solutions before full-scale implementation.^{25,26}

A specific approach to the fifth principle is to employ rapid cycle testing, or the plan-do-study-act (PDSA) model, which requires agencies to run a series of rapid tests, with subsequent tests building on results of the earlier one, rather than engage in detailed planning before testing.²⁷

The value of the PDSA model is that it typically requires a natural flow of information gathering, decision making, action, and assessment to address issues of improvement. The *Plan* phase identifies the aim of a particular effort, such as reducing the waiting time from first contact with the agency to the first clinical appointment. This may include selecting a change that can be quickly implemented and tested in the agency and involving key people in the planning process (for example, program manager) who can help remove barriers to the change. The *Do* phase of the PDSA cycle may involve a trial run, using the new process with a few clients for a short period of time. Next, in the *Study* phase, staff looks at the benefits and the problems caused by the change they implemented. Then, in the *Act* phase, staff either fixes the problems that arose during the trial or, if it went well, incorporates the new process into the day-to-day functioning of the agency.

Walk-Throughs

To participate in NIATx, all agencies were required to perform a "walk-through": an exercise in which staff

Sidebar 1. Network for the Improvement of Addiction Treatment (NIATx)

NIATx offers the following services:

1. Biannual Learning Sessions, in which organization change teams learn from and support one another and gain advice from outside experts on how best to adopt the innovations.
2. Monthly teleconference interest circles, in which organization change leaders discuss issues and progress specific to the four NIATx aims and specialty topics (for example, programs for women, adolescents).
3. The Web site (<http://www.niatx.net>) provides relevant publications, a resources list, communication services, and on-line tools on such topics as assessment, action planning, decision making, and sustainability.
4. "Coaches" or process improvement experts provide consultation and advice (through quarterly site visits, biweekly phone consultation, and e-mail communication) to help change leaders and teams to make, sustain, and spread process improvement efforts.

members experience the treatment processes as a patient does. In a walk through, the agencies chose two staff members to act as a client and family member, respectively, and walk-through the agency's current process for getting clients into treatment, starting with making first contact and then on to the assessment and the first appointment. During this process, the mock patients and family members made notes of their experiences, and the staff delivering the services reported how the current processes helped or hindered their ability to provide quality services. After completing this process, the staff shared their results with change teams consisting of representatives from the agency departments that participated in the walk-through. A walk-through of the intake process, for example, might include a counselor, a clerical staff person, the head of admissions, as well as the business office. The change teams reviewed the walk-through results and selected a problem that, if solved, would make a significant difference toward

achieving their selected aim. The teams brainstormed possible actions they could implement immediately to help solve the problem. Each agency's change team then selected and implemented one change over a two- or three-week period.

In their applications for NIATx membership, which were submitted in Fall 2001, agencies identified a variety of barriers to optimal access to and retention in treatment that emerged during their walk-throughs. These barriers included delays in returning phone calls and setting appointments, inadequate family involvement, extensive and redundant paperwork, treatment that was not tailored to patient needs, overworked staff, limited program hours, poor (even non-functioning) telephone systems, and clients not knowing what to expect. All 40 NIATx members have stories about how participation in NIATx and engagement in rapid-cycle changes affected their organizations. Such changes may represent a reduction in time from first contact to first treatment, fewer client no-shows, increased treatment continuation for clients, or increased admissions. Acadia Hospital represents one example of a treatment organization that has made improvements across all four NIATx aims within one level of care.

Acadia's Story: Treatment on Demand Background

In 2003 Acadia Hospital, a freestanding mental health and addictions treatment facility located in Bangor, Maine, annually provided 3,995 bed days of inpatient medical detoxification to 454 clients. It also provided 4,397 substance abuse outpatient visits to 185 clients and treated 243 clients in methadone maintenance. It also provided 3,151 bed days in a 10-bed substance abuse residential rehabilitation program and 17,092 shelter nights in its 37-bed emergency shelter program that serves homeless substance abusers. Acadia also manages a 10-bed therapeutic transitional housing program that provided 3,389 days of care in 2003.

In 2003 Acadia Hospital also received an average of 320 calls each week from people seeking treatment services for alcohol and/or drug addiction. In addition, many of the callers for mental health services—about 1,000 each week in 2003—also suffer from substance use disorders and are in need of substance abuse treatment

services. A primary challenge that Acadia Hospital faced was that most of its addiction services had been operating at or, at times, even over capacity for nearly 10 years. As a result of their already full schedules, Acadia staff members had not had adequate time to examine and plan how to provide services more effectively. This challenge to improve services was compounded by a dramatic increase in requests to treat opioid dependency in the previous three years.

Given these capacity constraints, only 25% of the clients who initially called for outpatient care at Acadia ever showed up for their assessment appointments, and only 19% ever made it into treatment. Acadia's low treatment rate suggested that it needed to change its processes to get more clients into outpatient care.

The staff at Acadia, led by its chief operating officer, decided that NIATx provided them with a much-needed opportunity to examine their business processes and improve the efficiency of its operations. Acadia linked its process improvement intervention plan to an existing organizational goal of reducing the waiting time between clients' first calls for service and their clinical evaluation and admission. Moreover, it engaged the guidance and support of several influential leaders, including the chief medical officer and the clinical director, to help ensure success in all departments to be affected by the new admission process.

The clinical supervisor of substance abuse services [S.O.F.], who was also Acadia's "change agent," or in-house leader for the project, and the nurse manager for Acadia's narcotic treatment program, who developed the "client's" scenario, participated in the site's walk-through exercise, in which the client (portrayed by S.O.F.) was referred to inpatient treatment for safety, stabilization, and detoxification, and received outpatient referrals for opioid replacement therapy (methadone) and housing. The walk-through team kept a log of their experiences throughout the process, including their timeline, notes, and questions they generated.

Walk-Through Results

The results from the walk-through indicated that Acadia's intake procedure presented significant barriers to treatment. Scheduling for intake occurred four days, on average, after Acadia received the patient's first call.

Acadia's existing processes in scheduling intakes were confusing because clients had to place multiple calls to the assessment center to schedule appointments, and time lags in scheduling patient appointments significantly contributed to treatment drop out. Although clients waited for Acadia to schedule initial intake evaluation appointments, they were instructed to make daily phone calls to demonstrate their interest in treatment. In a way, by requiring clients to initiate contact during the waiting period, Acadia was sending a message to clients that they had to prove their dedication to treatment. This practice highlighted how administrative inefficiencies presented barriers to client admissions that could have deterred consumers from getting the treatment they needed. The walk-through also showed that the client was commonly separated from their family member(s) for long time periods. In the absence of any explanation or other communication, this process was disturbing for both patient and family member.

Process Improvements and Results

Within only three weeks of the walk-through, Acadia had selected a problem, implemented a change to address that problem, and documented the results of the change. The chief operating officer, the clinical supervisor, and other staff formed the process improvement team and focused on reducing the time it took to refer a patient to intensive outpatient (IOP) services. The process improvement team decided that clients should not be required to call in during the waiting period to demonstrate their interest in treatment.

The improvement team decided to try to stop giving appointments altogether. Staff told clients to come in at 7:30 A.M. the following morning, and that if they needed care, they would begin treatment immediately after their assessment. To address this demand, clinical staff arranged to arrive by 7:30 A.M., so that all prospective clients could have assessments conducted immediately on arrival. As a result of this change, 65% of the approximately 225 clients a month who called for treatment came in for assessment, compared with 25% before the change. Now 52% of the clients (instead of 19%) made it into treatment.

Over time, leadership and staff at Acadia introduced other changes in IOP by increasing staff availability for

Table 2. Impact of Process Improvement Changes on Key NIATx Aims at Acadia Hospital

Targeted Population (Dates)	Key Changes	Results
No-Show Clients (Feb. 23, 2004– Mar. 12, 2004)	Outreach to No-Shows by <ul style="list-style-type: none"> ■ Using scripted call to no-shows ■ Inviting no-shows to next-day program ■ Strategizing on how to overcome treatment attendance barriers ■ Offering to greet client in person 	<ul style="list-style-type: none"> ■ Overall show rate up from 57% to 66% (15.8% increase) ■ Show rate from self-referred clients up from 49% to 69% (40.8% increase) ■ Show rate from internal referrals up 12% from 50% to 56% (12% increase)
Clients Referred from Detoxification to IOP (Feb. 12, 2004– Sep. 29, 2004)	Improve Continuation from IP to IOP by <ul style="list-style-type: none"> ■ Explaining to client about IOP and inviting them to attend ■ Registering clients for the IOP program on IP unit ■ Accompanying client to IOP upon discharge 	<ul style="list-style-type: none"> ■ Client registration had no impact ■ Continuation rate from inpatient detox to IOP up from 55% to 75% (36.4% increase) ■ Number of admissions to IOP from detox up by 45.5%
Client Continuation in IOP (Aug. 2005)	IOP Orientation Groups by <ul style="list-style-type: none"> ■ Introducing a patient activity check list ■ Giving clients a certificate upon completion 	<ul style="list-style-type: none"> ■ Continuation to fourth session up from 36.2% to 67% (85.1% increase) ■ Basis-32 scores up from 0.37 to 0.50 (35.1% increase) ■ Impulsivity/Addiction Scale up from 0.41 to 0.69 (68.3% increase)

* NIATx, Network for Improvement of Addiction Treatment; IP, inpatient ; IOP, intensive outpatient.

clinical evaluations, shifting the start time from 9 A.M. to 8 A.M., establishing a clinician pool from existing staff to handle client overflow, and providing, if warranted, same-day client admission to IOP or chemical dependency services.

These process improvements reduced the time from first contact to the first treatment session from 4.1 to 1.3 days (68%). Buoyed by this success, Acadia continued to study and adopt process improvement changes to reduce client no-shows and increase continuation in treatment and transfers across levels of care (Table 2, above).

Because of the increased number of clients entering care, Acadia added a counselor to its staff. In doing so, Acadia also added to its billable hours, which in turn increased its revenue by 56% and enhanced its profit margin by approximately \$400,000 in two years. In fact, the new admission process forced Acadia to rethink how it treats clients altogether, and its caseload quadrupled in the process. Such “treatment on demand” was then being

spread to Acadia’s extended shelter program and its mental health services. Reflecting on their overall experience, Acadia’s leadership identified key factors that helped facilitate change in the organization (Table 3, page 101).

Acadia shared its experience in process improvement with the other 39 members in the NIATx network at learning collaborative meetings, during which agencies shared ideas, lessons learned, and successes. These meetings took place twice per year and included participation from all process improvement team members from the NIATx sites.

Discussion

Acadia’s experience suggests that, if an organization designs changes with the customer’s perspective in mind, applies rapid PDSA cycles, and if it promotes changes that are properly aligned with its overarching goals, it can then make significant process improvements in a short period of time. In addition, the process

Table 3. Key Factors of Successful Change Identified by Acadia Hospital

Involvement of key leadership	Project team included senior managers with the authority to influence change in all affected areas
Role of project team as change agents	Scope of work provided ability to assess and implement changes
Unsuccessful initiatives would not continue	Senior leadership enabled staff involvement and was committed to stopping unsuccessful processes
Continuous communication	Short team meetings, centralized communications of tasks and responsibilities, and ongoing contact with key stakeholders fostered continuous communication
Optional project team attendance	Project team meetings were scheduled when staff could attend with minimal impact on calendar
The “flattening” of organizational structure	Collaboration between supervisors and staff underscored senior leader commitment
Flexing staff across units/treatment programs	Staff was shifted across departments as needed to meet demand
Minimizing the impact of changed work schedule	Staff were provided with choices on how change affected their schedule
Enthusiasm of key administrators	Administrators' enthusiastic and willing support conveyed strong message to staff
Success of the initiative	Preliminary successes encouraged staff to try new approaches to improve processes

improvement team consisted of two key members of Acadia’s operations management team who could remove barriers to the change process and work directly with the line staff to implement these changes. An organization gaining experience and accumulating benefits as a result of such process improvements (such as less redundancy in staff functions, improved profit margins, an increase in client satisfaction) may have several incentives to continue applying process improvement and to sustain the resulting changes.

One might question whether these experiences have relevance to other community-based health care or private sector organizations. One can argue that the substance abuse treatment field is different, given its scarcity of resources, lack of public understanding and support, and a mixed record of results in implementing evidence-based practices. Yet although these factors might initially be viewed as liabilities, they can also be considered assets in initiating change insofar as substance abuse treatment is a field in which the staff works on improvement every day of their professional lives. While it is directed to changing individual lives, the staff has developed skills relevant to improving

organizational processes. All health care organizations, whether providing addiction treatment or not, is faced with the challenge of finding ways to increase output and achieve better results with fixed resources. Therefore, the successes experienced by organizations in the NIATx initiative should be useful for implementing change in other fields of service delivery.

Several conclusions can be drawn from the NIATx experience. First, the addiction treatment field seems ready for improvement—488 agencies competed to participate in NIATx. In fact, some agencies used their own resources to participate in the learning collaborative sessions. In addition, more than 800 individuals representing 200 agencies have signed on to have access to the NIATx Web site.

Second, all 40 NIATx agencies have demonstrated positive changes. Although a formal evaluation of NIATx improvements is not yet complete, preliminary quantitative analysis and anecdotal evidence suggest that these agencies have made significant improvements in access to and retention in treatment. For example, one agency increased the number of clients attending four treatment sessions postadmission from 11% to 89%. Another

agency reduced wait time for treatment from 20 days to next-day appointments. Yet another reduced its rate of no-shows for the first appointment by 55% to 12%. In addition, change may be simpler and less time-consuming than is often presumed. If these resource-deficient organizations can accomplish positive change, then other organizations committed to improvement can likely do the same.

Third, organizations seeking to improve operating systems can draw on the depth of experience of their front-line workers, who make changes in how they work all the time. These changes are typically informal adaptations to persistent problems. The challenge is to get leadership involved in the process by giving front-line permission, a structure, and incentives to acknowledge and properly address problems, rather than work around them. Creating a culture of improvement in an organization relies heavily on the quality of leadership that drives those improvements. Leadership is the necessary element to activate the five principles discussed in this article.

Although the changes initiated at Acadia Hospital and other agencies in the NIATx initiative prove promising, NIATx is still in its early stages of development. It is difficult to determine whether those changes will be sustained once the funding ends. Until we learn more about the reach and sustainability of change efforts by agencies in the NIATx program, we hope that organizations within and outside addiction treatment can learn from the successes of Acadia and other NIATx organizations. By creating change amidst such limitations, these agencies demonstrate that, like the people in the noted fable, they can make “soup from stones” and instill hope in a

field that will likely benefit from its examples of motivated—and experienced—improvement. **J**

The Robert Wood Johnson Foundation and the Center for Substance Abuse Treatment support the Network for the Improvement of Addiction Treatment through grants and cooperative agreements. Awards to the University of Wisconsin (RWJF 48364; CSAT-SC-04-035) and the Oregon Health and Science University (RWJF 46876, 50165; PIC-STAR-SC-03-044) supported the preparation of this manuscript. The authors would like to thank Jessica Athens for reviewing and editing the final manuscript and Beth Hribar for her assistance in preparing the manuscript.

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