

# What Works in Drug & Alcohol Treatment:



Three Steps to Improved Outcomes

Scott D. Miller, Ph.D. & David Mee-Lee, M.D.

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## What Works in Drug & Alcohol Treatment: Pop Quiz

Question #1:

Research consistently shows that treatment works

**True**

Study after study, and studies of studies show the average treated client is better off than 80% of the untreated sample.




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### What Works in Drug & Alcohol Treatment: Tutorial on "Effect Size"

← Effect size of Aspirin

Interval	Percentage of Cases
-3σ to +3σ	99.73%
-2σ to +2σ	95.44%
-1σ to +1σ	68.26%
Mean to +1σ	34.13%
Mean to -1σ	34.13%
+1σ to +2σ	13.59%
+2σ to +3σ	2.14%
-1σ to -2σ	13.59%
-2σ to -3σ	2.14%

Rosenthal, R. (June 1990). How are we doing in soft psychology? *American Psychologist*, 45(6), 775-777.

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### What Works in Drug & Alcohol Treatment: An Example

- More good news:
  - Research shows that only 1 out of 10 clients on the average clinician's caseload is not making any progress.
- Recent study:
  - 6,000+ treatment providers
  - 48,000 plus real clients
  - Outcomes clinically equivalent to randomized, controlled, clinical trials.

Category	Value
Benchmark	0.8
Adults	0.9
Children	1.0

Kendall, P.C., Kipnis, D. & Otto-Salaj, L. (1992). When clients don't progress. *Cognitive Therapy and Research*, 16, 269-281.  
 Minami, T., Wampold, B., Seejin, R., Hamilton, E., Brown, J., Kircher, J. (in press). *Journal of Consulting and Clinical Psychology*.

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### What Works in Drug & Alcohol Treatment: The "Good News"

## The bottom line?

- The majority of helpers are effective and efficient *most* of the time.
- Average treated client accounts for only 7% of expenditures.

## So, what's the problem...

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### What Works in Drug & Alcohol Treatment: The "Bad News"

- Drop out rates average 47%;
- Therapists frequently fail to identify failing cases;
- 1 out of 10 clients accounts for 60-70% of expenditures.



Lambert, M.J., Whipple, J., Hawkins, E., Vermeersch, D., Nielsen, S., & Smart, D. (2004). Is it time for clinicians routinely to track client outcome? A meta-analysis. *Clinical Psychology, 10*, 288-301.  
Chasson, G. (2005). Attrition in child treatment. *Psychotherapy Bulletin, 40*(1), 4-7.

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### What Works in Drug & Alcohol Treatment: Pop Quiz

**Question #2:**      **FALSE**

Research shows that some treatment approaches are *more effective* than others

*All approaches work equally well with some of the people some of the time.*




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### What Works in Drug & Alcohol Treatment: Do Treatments vary in Efficacy?



- The research says, "NO!"
- The lack of difference cannot be attributed to:
  - Research design;
  - Time of measurement;
  - Year of publication;
- The differences which have been found:
  - Do not exceed what would be expected by chance;
  - At most account for 1% of the variance.

Rosenzweig, S. (1936). Some implicit common factors in diverse methods in psychotherapy. *Journal of Orthopsychiatry, 6*, 412-15.  
Wampold, B.E. et al. (1997). A meta-analysis of outcome studies comparing bona fide psychotherapies: Empirically, "All must have prizes." *Psychological Bulletin, 122*(3), 203-215.

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## What Works in Therapy: Do Treatments vary in Efficacy?



- Meta-analysis of all studies published between 1960-2007 comparing bona fide treatments for alcohol abuse and dependence:
  - *No difference in outcome between approaches intended to be therapeutic:*
  - *Approaches varied from CBT, 12 steps, Relapse prevention, & PDT.*
  - *Researcher allegiance accounted for 100% of variance in effects.*

Inel, Z., Wampold, B.E., Miller, S.& Fleming, R., (2008). Distinctions without a difference. *Psychology of Addictive Behaviors*, 22(4), 533-543.

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## What Works in Drug & Alcohol Treatment: Pop Quiz

Substance Abuse Mental Health Services Administrator  
United States Department of Health and Human Services

### EVIDENCE-BASED PRACTICES

Shaping Mental Health Services Toward Recovery

<ul style="list-style-type: none"> <li>•Cognitive Therapy</li> <li>•Behavioral Therapy</li> <li>•Cognitive Behavioral Therapy</li> <li>•Motivational Interviewing</li> <li>•Twelve Steps</li> <li>•Dialectical Behavioral Therapy</li> <li>•Multidimensional Family Therapy</li> <li>•Structural Family Therapy</li> <li>•Functional Family Therapy</li> <li>•Skills Training</li> <li>•Acceptance and Commitment Therapy</li> <li>•Existential Therapy</li> </ul>	<ul style="list-style-type: none"> <li>•Client-centered Therapy</li> <li>•Systemic Therapy</li> <li>•Biopsychosocial Therapy</li> <li>•Solution-focused Therapy</li> <li>•Multimodal Therapy</li> <li>•Psychodynamic Therapy</li> <li>•Narrative Therapy</li> <li>•Integrative Problem-Solving Therapy</li> <li>•Eclectic Therapy</li> <li>•Interpersonal Psychotherapy</li> <li>•Transrational Therapy</li> </ul>
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## What Works in Drug & Alcohol Treatment: An Example

### Cannabis Youth Treatment (CYT) Randomized Field Experiment



**Michael Dennis, Ph.D.,**  
**Susan H. Godley, Ph.D.,**  
**Guy S. Diamond, Ph.D.,**  
**Frank M. Tims, Ph.D.,**  
**Thomas Babor, Ph.D.,**  
**Jean Donaldson, M.A.,**  
**Howard Liddle, Ed.D.,**  
**Janet C. Titus, Ph.D.,**  
**Yifrah Kamner, M.D.,**  
**Charles Webb, Ph.D.,**  
**Nancy Hamilton, M.P.A.,**  
 and the CYT steering committee  
*Presentation in Symposium 64, "State-of-the-Art Adolescent Substance Abuse Prevention and Treatment", at the American Psychiatric Association Annual Conference, Philadelphia, PA, May 18-22, 2002.*

Dennis, M., Godley, S., Diamond, G., Tims, F., Babor, T., Donaldson, J., Liddle, H., Titus, J., Kamner, Y., Webb, C., Hamilton, N., Funk, R. (2004). The cannabis youth treatment (CYT) study: Main findings from two randomized trials. *Journal of Substance Abuse Treatment*, 27, 97–213.




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**What Works in Drug & Alcohol Treatment:  
An Example**

- 600 Adolescents marijuana users:
  - Between the ages of 12-15;
  - Rated as or more severe than adolescents seen in routine clinical practice settings;
  - Significant co-morbidity (3 to 12 problems [83%], alcohol [37%]; internalizing [25%], externalizing [61%]).
- Participants randomized into one of two arms (dose, type) and one of three types of treatment in each arm:
  - Dose arm: MET+CBT (5 wks), MET+CBT (12 wks), Family Support Network (12 wks)+MET+CBT;
  - Type arm: MET/CBT (5 wks), ACRT (12 weeks), MDFT (12 wks).

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**What Works in Drug & Alcohol Treatment:  
An Example**



- No difference in outcome between different types of treatment or different amounts of competing therapeutic approaches.

“The results...[showed] that neither the best-practice nor the research-based interventions were clearly superior...”

 Godley, S.H., Jones, N., Funk, R., Ives, M Passetti, L. (2004). Comparing Outcomes of Best-Practice and Research-Based Outpatient Treatment Protocols for Adolescents. *Journal of Psychoactive Drugs*, 36(1), 35-48.

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**What Works in Drug & Alcohol Treatment:  
Pop Quiz**

**Question #3: FALSE**

Of all the factors affecting treatment outcome, treatment model (technique or programming) is the *most potent*.

Technique makes the smallest percentage-wise contribution to outcome of any known ingredient.



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### What Works in Drug & Alcohol Treatment: Factors accounting for Success

**Outcome of Treatment:**

- 60% due to "Alliance" ([jaka "common factors"] 8%/13%)
- 30% due to "Allegiance" Factors (4%/13%)
- 8% due to model and technique (1/13)

Factor	Percentage of Variance
Technique	1%
Allegiance	4%
Alliance	9%

Wampold, B. (2001). *The Great Psychotherapy Debate*. New York: Lawrence Erlbaum.

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### What Works in Drug & Alcohol Treatment: An Example

#### Cannabis Youth Treatment Project

- Ratings of the alliance predicted:
  - Premature drop-out;
  - Substance abuse and dependency symptoms post-treatment, and cannabis use at 3 and 6 month follow-up.
- By contrast, treatment approach accounted for little more than 0% of the variance in outcome.

Terlaff, B., Hahn, J., Godley, S., Godley, M., Diamond, G., & Funk, R. (2005). Working alliance, treatment satisfaction, and post-treatment patterns of use among adolescent substance users. *Psychology of Addictive Behaviors*, 19(2), 199-207.

Shelef, K., Diamond, G., Diamond, G., Liddle, H. (2005). Adolescent and parent alliance and treatment outcome in MDFT. *Journal of Consulting and Clinical Psychology*, 73(4), 689-698.

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### What Works in Drug & Alcohol Treatment: Research on the Alliance

- Research on the alliance reflected in over 1000 research findings.

Bachelor, A., & Horvath, A. (1999). The Therapeutic Relationship. In M. Hubble, B. Duncan, & S. Miller (eds.), *The Heart and Soul of Change*. Washington, D.C.: APA Press.

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## The Client's Theory of Change: Empirical Findings

- In the Hester, Miller, Delaney, and Meyer study:
  - A difference in outcome was found between the two groups depending on whether the treatment fit with the client's pre-treatment beliefs about their problem and/or the change process.
- When treatment of people diagnosed as schizophrenic was changed to accord their wishes and ideas:
  - More engagement;
  - Higher self-ratings; and
  - Improved objective scores.

Hester, R., Miller, W., Delaney, H., & Meyers, R. (1990). Effectiveness of the community reinforcement approach. Paper presented at the 24th annual meeting of the AAAP, San Francisco, CA.

Disson, B., & Miller, S. (2000). The client's theory of change: Consulting the client in the integrative process. *Journal of Psychotherapy Integration, 10*(2), 169-187.

Patel, S., & Grayson, T. (1999). A pilot trial of treatment changes according to schizophrenic patients' wishes. *Journal of Nervous and Mental Disease, 187*(7), 441-443.

Kelli, R., Rosenberg, J., & Bruchman, S. (2007). Whose treatment is it anyway? The role of consumer preferences in mental healthcare. *American Journal of Psychiatric Rehabilitation, 10*(1), 62-80.

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## What Works in Drug & Alcohol Treatment: Pop Quiz

Question #4:

Consumer ratings of the alliance are better predictors of outcome than clinician ratings.

**True**

~~Remember the Alamo!~~

Remember Project MATCH

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## What Works in Drug & Alcohol Treatment: Project MATCH and the Alliance

- The largest study ever conducted on the treatment of problem drinking:
  - Three different treatment approaches studied (CBT, 12-step, and Motivational Interviewing).
- **NO** difference in outcome between approaches.
- The client's rating of the therapeutic alliance the best predictor of:
  - Treatment participation;
  - Drinking behavior during treatment;
  - Drinking at 12-month follow-up.

Project MATCH Group (1997). Matching alcoholism treatment to client heterogeneity. *Journal of Studies on Alcohol, 58*, 7-29.

Babor, T.F., & Dol Boca, F.K. (eds.) (2003). *Treatment matching in Alcoholism*. Cambridge University Press, Cambridge, UK.

Comors, G.J., & Carroll, K.M. (1997). The therapeutic alliance and its relationship to alcoholism treatment participation and outcome. *Journal of Consulting and Clinical Psychology, 65*(4), 588-98.

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## More Evidence: How Much is Enough?

- 38 cocaine-dependent methadone maintenance participants receiving an escalating schedule of voucher-based reinforcement for cocaine abstinence administered by research assistants.
  - Urinalysis 3x/week during active stage of intervention and 2x/week during aftercare stage of intervention.
- Also receiving AODA counseling from substance abuse professionals.
- Participant ratings of working alliance with RAs administering CM were greater than the alliance ratings for counselors administering drug counseling.
- Participant ratings of working alliance with RAs were positively related to drug abstinence, but ratings with counselors were not.

L.A. Benishok, S.E. Shealy, B.J. Rosenwasser, M.L.E. Kerwin, K.L. Dugosh & K.C. Kirby (2006). Working Alliance with Research Assistants and with Counselors for Methadone Maintenance Patients Receiving Cocaine Abstinence Reinforcement. NIDA grant # R01-DA-017444.

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## What Works in Drug & Alcohol Treatment: Pop Quiz

# True

**Question #5:** The bulk of change in successful treatment occurs earlier rather than later.

If a particular approach, delivered in a given setting, by a specific provider is going to work, there should be measurable improvement in the first six weeks of care.

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## What Works in Drug & Alcohol Treatment: Project MATCH and Outcome

**Results** 113

**Percent Days Abstinent by Treatment Condition**

Time in Months	CBT (%)	MET (%)	TSF (%)
Baseline	~25	~25	~25
1-3	~85	~75	~75
6	~85	~75	~75
9	~85	~75	~75
12	~85	~75	~75
15	~85	~75	~75
37-39	~85	~75	~75

Babor, T.F., & Del Boca, F.K. (eds.) (2003). *Treatment Matching in Alcoholism*. United Kingdom: Cambridge, 113.

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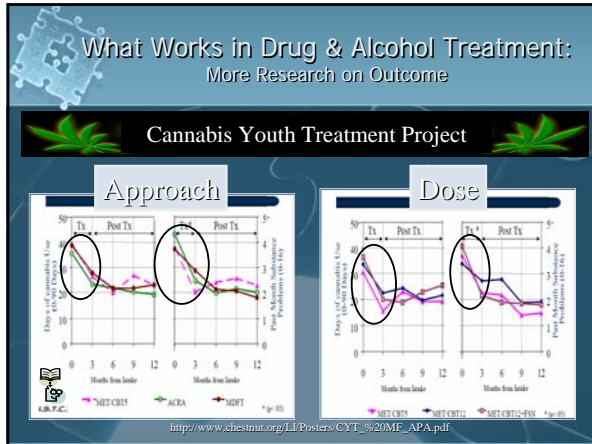
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### What Works in Drug & Alcohol Treatment: Pop Quiz

**Question #6: False**

Stigma, ignorance, denial, and lack of motivation are the most common reasons potential consumers do not seek the help they need.

Second to cost (81%), *lack of confidence* in the outcome of the service is the primary reason (78%). Fewer than 1 in 5 cite stigma as a concern.

http://www.apa.org/releases/practicepoll\_04.html

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### What Works in Drug & Alcohol Treatment: How do therapists compare?

In a recent survey on how much consumers trusted various professionals....

Psychotherapy in Australia (2001). Trust in therapists? 7(1), 4.

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What Works in Drug & Alcohol Treatment:  
Pop Quiz

Last Question!

The best way to insure effective, efficient, ethical and accountable treatment practice is for the field to adopt and enforce:

- Evidence-based practice;
- Quality assurance;
- External management;
- Continuing education requirements;
- Legal protection of trade and terminology.

**False**




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What Works in Drug & Alcohol Treatment:  
A Tale of Two Solutions...

The Medical Model:




- Diagnosis-driven, "illness model"
- Prescriptive Treatments
- Emphasis on *competence* and *competency*

**HOW?**

Practice-based Evidence

- Client-directed (Fit)
- Outcome-informed (Effect)
- Emphasis on benefit over need
- Restore real-life functioning




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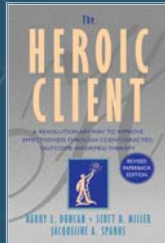
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What Works in Drug & Alcohol Treatment:  
First Steps



- Formalizing what experienced therapists do on an ongoing basis:
- Assessing and adjusting fit for maximum effect.

Duncan, B.L., Miller, S.D., & Sparks, J. (2004). *The Heroic Client* (2nd Ed.). San Francisco, CA: Jossey-Bass.




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### What Works in Drug & Alcohol Treatment: Three Steps



1. Develop a highly individualized service delivery plan;
2. Formal, ongoing feedback from clients regarding the plan, process and outcome of treatment;
3. Integration of both plan and feedback into an innovative and flexible continuum of care that is maximally responsive to the individual client.




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### What Works in Drug & Alcohol Treatment: Step One

An “individualized service delivery plan” is basically written summary—a snapshot so to speak—of the alliance between particular client and therapist at given point in time...



Miller, S.D., Mee-Lee, D., & Plum, W. (2005). Making treatment count. *Psychotherapy in Australia, 10(4)*, 42-56.




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### What Works in Drug & Alcohol Treatment: Step One

Structuring the Alliance with the ASAM MDA:

1. Acute intoxication/withdrawal potential;
2. Biomedical conditions/complications;
3. Emotional, behavioral, cognitive conditions/complications;
4. Readiness to change;
5. Relapse, continued use/problem potential;
6. Recovery environment.

Minimizing Chaos



Maximizing Flexibility




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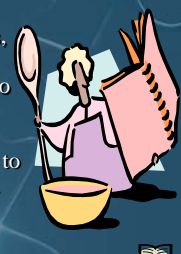

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### What Works in Drug & Alcohol Treatment: Step Two

**Formal Client Feedback:**

- “As any experienced clinician knows, therapy is a complex affair, full of nuance and uncertainty. In contrast to examples found in manuals and textbooks—where the treatment, if done in the manner described, seems to flow logically and inexorably toward pre-determined outcome—finding “what works” for a given client most often proceeds in trial and error fashion...”


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### What Works in Drug & Alcohol Treatment: Step Two

- Traditionally, the disorder inherent in real world clinical practice has been managed by programming—standardized packages or treatment “tracks” to which clients assigned and their progress assessed by degree of compliance and movement from one level to next.
- In contrast, client-directed, outcome-informed approach begins with experience and outcome the client desires and then works backwards to create means by which those will be achieved. Even then, client is in charge, helping to fine-tune or alter, continue or end treatment via ongoing feedback.




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### What Works in Drug & Alcohol Treatment: Step Two

**Individually:**  
(Personal well-being)

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**Interpersonally:**  
(Family, close relationships)

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**Socially:**  
(Work, School, Friendships)

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**Overall:**  
(General sense of well-being)

**Relationship:**  
(Partner, family, friends, support)

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**Goals and Objectives:**  
(Identified as a result of assessment and agreed on by client)

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**Approach or Method:**  
(Theoretical approach, treatment plan, etc.)

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**Overall:**  
(How well the client is doing)

Valid  
Reliable  
Feasible

The O.R.S
The S.R.S

Download free working copies at:  
<http://www.talkingcure.com/index.asp?id=106>




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### What Works in Drug & Alcohol Treatment: Step Two

•Cases in which therapists “opted out” of assessing the alliance at the end of a session:

- Two times more likely for the client to drop out;
- Three to four times more likely to have a negative or null outcome.

Miller, S.D., Duncan, B.L., Sorrell, R., & Brown, G.S. (February, 2005). The Partners for Change Outcome Management System. *Journal of Clinical Psychology*, 61(2), 199-208.

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### What Works in Drug & Alcohol Treatment: Step Two

Figure 3. Improvement in effect size following feedback

Quarter	Year	n	Effect Size
2nd quarter	2002	539	0.45
3rd quarter	2002	722	0.35
4th quarter	2002	723	0.45
1st quarter	2003	845	0.55
2nd quarter	2003	882	0.65
3rd quarter	2003	1020	0.75
4th quarter	2003	945	0.80
1st quarter	2004	865	0.85

Miller, S.D., Duncan, B.L., Sorrell, R., Brown, G.S., & Chalk, M.B. (2005). Using outcome to inform therapy practice. *Journal of Brief Therapy*, 5(1).

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### What Works in Drug & Alcohol Treatment: A Question of Focus

Focus Area	Number of Cases
Technique	1
Allegiance	4
Alliance	8
Outcome	13

Is it Working?

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What Works in Drug & Alcohol Treatment:  
Step Three

Integrating the plan and feedback into a flexible continuum of care:

- Treatment contains no fixed program content, length of stay, or levels of care.
- Instead, a continuum of possibilities is made available to client that includes everything from community resources, natural alliances with family and significant others, to formal treatment and care within healthcare institutions.




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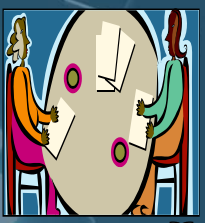
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Integrating Plan and Feedback into Flexible Continuum of Care (cont.)

- Literally, everything is, so to speak, “on the table.”
- The ASAM MDA provides the initial structure for partnering with client in the development of treatment.
- The Outcome and Alliance feedback determine whether, how, and when to continue, modify, or terminate contact.




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What Works in Drug & Alcohol Treatment:  
Step Three

Outcome of treatment varies depending on:

- The unique qualities of the client;
- The unique qualities of the therapist;
- The unique qualities of the context in which the service is offered.

Directions for change:

- What: 1%
- Where: 2-3%
- Who: 8-9%




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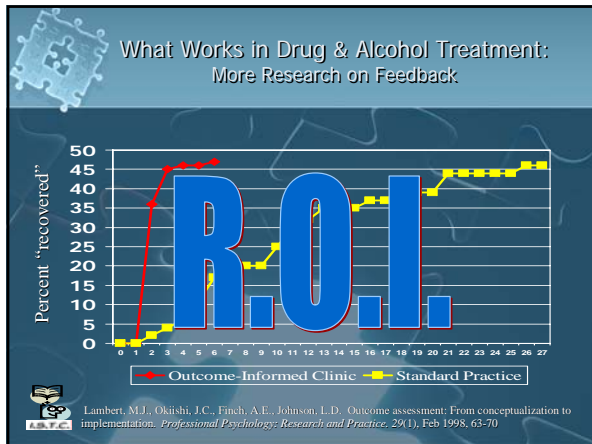
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### What Works in Drug & Alcohol Treatment

**Call for:**

- ✓ Accountability;
- ✓ Measurable outcomes;
- ✓ Efficient use of resources;
- ✓ Documented "return on investment"

**The response:**

- ✓ Practice-based practice;
- ✓ Training and supervision targeted to outcomes of individual therapists and programs;
- ✓ Continuous monitoring and real-time utilization of outcome data;
- ✓ Treatment planning and programs structured and informed by local norms and algorithms.
- ✓ Regulatory bodies use outcome data for value-based oversight and purchasing of treatment services.

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