Advancing Recovery: Implementing Evidence-Based Treatment for Substance Use Disorders at the Systems Level

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ABSTRACT. Objective: A multisite evaluation examined the process and outcomes of Advancing Recovery, a Robert Wood Johnson Foundation initiative to overcome barriers to implementing evidence-based treatments within alcohol and drug treatment systems. Method: We report findings from a 3-year, mixed-method study of how treatment systems promoted two evidence-based practices: medication-assisted treatment and continuing care management. We compared outcomes and implementation strategies across 12 state/county agencies responsible for alcohol and drug treatment and their selected treatment centers. Each partnership received 2 years of financial and technical support to increase adoption of evidence-based treatments. Results: Partnerships flexibly applied the Advancing Recovery model to promote the adoption of evidence-based treatments. Most sites achieved a measurable increase in the numbers of patients served with evidence-based practices, up from a baseline of virtually no use. Rates of adopting medication-based treatments were higher than those for continuing care management. Partnerships used a menu of top-down and bottom-up strategies that varied in specifics across sites but shared a general process of incremental testing and piecemeal adaptation. Conclusions: Supported partnerships between providers and policymakers can achieve wider adoption of evidence-based treatment practices. Systems change unfolds through a trial-and-error process of adaptation and political learning that is unique to each treatment system. This leads to considerable state and local variation in implementation strategies and outcomes. (J. Stud. Alcohol Drugs, 73, 413–422, 2012)

Although not without controversy (Klingemann and Bergmark, 2006; Tanenbaum, 2005), there is growing consensus about the need to increase the adoption of new treatments for substance use disorders, including medication-based treatments and continuing care management (Lingford-Hughes et al., 2004; United Nations Office on Drugs and Crime and World Health Organization, 2008). Treatment systems, unfortunately, share in a common struggle to move promising new therapies from clinical trials to community-based practice. This was demonstrated when a national survey found that, on average, only 60% of U.S. medical patients receive health care consistent with clinical guidelines. Notably, patients with alcohol dependence were the least likely to receive optimal treatment, with only 10.5% receiving evidence-based care (McGlynn et al., 2003).

Advancing Recovery, a Robert Wood Johnson Foundation national initiative, provides a model for encouraging the diffusion of new therapies through systems-level change. Findings from our mixed-method evaluation show the outcomes and process that unfolded as partnerships between policymakers and providers collaborated to increase the adoption of evidence-based treatments.

Barriers to the adoption of evidence-based treatments

Research on barriers to implementing new therapies for alcohol and drug use disorders has focused on the individual clinician and, to a more limited extent, the treatment organization (Raghavan et al., 2008; Simpson, 2002). Clinicians often fail to adopt emerging treatment modalities because they lack awareness, education, training, and practical experience (Fuller et al., 2007; Squires et al., 2008). They may also reveal negative attitudes toward new treatment modalities and, sometimes, philosophical conflicts that stem from deeper differences in competing medical, psychiatric, and self-help orientations (Aarons, 2005; Forman et al., 2001; Mark et al., 2003).

Organizational climate and culture also affect clinician attitudes toward new therapies (Aarons and Sawitzky, 2006; Glisson et al., 2008). Management practices and staff turn-
over can affect rates of clinical innovation (Squires et al., 2008). Organizational capacity—as reflected in larger treatment programs, highly credentialed staff, strong information processing capacities, and well-resourced patients—is positively associated with rates of adopting evidence-based practices (Ducharme et al., 2007; Fuller et al., 2007; Knudsen et al., 2007; Roman and Johnson, 2002; Thomas et al., 2003, 2008).

Most researchers are quick to acknowledge that, in addition to the characteristics of individual clinicians and organizations, aspects of the broader treatment systems in which they operate can affect clinical innovation. Despite generally acknowledging that systems matter (Black, 2001; Marinelli-Casey et al., 2002; Miller and Wilbourne, 2002), evidence about how they matter is largely anecdotal and confined to isolated case studies (Raghavan et al., 2008; Rapp et al., 2005).

Treatment systems for alcohol and drug use disorders are largely governed from the state level in the United States. “Single-state authorities” (SSAs) regulate and pay for services using state appropriations, federal block grant dollars, and, in some states, Medicaid coverage. Some SSAs further devolve authority to regional or county entities. Analyses of the U.S. $22.2 billion spent annually for the treatment of substance use disorders underscore the strategic role of state and local payers. State and local governments account for about 36% of total expenditures, state Medicaid programs pay for 21%, and federal block grants administered by states cover an additional 16% (Mark et al., 2011). In most states, SSAs have added influence through rule setting: They create and enforce licensing and credentialing regulations for treatment centers, even those centers that exclusively serve private-paying patients.

Given their financing and regulatory roles, state and local governments could have considerable influence over the adoption of new evidence-based treatments. Yet we lack a systematic understanding of how they should promote clinical innovation. There is some evidence that policymakers can impede innovation by inadequately covering the costs of new therapies, by failing to support clinician training, and by approving regulations that discourage adoption of new treatment technologies (Kimberly and McLellan, 2006; Nutley et al., 2002). It follows that the financial and regulatory powers of state and local governments could be harnessed to promote the adoption of effective new treatments.

**Advancing Recovery**

Advancing Recovery, a Robert Wood Johnson Foundation National Program, recognized the promise of working with SSAs to promote the adoption of evidence-based treatments for substance use disorders. This initiative built on the Network for the Improvement of Addiction Treatment (NIATx) Model, which uses process improvement to promote clinical innovation within alcohol and drug treatment centers (Hoffman et al., 2008; McCarty et al., 2007).

A call for proposals invited SSAs to partner with three to four treatment centers in their jurisdictions to test strategies for promoting adoption of science-based pharmacological and psychosocial treatments. The National Quality Forum’s (2007) *National Voluntary Consensus Standards for Treatment of Substance Use Conditions* identified a short list of new therapies that applicants could implement. National learning sessions and expert coaching provided opportunities for face-to-face collaboration and technical assistance to participating sites.

The Advancing Recovery National Program Office developed a systems change model as a planning and coaching tool, which was further refined during the project. The model draws from the wider literature on quality improvement and implementation research to provide a roadmap for how treatment systems might promote the adoption of evidence-based treatments (Berwick, 2004; Institute of Medicine, 2001, 2006). It combines strategies for change from the “top down,” such as SSAs instituting new payment strategies and regulations, with “bottom-up” strategies, such as changes in clinical processes within treatment centers. The model assumes that, if a small cadre of policymakers and providers can demonstrate the viability of a particular treatment innovation, they will set the stage for diffusion throughout the system (see: Rogers, 2003).

Table 1 summarizes key components of the Advancing Recovery model. The present analysis focuses on the model’s “five levers,” which comprise the specific tools that could be used to promote diffusion of new treatments. The first is to conduct a financing analysis that reviews budget, costs, and reimbursement mechanisms for paying providers at the systems level. Adopting new therapies is inevitably accompanied by higher marginal costs for clinician training, supervision, productivity losses during training, and the direct costs of the technology (Raghavan et al., 2008). Understanding where these costs lie helps government officials advocate for new funding and changes in payment arrangements that incentivize new treatment modalities (Rapp et al., 2005).

A second lever in the Advancing Recovery model is regulatory and policy analysis. States use regulations to specify practitioner qualifications and the operation of treatment services. Prior research suggests that government licensing and accreditation rules are associated with the breadth of treatment options offered patients (Chriqui et al., 2008; Knudsen et al., 2007; Kubiak and Arfken, 2008) and the supply of practitioners (Tanenbaum, 2005). The third change lever is an inter-organizational relationship analysis to assess roles and relationships among stakeholders, the system’s structure, and how such relations can be maximized to support innovation (see: Schmidt and Weisner, 1993). Fourth, drawing on tools from quality improvement
the targeted practices. Advancing Recovery with little prior experience implementing (buprenorphine/naloxone), the treatment systems began Action promoting use of an opioid agonist medication two. With the exception of Baltimore, which had some prior experience, all other sites, however, successfully implemented the Colorado Action was relaxed when it became clear that promoting adoption of one practice challenged most sites. The Colorado Action may prove useful to achieve optimal patient outcomes (McCarty et al., 2007). Treatment systems are seldom set up with direct involvement by the consumers of care, making it difficult to identify how and why they sometimes fail patients. The Advancing Recovery model views the patient experience as a crucial tool for identifying ways to improve care processes.

Method

In this analysis, we report findings from a 3-year, mixed-method comparative study of how partnerships of state/local authorities and providers in 12 sites used Advancing Recovery’s change levers to promote medication-assisted treatment and continuing care management.

Partnership selection

A competitive application process involving two cohorts of six awards identified policymaker–provider partnerships from 10 states (Alabama, Arkansas, Colorado, Delaware, Florida, Kentucky, Maine, Missouri, Rhode Island, West Virginia) and 2 counties (Baltimore, Dallas). All but one partnership began with three or four treatment providers, with the ultimate goal of system-wide adoption. The period of implementation varied in length from 9 months to 2 years.

The 12 sites were asked to implement two evidence-based practices (one during each year of the award). This expectation was relaxed when it became clear that promoting adoption of one practice challenged most sites. The Colorado and Baltimore sites, however, successfully implemented two. With the exception of Baltimore, which had some prior experience promoting use of an opioid agonist medication (buprenorphine/naloxone), the treatment systems began Advancing Recovery with little prior experience implementing the targeted practices.

Results

Rates of adopting evidence-based treatments

Treatment centers at all sites except Baltimore began Advancing Recovery with little experience providing their selected evidence-based treatments. Most, but not all, reported some success with increased adoption, as measured by the number of new admissions treated with the targeted.
treatment. Rates of adoption varied considerably across state partnerships and treatment modalities.

Medication-assisted treatments. Table 2 summarizes data by quarter for the five states implementing medications for alcohol or opioid use disorders. States varied in types of medications used, target populations, missing data, and metrics for monitoring outcomes. Start-up times also varied across sites, with Maine, Missouri, and West Virginia beginning their medication initiatives in the first year of Advancing Recovery, and Colorado and Dallas in Year 2.

Rates of adopting medication-assisted treatment varied. The four outpatient clinics in Maine experienced rapid and sustained success. Use of buprenorphine increased during the first and second quarters (an average of 40 patients per quarter) over a baseline of 20 patients in the 6 months before implementation of Advancing Recovery; numbers doubled again in the second and third quarters (an average of 82 patients per quarter). In West Virginia, the number of buprenorphine patients increased more slowly, from 57 to 76 by the seventh quarter. Then the rate fluctuated between 7% and 10% of total admissions. In comparison, physicians in Dallas were reluctant to prescribe buprenorphine, and a lack of Medicaid coverage inhibited implementation.

Missouri promoted use of naltrexone and acamprosate for alcohol dependence with a slow start, but ultimately good progress. By the end of Year 1, all participating clinics had some patients using medications. Missing data in Year 2 reflect the challenges of real-world treatment settings: Missouri implemented a new data system and data were lost in the transition. In Colorado, a donation of extended-release naltrexone from the manufacturer stimulated initial growth in new admissions, but subsequent drug shortages led their numbers to later decline.

Continuing care management. Table 3 shows data on the adoption of continuing care management. Rates of patients treated were generally lower than those for sites implementing medication-assisted treatments. The six continuing care initiatives varied in target populations and treatment strategies, but all addressed transitions in care through in-person or telephone counseling (see: McKay et al., 2010).

Alabama’s two regional residential treatment centers for adolescents sought to improve rates of continuing care after discharge. In the initial reporting period, 30% of the patients discharged from residential care entered outpatient treatment; completed referrals reached 65% in the sixth quarter. Baltimore achieved considerable success by blending continuing care with medication-assisted treatment via outpatient buprenorphine maintenance. After patients stabilized on buprenorphine for 6 months, care transferred from drug treatment centers to participating health centers. During the first year, Baltimore doubled the proportion of patients transitioned into continuing care. This opened more slots for buprenorphine patients (as evidenced by the base of the percentages shown in Table 3), increasing their

<table>
<thead>
<tr>
<th>Site</th>
<th>Colorado</th>
<th>Dallas</th>
<th>Maine</th>
<th>Missouri</th>
<th>West Virginia</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBP</td>
<td>Extended-release and oral naltrexone for ETOH patients</td>
<td>Buprenorphine for young adults (&lt;30 yrs)</td>
<td>Buprenorphine for opioid patients</td>
<td>Naltrexone and acamprosate opioid patients</td>
<td>Buprenorphine for opiate outpatients for ETOH patients</td>
</tr>
<tr>
<td>Participating centers, n</td>
<td>3 outpatient clinics</td>
<td>4 outpatient clinics</td>
<td>4 outpatient clinics</td>
<td>10 outpatient clinics</td>
<td>4 outpatient clinics</td>
</tr>
<tr>
<td>ETOH patients treated with EBP / patients screened*</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Young opioid patients treated with EBP / young adults screened*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opioid patients treated with EBP / total outpatient admissions*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 1</td>
<td>Q1</td>
<td>39 / 738 5.3%</td>
<td>13 / 103 12.6%</td>
<td>48 / 254 18.9%</td>
<td>63 / 815 7.7%</td>
</tr>
<tr>
<td></td>
<td>Q2</td>
<td>41 / 719 5.7%</td>
<td>48 / 254 18.9%</td>
<td>59 / 769 9.0%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Q3</td>
<td>77 / 684 11.3%</td>
<td>48 / 451 10.6%</td>
<td>59 / 769 9.0%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Q4</td>
<td>87 / 587 14.8%</td>
<td>61 / 616 9.9%</td>
<td>63 / 700 13.3%</td>
<td></td>
</tr>
<tr>
<td>Year 2</td>
<td>Q5</td>
<td>20 / 53 37.7%</td>
<td>27 / 296 9.1%</td>
<td>97 / 537 18.1%</td>
<td>N.A. 68 / 780 8.7%</td>
</tr>
<tr>
<td></td>
<td>Q6</td>
<td>45 / 325 13.8%</td>
<td>19 / 278 6.8%</td>
<td>95 / 607 15.7%</td>
<td>N.A. 64 / 843 7.6%</td>
</tr>
<tr>
<td></td>
<td>Q7</td>
<td>16 / 172 9.3%</td>
<td>20 / 271 7.4%</td>
<td>82 / 522 15.7%</td>
<td>111 / 1,069 10.4% 76 / 836 9.1%</td>
</tr>
<tr>
<td></td>
<td>Q8</td>
<td>13 / 191 6.8%</td>
<td>33 / 335 9.9%</td>
<td>78 / 540 14.4%</td>
<td>N.A. N.A.</td>
</tr>
<tr>
<td>Total served, n</td>
<td>94</td>
<td>99</td>
<td>596</td>
<td>281</td>
<td>450</td>
</tr>
</tbody>
</table>

Notes: ETOH = ethanol; yrs = years; EBP = evidence-based practice; Q = quarter; N.A. = data not available. *n served with EBP / total n eligible.
numbers from 315 during the fourth quarter to 451 by the sixth quarter.

Colorado made steady progress on improving continuity between detoxification and outpatient care by offering financial incentives for outpatient programs willing to admit detoxification patients. Kentucky also addressed detoxification discharges but worked in a rural community and on a smaller scale. Patient video presentations, navigators, and case managers improved coordination between hospital discharge and outpatient admission.

Because of its large rural areas, Arkansas implemented telephone-based continuing care for adults discharged from residential care. The number of patients served nearly doubled over the first year but then declined in Year 2 because of staff turnover. Rhode Island also struggled to implement its program of telephone continuing care following outpatient treatment. Patients were reluctant to enter the program, and counselors were skeptical of the value of a telephone intervention.

### Process of systems change

Qualitative data paint a picture of (a) how government authorities and treatment providers used the Advancing Recovery model’s five levers to promote the use of evidence-based practices and (b) why we observed variation in adoption rates across sites and between medication and continuing care.

### Financial analysis

The first lever for systems change encouraged policymaker–provider partnerships to examine strategies to finance evidence-based care. Partnerships initially responded with efforts to secure new funds to cover the costs of the new therapy. Maine and Baltimore, however, were the only sites to succeed. Maine’s legislature allocated $500,000 to purchase medications for treating alcohol and drug use disorders, and Maine’s Medicaid office added the medication to its pharmaceutical formulary. This early success seemed attributable to close relationships and trust between the SSA and other state decision-makers, as well as the SSA director’s reputation for being a “team player.” In the intimacy of this small state’s bureaucracy, Maine’s SSA director explained that she could simply “walk down the hall” to negotiate with staff responsible for recommending new funds. Similarly, the Baltimore team increased the number of buprenorphine treatment slots from 112 to 451 through a bargaining process that resulted in new funding from the state and city governments.

Most other sites had less success with generating new funds. Dallas struggled to expand access to buprenorphine in part because the county’s Medicaid behavioral health plan did not include the drug in its pharmacy benefits. Kentucky also struggled with no Medicaid coverage for treatment of adults with alcohol and other drug disorders.

When efforts to raise funds failed, most partnerships defaulted to one or two alternatives: reallocating existing funds to support adoption of the new therapy and/or increas-

### Table 3. Adoption of continuing care treatments in six Advancing Recovery sites

<table>
<thead>
<tr>
<th>Site</th>
<th>Alabama</th>
<th>Arkansas</th>
<th>Baltimore</th>
<th>Colorado</th>
<th>Kentucky</th>
<th>Rhode Island</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBP</td>
<td>Adolescent to outpatient CC</td>
<td>Residential to telephone CC</td>
<td>Bup. patients from AOD to FQHC-based CC</td>
<td>Detox. to outpatient CC</td>
<td>Hospital detox. to CMHC-based CC</td>
<td>Outpatient to telephone CC</td>
</tr>
<tr>
<td>Participating centers, n</td>
<td>3 outpatient clinics</td>
<td>4 residential programs</td>
<td>3 outpatient clinics</td>
<td>3 detox. programs</td>
<td>1 hospital; 1 mental health center</td>
<td>3 outpatient clinics</td>
</tr>
<tr>
<td>Period</td>
<td>Youth enrolled / patients referred to CC (%)</td>
<td>Residential to phone CC (%)</td>
<td>Patients transferred / slots for buoy. patients (%)</td>
<td>Patients transferred / detox. discharges (%)</td>
<td>Patients entering outpatient / hospital discharges (%)</td>
<td>Patients served (%)</td>
</tr>
<tr>
<td>Year 1</td>
<td>Q1</td>
<td>32 / 292 11.0%</td>
<td>165 / 2,795 5.9%</td>
<td>24 / 48 50.0%</td>
<td>8 / N.A. N.A.</td>
<td>Q2</td>
</tr>
<tr>
<td>Year 2</td>
<td>Q5</td>
<td>29 / 58 50.0%</td>
<td>72 / 315 22.9%</td>
<td>314 / 2,980 10.5%</td>
<td>N.A. 80.0%</td>
<td>13 / N.A. N.A.</td>
</tr>
<tr>
<td>Total served, n</td>
<td>175</td>
<td>219</td>
<td>407</td>
<td>2,018</td>
<td>56</td>
<td>97</td>
</tr>
</tbody>
</table>

Notes: CC = continuing care; bup. = buprenorphine; AOD = alcohol and other drugs; FQHC = Federally Qualified Health Center; detox. = detoxification; CMHC = Community Mental Health Center; Q = quarter; N.A. = data not available. *n served with evidence-based practice / total n eligible.
ing flexibility in contractual arrangements for paying treatment centers. Rhode Island’s SSA converted a portion of outpatient slots into slots for continuing care management, amended provider contracts to permit these new expenditures, and approved a new billing code. Missouri’s SSA also restructured existing contracts and allowed treatment centers to purchase physician time and medications. Notably, this step took on its own momentum. After the Missouri partnership demonstrated that alcohol medications reduced treatment readmissions and improved outcomes, Missouri’s Department of Corrections allocated $500,000 to purchase medications for offenders on probation and parole.

Regulatory and policy analyses. Regulatory and policy changes were among the most commonly used, and successful, levers for systems change. A common thread across sites was SSAs’ complementary use of regulatory and financing changes. In Missouri and Maine, treatment program certification standards changed to require staff physicians; treatment centers now had some access to a prescriber. Once these regulatory changes were fully vetted with participating providers, contract language was amended to echo the certification regulations. As SSA staff in Missouri explained, providers “voluntarily apply for certification by the state . . . contract requirements [then] regulate services provided within the framework of the certification standards.”

Several SSAs arrived at complementary licensing and contract language after other alternatives had failed. Maine, for example, initially encountered provider opposition to the use of medications; some 12-step-oriented counselors were philosophically opposed. Maine’s SSA first tried provider education and feedback sessions to address philosophical differences and negotiate a compromise. When this failed, government officials turned to licensing and contract requirements, in the SSA director’s words, so that “the rest of the providers . . . have to make changes whether they want to or not.” A similar story unfolded in Missouri. After the successful implementation of alcohol treatment medications within centers participating in Advancing Recovery, Missouri’s SSA director spoke bluntly to providers who remained opposed: “Either you support medication-assisted treatment or you will be out of business.”

Inter-organizational analysis. Advancing Recovery partnerships actively brokered relationships with other state agencies and supported quality improvement collaboratives that brought stakeholder groups together to support clinical innovation. A general theme here was the importance of the SSA’s placement within the state bureaucracy. Rhode Island and Maine exemplified one extreme where state officials had considerable autonomy and good working relationships with other agencies. The small size of government in these states seemed to facilitate autonomy and trust. Maine’s SSA director noted, “We’re like family.” Kentucky, Florida, and West Virginia, in contrast, had more complex bureaucracies where authority was fragmented across multiple, loosely coupled divisions. The Kentucky and West Virginia SSAs lacked statutory authority to award licenses and enforce provider compliance, thus limiting their regulatory options to promote innovation.

A situation in West Virginia illustrated the challenges. Licensing authority resided with the West Virginia Office of Health Facility Licensure and Certification (OHFLAC). Shortly into Advancing Recovery, OHFLAC ordered the closure of the buprenorphine medication services at the largest treatment center, claiming it was an “unlicensed opioid treatment program.” The SSA intervened and eventually convinced OHFLAC officials that the treatment center was legal. The cease and desist order was rescinded, but only after a period of uncertainty and turmoil.

Understanding the inter-organizational layout had benefits for building stronger coalitions and regional provider networks that, among other things, could offer periodic training and technical assistance on the use and implementation of evidence-based practices. The Texas SSA supported training on motivational interviewing so that Dallas providers could encourage opioid-dependent patients to use buprenorphine. Arkansas’ SSA found that it had to offer ongoing training in continuing care and case management because of staff turnover. Missouri’s SSA created a centralized purchasing system for medications to lower collective costs. Stronger ties among Alabama treatment providers facilitated the transfer of adolescents from residential to outpatient services. Finally, Baltimore treatment programs transferred patients to federally qualified health centers and, in the process, increased the capacity for treating opioid dependence and integration with primary care.

Operations analysis. Operations analysis allowed partnerships to explore the processes that structure, and sometimes inhibit, the delivery of evidence-based care. A key element was the walkthrough, whereby senior staff pretended to be patients and walked through the process of being admitted and treated (see: Ford et al., 2007). By this means, treatment centers identified and addressed inefficiencies related to patient flow—including intake, admissions, treatment, and discharge planning—as well as administrative procedures related to scheduling, billing, charting, and patient follow-up.

The Missouri partnership developed flow charts mapping the process for implementing medication-assisted treatment. Providers identified 15 actionable steps to increase the use of medications, ranging from a more private and confidential setting for intakes, to creation of a new billing code, to training staff on the use of medications. Missouri’s SSA then reviewed these results to identify policies that would help support the suggested changes. As a result, the state added billing codes, issued treatment guidelines, changed contracts to permit the purchase of medications, and developed a centralized medication purchasing capacity, all which required buy-in from state officials at higher levels of government.
Sites also embraced the concept of piloting changes in care. A treatment center executive told us:

\[
\ldots \text{probably the best thing we did was to have one counselor work on it, hammer out all the details, and \[be the\] cheerleader. So, when we started rolling it out \ldots she was already on board. \[Instead of\] eight grumpy counselors, we had one grumpy counselor for a short period. \ldots She saw it would work and \ldots she was able to talk to the others and say ‘It’s not difficult!’ \ldots That made our job [easy].}
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**Customer impact analysis.** The final change lever encouraged treatment centers to understand the experience of the patient as “customer.” The partnerships used walkthroughs to gain a sense of the patient experience to improve care delivery processes. Customer impact analyses in West Virginia revealed that patients using buprenorphine were not welcomed at 12-step meetings. The partnership developed alternative buprenorphine support groups, and the concept spread statewide. The support groups built a more active consumer constituency within the state. During the legal crisis that threatened closure of West Virginia’s buprenorphine services, consumer and family advocacy proved instrumental in preserving services.

**Discussion**

There is a growing consensus about evidence-based treatments for alcohol and drug use disorders. Yet treatment systems struggle with the more practical problems of increasing adoption of these new therapies. The Advancing Recovery model helped steer coalitions of policymakers and providers through the thorny path of implementing change at the systems level. We found evidence that partnerships in diverse treatment systems could achieve meaningful gains in the adoption of medications and continuing care. Although partnerships began Advancing Recovery having virtually no patients treated with the targeted evidence-based treatments, most partnerships increased adoption, although the absolute number of new patients served by some sites remained small. The general process of implementing change could be characterized as one of trial-and-error adaptation and incremental learning as sites attempted to overcome barriers to innovation. No partnership achieved success through a single formula or discrete policy change. No single tool worked equally well across all treatment systems or therapies.

**Overcoming barriers to adoption of evidence-based practices**

Barriers to the adoption of clinical innovations were substantial across all levels of treatment systems. They ranged from the lack of special funding, to the roll-out of new treatments, to the lack of insurance coverage, limited SSA regulatory power, complexity and fragmentation within state bureaucracies, provider resistance to change, uneven participation of treatment centers, staff turnover and lack of training, limited treatment slots, weak data systems for tracking change, communication problems, and finally, the problems of coordinating change in large states and geographically dispersed rural areas.

The new treatments themselves also imposed constraints on implementation. Looking across the Advancing Recovery sites, we generally observed higher rates of adopting medication-assisted therapies compared with continuing care management. Our qualitative observations suggested that one reason for this was that the two types of therapy called for different kinds of systems change. One was a “hard” pharmacological technology and the other a “softer” behavioral one requiring rather complex changes in service delivery to sustain increased use (Rogers, 2003). To boost the adoption of medication-assisted treatments, SSAs mainly focused on the use of financing and contracting tools. When payment mechanisms were in place, the most common barrier was philosophical resistance to the use of medication. States offered training to ameliorate lack of knowledge, but ultimately, many resorted to the use of regulatory and contracting language to require patient access to medications.

In contrast, partnerships implementing continuing care management favored inter-organizational and operational analyses that forged stronger provider networks and identified gaps in the continuum of care. Continuing care implementation faced unique challenges that required coordinating fragmented systems, particularly in rural areas, and achieving the proper flow of patients across different levels of care. Short of opening new facilities, efforts to increase rates of continuing care often came up against inherent limitations in the availability of treatment slots and patient flow. Staff training and turnover also impeded implementation. Thus, Rhode Island counselors and patients often viewed outpatient discharge as the end of care and, therefore, were reluctant to make telephone calls and participate in continuing care. These struggles illustrated the need for building consensus in which both practitioners and patients embraced the value of the service. The larger lesson is that the nature of the treatment itself places important limits and demands on systems change that will define which implementation strategies are needed and most useful.

Our findings also suggest that successful systems change requires a cooperative division of labor between both sides of a policymaker–provider partnership. SSA officials were usually in the best position to take advantage of financial, regulatory and inter-organizational analyses. Participating treatment centers typically had a greater capacity to exploit operations and customer impact analyses. The most successful partnerships in this study used a coordinated effort to make complementary changes across multiple levels of the system all at once. This was nowhere better illustrated than in Missouri, where conducting walkthroughs allowed
providers to experience treatment through the patient’s eyes, making it possible to identify actionable steps to increase the adoption of medications. Officials in the Missouri SSA subsequently used the treatment centers’ recommendations to guide financing and regulatory changes that would make the system more responsive to clinician and patient needs.

The process of change

Advancing Recovery partnerships discovered synergies and complementarities through an incremental process of trial and error, or “political learning” (Heclo, 1974; March and Olsen, 1989). Political learning, followed by incremental adaptation, allowed the more successful partnerships to tailor an approach for working within their own unique organizational environments—perhaps an approach specifically geared to working within the realities of an unwieldy government bureaucracy, or a geographically dispersed rural treatment system, one with unfriendly legal restrictions, or one with a philosophically divided provider constituency. Recall that all 12 sites attempted to generate new funding streams with limited success. Yet having failed, some partnerships eventually found that there were still ways to pull the financing lever besides by simply increasing the budget. SSAs could default to the reallocation of existing resources and/or payment incentives to encourage implementation of evidence-based practices. Moreover, by bundling these financing policies with regulatory changes, systems could further increase the likelihood that providers would adopt the innovation.

Limitations

A key limitation is that the partnerships in this study were selected through competitive applications and were provided with added funding and technical assistance to support their change efforts. The evidence presented here is, therefore, based on a best-case scenario of what can be achieved under fairly optimal conditions. The external funding and coaching provided by the Robert Wood Johnson Foundation were unique and time-limited supports for systems change. Although meaningful change can be achieved without these supports, it is likely to be slower and even more incremental than observed here. This evaluation ultimately represents a first step down the path of developing real-world approaches to increase the adoption of evidence-based treatments. What should follow are studies of similar efforts to change treatment systems carried out under a wider range of real-world constraints and less optimal conditions.

Implications

Findings from this study suggest that implementing new treatments for alcohol and other drug use disorders requires a flexible menu of tools that can accommodate the varying demands of specific treatment modalities and the existing contours of treatment systems. Our findings also suggest that successful systems change is not likely to be a solitary activity of top-down policymaking by government officials. Some changes in Advancing Recovery started with policymakers changing regulations “from above,” but others started with providers piloting new approaches within their treatment centers, instigating a course of change “from below.” The greatest successes appeared largely because of the coordination of efforts between policymakers and providers, not from what one side or the other achieved in isolation.

This evaluation underscores the potential for systems change to promote a wider range of clinical options as well as the significant barriers that must be overcome. It suggests that there is no single formula or optimal progression in the process of changing the delivery of care. We tend to assume that reforms in health care systems should unfold in discrete stages: policy development, followed by government debate, passage of a law, and ultimately policy implementation. Our observations here suggest that this process is far less tidy and linear. In the 12 treatment systems we observed, actors pursued multiple change strategies simultaneously. Those that seemed to work—and to work well together—were pursued while others were abandoned or placed on a back burner. Through the continual back-and-forth of policy revision and real-world implementation, partnerships felt their way toward a bundle of strategies that fit the contours of their environments. This suggests that, to promote sustainable changes in treatment for alcohol and other drug problems, multiple inputs and a certain degree of chaos are to be expected. But ultimately, what matters is the quality of care, the patient’s experience, and long-term sustainability, not the predictability or elegance of the process by which it all came about.

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