

The Business Case for Process Improvement

A Technical Assistance Report

Improving Treatment Access & Retention Translates to Bottom-Line Results

Introduction

What is the Technical Assistance Report Series (TARS)?

The TARS is a compendium of short reports structured around key process improvement topics. Each report will provide introductory tools and guidance, pose key questions, and highlight provider and payer experiences that demonstrate effective application of methods to improve treatment access and retention.

Who should read the Technical Assistance Report Series?

The TARS is designed for any individual or team wishing to maximize the likelihood of success in organizational change efforts. The examples presented pertain to addiction treatment processes, although many of the concepts illustrated can be adapted and applied in various industry settings. The Business Case Technical Assistance Report is geared primarily for Executive Sponsors and senior Change Leaders.

Setting the Stage

"No margin, no mission." It's a phrase often refrained in the world of addiction treatment, and one that rings true given the increasingly tight fiscal landscape in which most addiction treatment providers operate. NIATx has long stressed the importance of building a strong business case for change initiatives, but determining the impact of process improvement from a business perspective can be difficult. Most addiction treatment providers are not in the field to make money, but instead to fulfill a mission of helping clients overcome addictions. However, it is critical that process improvement initiatives not only support treatment access and retention, but also support the organization's core business. Process improvements cannot possibly be sustained if they act as a drain on an agency's resources. The concepts of clinical interest and business interest *must* be in alignment for change to take hold.

NIATx Principles

The NIATx process improvement model is centered on five key principles:

- 1. Understand and involve the customer
- 2. Fix key problems (that let the CEO sleep at night)
- 3. Pick a powerful change leader
- 4. Get ideas from outside the organization/field
- 5. Use rapid-cycle testing

The first principle—transforming agency culture towards customer-centered thinking—is essential to the NIATx process improvement model. All the principles are important in their own right, of course, but principle two is what the business case for process improvement is all about. While process improvement teams should focus on making changes that improve the customer experience, it is also vital that these changes support the organizational mission. The key problems that keep the CEO up at night are usually related to the financial health of the organization. Countless studies have demonstrated the importance of management support for organizational change, and improvement projects that have a positive impact on the bottom line are the ones that will receive the support of agency leadership. Without a strong business case, there is little hope of sustaining and spreading changes throughout the organization.

The Four Aims and the Bottom Line

NIATx began with 39 agencies across the United States in 2003. The Founding Members focused on four aims related to treatment access and retention: reducing waiting times, reducing no-shows, increasing admissions, and increasing continuation. Employing process improvement techniques, these agencies have made impressive gains in treatment access and retention, as seen in the results below (current, 11/29/06):

- Reduce Waiting Times: 23.6% reduction (82 change projects in 34 agencies)
- Reduce No-Shows: 32.0% reduction (51 change projects in 29 agencies)
- Increase Admissions: **25.3% increase** (52 change projects in 25 agencies)
- Increase Continuation: 13.5% increase (102 change projects in 34 agencies)

The clinical benefits of these improvements are clear in terms of treatment access and retention. What is less clear, and less publicized, is how instrumental these improvements have been in achieving member agencies' financial objectives.

The Role of Reimbursement

Calculating the financial impact of reduced waiting times, reduced no-shows, increased admissions, and increased continuation can be complicated. A large and confounding factor in this type of analysis is the array of complex, payer-specific reimbursement schemes that characterize the field. As an executive sponsor or change leader, being knowledgeable about reimbursement is essential. This knowledge must be used to translate between clinical interest and business interest when setting process improvement objectives.

Reimbursement generally falls into two categories: fee-for service or capitation. In the experience of NIATx Founding Members, the business case for improving admissions and continuation is fairly clear-cut under a fee-for-service payment structure, since increased revenues have a positive impact on the bottom line. Long waiting times and high no-show rates represent wasted system capacity. Improvements to these aims eliminate waste and drive down unit costs, and benefit the bottom line no matter what reimbursement scheme is in place.

Reducing Waiting Times

Timeliness in addiction treatment agencies is often represented by one of the following scenarios:

- 1. The agency cannot handle available demand and is forced to turn potential clients away at the door:
- 2. The agency's waiting list is in a state of perpetual, limitless growth;
- 3. The average time until the next available appointment is long and relatively stable.

Scenario one is certainly possible; demand may be so great that an organization is forced to turn clients away, no matter how efficient the operation. Scenario two is rarely encountered in practice; waiting lists don't generally extend infinitely. Scenario three is common in the addiction treatment field. However, the notion that an organization can be operating near 100 percent efficiency *and* maintain a relatively constant backlog of clients is illusory (Murray, 2003). If demand is truly greater than an agency's capacity to handle it, then clients must either be turned away, or the waiting list will grow without limit. This result may seem counterintuitive, but derives from the laws of queuing theory. If an agency is able to maintain a relatively constant backlog without turning clients away, then it is operating below capacity by definition.

Timeliness is an essential prerequisite for agencies striving to improve treatment access and retention. As illustrated above, long waiting times are *almost always* an indication of process

inefficiencies that result in unutilized agency capacity. The four Aims interact with one another, and improving timeliness tends to drive improvements in the other Aims. When waiting time is reduced, previously unutilized capacity becomes available, resulting in increased admissions. Clients who don't have to wait for inordinately long periods tend to show up for appointments more frequently. Timely treatment also helps clients stay engaged in treatment. Unfortunately, timeliness is the aim that is most difficult to attach a dollar figure to. However, the impact that timeliness has on the other aims can help quantify the business case for improving this vital measure of treatment access.

Mini-case example:

The Acadia Hospital (Bangor, ME) was facing a budget crisis in their Intensive Outpatient Program (IOP), with a budget deficit of \$202,611 in Fiscal Year 2002. The program was severely underutilized. Clients who requested treatment were placed in IOP treatment "slots" as they became available. Clients had to make multiple callbacks while waiting for admission to an open "slot," even if there were no-shows in the program. A NIATx change team conducted a Plan, Do, Study, Act (PDSA) change cycle wherein potential clients were offered next day screening appointments. Under the new system, time from initial contact to screening fell from 4.1 days to 1.3 days and more people were screened in the first week than in the entire previous month. The program now operates much more efficiently and is able to serve many more clients. This change turned the program around, from a budget deficit of \$139,346 in 2003 to a surplus of \$208,639 in Fiscal Year 2004. The program continues to operate in a surplus condition to this day.

Reducing No-shows

There is a business case for reducing no-shows under any reimbursement scheme. No-shows represent unutilized capacity and invariably drive up the unit cost of treatment. Decreasing no-shows promotes efficiency by allowing your agency to increase the rate of direct-service billing.

A simple spreadsheet tool is available online at www.niatx.net to model the impact of reducing noshows for assessment. It incorporates the financial impact of lost revenue, as well as productivity losses due to idle staff time. Use this tool when conducting change projects to model the likely financial impact of reducing no-shows.

Mini-case example:

The Center for Drug Free Living, Inc (CFDFL; Orlando, FL) was experiencing no-show rates for scheduled appointments near 90 percent when they joined NIATx. This significant no-show rate caused scheduling inefficiencies that pushed time from first request to first treatment to an average of 41 days. It was estimated that each no-show for initial screening cost the agency \$85.60 in lost revenue and labor costs. To remedy the problem, CFDFL formed a change team that decided to offer screening on a walk-in basis. By eliminating screening appointments, CFDFL "killed two birds with one stone." The concept of appointment no-shows became an artifact of their outmoded system, and their waiting list vanished. The revenue previously lost to appointment no-shows was recouped; this change resulted in an average monthly increase of nearly \$25,000 in fees collected.

Increasing Admissions

Getting a greater number of the estimated 23 million Americans in need of addiction treatment in the door was a huge motivating factor in the creation of NIATx. In a fee-for-service reimbursement

scheme, the business case impact for increasing admissions is straightforward: More admissions equals more revenue.

Under a capitation payment arrangement, the business case for increasing admissions is less clear. Contract requirements generally stipulate that an agency serve a given number of clients, and agencies that go above and beyond the cap limit can gain bargaining power in future contract negotiations. Some NIATx member agencies have circumvented the capitation issue by focusing on altering their payer mix to maximize those revenues generated through fee-for-service payments.

Mini-case example:

Using NIATx process improvement methods, Prairie Ridge Addiction Treatment Services (Mason City, IA) has made dramatic bottom-line improvements by focusing on increasing admissions of fee-for-service clients. Pre-NIATx, Prairie Ridge received a majority of its revenue through the Substance Abuse Prevention and Treatment (SAPT) Block Grant, a capitation contract of 1100 clients. With no increases in state or federal appropriations for eight consecutive years, the agency averaged 42 percent over-utilization of block grant funds between 2000–2005, resulting in up to \$462,000 of annual un-reimbursed care. Beginning in 2005, Prairie Ridge set out to remedy this funding deficit by increasing admissions in the 40 percent of their business that was fee-for-service. A change team was formed in the Accounts Receivable department, who used PDSA change cycles to increase third party, Medicaid, and client-fee receipts from \$627,193 in Fiscal Year 2004 to \$1,008,367 in Fiscal Year 2006.

Increasing Continuation

The business case for increasing continuation is clear, as long as the provider is reimbursed for every unit of service provided. A tie also exists between keeping people in treatment and the cost of admitting new clients; i.e., it's generally cheaper to keep an existing client in treatment than to engage a new one. Under capitation, the business case for increasing continuation is not as clear; but again, high continuation rates can be a significant source of value in contract negotiations.

Mini-case example:

Perinatal Treatment Services (Seattle, WA) joined NIATx in September 2003 in a state of crisis. Their long-term residential treatment program for pregnant and parenting women was only four months into the fiscal year with a net loss of \$140,000, a 60 percent continuation rate through the first four units of service, and occupancy rates below 50 percent. Kay Seim, the Executive Sponsor of Perinatal Treatment Services, engaged in a walkthrough exercise to experience the treatment process through the eyes of the customer. The walkthrough exercise exposed many opportunities to improve the customer experience, and a rapid-cycle change team was able to implement changes that led to an improvement from 60 percent to 85 percent continuation through the first four units of service. Now, occupancy is near 100 percent, and more women in the community are getting the help they need. Best of all, the link between continuation rates and revenues means that the program has improved from average monthly revenues of \$60,000 in 2002 to more than \$100,000 in Fiscal Year 2006, and the program is now squarely "in the black."

A new spreadsheet tool is available for download at www.niatx.net that can be used to help inform management about the impact of reduced no-shows, increased admissions, and increased continuation on the bottom line. (The tool is not designed to model the financial impact of waiting time reduction.) The spreadsheet also models the impact of varying payer mix between fee-for-service and

capitated clients. The key to the analysis is the impact that improvements in admissions, no-shows, and continuation have on increasing volume and thereby driving down the unit cost of service. Decreasing the unit cost of service will increase the contribution margin per unit of service, which will positively impact the bottom line.

Due to the complexity and variance of addiction treatment providers' business models, this spreadsheet cannot possibly be a "one size fits all" solution. One of the fundamental assumptions underlying the analysis is that agency costs (both direct and indirect) are relatively fixed; i.e., costs of operating the agency do not rise proportionally with volume. This is generally a reasonable assumption in service-driven organizations, because variable costs for materials, equipment use, etc. are minimal when compared to fixed labor and overhead costs. Overtime labor costs are not reflected in the model, which could be a missing element if your agency has highly variable labor costs. Additionally, the spreadsheet models simple capitation contracts and fee-for-service reimbursement only, merely two of the myriad reimbursement schemes currently in use.

In addition to the direct financial benefits that can result from process improvement, strategic benefits and internal organizational improvements should be considered (Bailit & Dyer, 2004).

Staff Retention & Workforce Development

High turnover rates and a shrinking workforce have put many addiction treatment providers into a staffing crisis. The bottom-line gains that can be realized by improving treatment access and retention can be used to increase employee salaries, invest in training and workforce development, and provide a better working environment. Furthermore, agencies in financial crisis may be susceptible to staff "jumping ship." A financially stable agency is more likely to have a relatively stable staff.

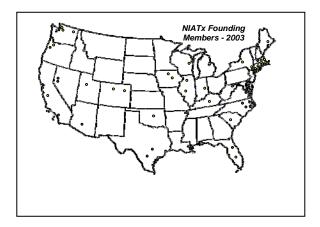
A cornerstone of the NIATx process improvement model is the participation of agency staff in rapid-cycle PDSA change teams. In NIATx, staff members are empowered to make decisions that drive organizational performance. Employee involvement is fundamental to many quality improvement systems across various fields. A study that analyzed the role of staff participation in organizational decision-making at 49 primary care practices showed that staff participation in the decision-making process was associated with reduced turnover among administrative staff (Hung, 2006).

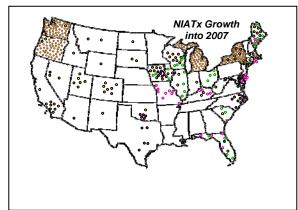
One NIATx member, Prairie Ridge Treatment Services, provided a conservative cost estimate of \$15,000 for recruiting, hiring, and training a replacement counselor. While no formal studies have been conducted to analyze staff retention among the NIATx Founding Members, it has generally been reported that staff members' involvement in process improvement has led to greater self-efficacy and commitment to organizational mission. Staff members respond to the client-centered approach of NIATx and enjoy being on the "cutting-edge" of process improvement in the addiction treatment field. Attracting and retaining good staff members is increasingly mission-critical, and participation in NIATx can provide an edge.

Strategic Advantage

The trend towards "pay-for-performance" in the addiction treatment field is gathering steam. NIATx membership can provide a clear competitive advantage when negotiating contracts with payers. Payers increasingly expect providers to adopt a process improvement approach. Payers expect providers to *demonstrate* quality performance, and reward those that can. The NIATx focus on data-driven decision making allows members to point to their improvements in treatment access and retention, and have the evidence to back them up. Successful pilot projects that make economic sense to payers have been used to leverage changes in the reimbursement structure. NIATx members have also pointed to process improvement success stories as selling points in private capital campaigns.

A Movement is Afoot





NIATx - 2003

NIATx - 2007

NIATx has exploded from 39 member agencies in 2003 to a projected 402 agencies by the end of 2007. Participating agencies have discovered the value of process improvement, and word is spreading quickly. NIATx was conceived as a network to allow for growth. As NIATx spreads into more and more states and providers, with ever-increasing ability to share and disseminate information, the face of addiction treatment is beginning to change.

What action should I take?

Use the information in this TAR, the self-assessment business case tools found at www.NIATx.net, and case examples from the Business Case Series to help build the business case for improving treatment access and retention in your agency.

Acknowledgements

NIATx would like to thank Lynn Madden, MPA, C.E.O. of APT Foundation; Kay Seim, Executive Sponsor, Perinatal Treatment Services; Helen Singh Benn, Change Leader, Center for Drug Free Living; and Jay Hansen, Executive Sponsor, Prairie Ridge Addiction Treatment Services, for their contributions to this report.

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