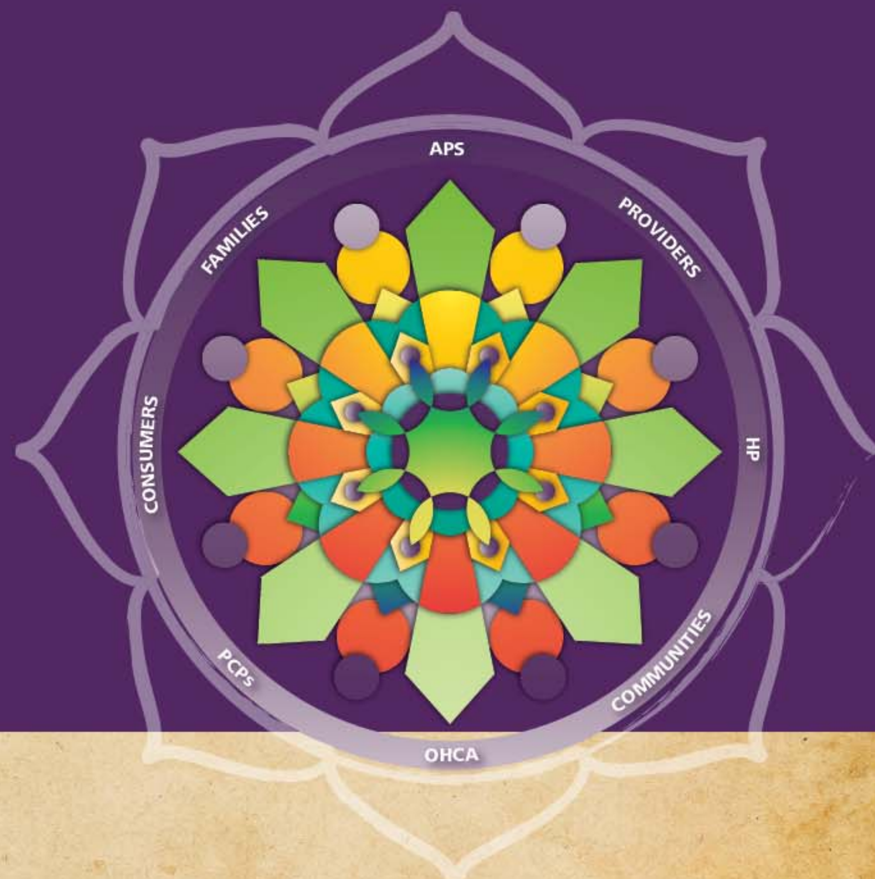
4th ANNUAL COLLABORATIVE BEHAVIORAL HEALTH PROVIDER TRAINING

April 7th and 8th, 2011



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PROVIDERS

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CONSUMERS

FAMILIES

Introduction to Outcomes Informed Care

Jeb Brown, PhD

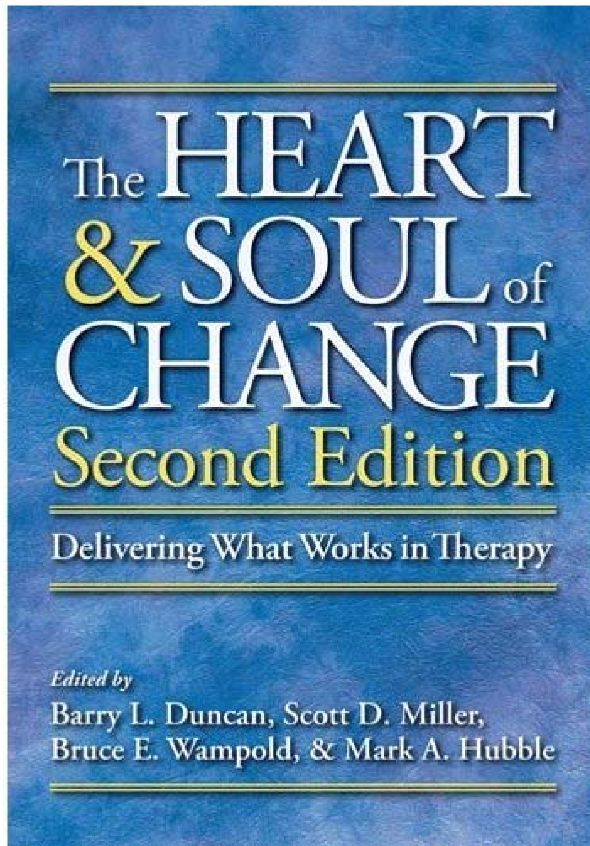
Director, Center for Clinical Informatics

Salt Lake City, UT

jebbrown@clinical-informatics.com

801 541-9720

Up to date review of literature



2009

American Psychological Association

Washington DC

Outcomes informed care …in the best interest of consumers

"The combination of measuring progress (i.e. *monitoring*) and providing feedback consistently yields clinically significant change…. Rates of deterioration are cut in half, as is drop out. Include feedback about the client's formal assessment of the relationship, and the client is less likely to deteriorate, more likely to stay longer, and twice as likely to achieve a clinically significant change"

- Duncan, Miller, Wampold & Hubble (2009); From Introduction in *Heart & Soul of Change*; page 39

Yes, it is time to monitor outcomes

"The use of outcomes management systems is ushering in a significant change in how psychotherapy is conducted. This review underscores the value of monitoring treatment response, applying statistical algorithms for identifying problematic cases, providing timely feedback to therapists (and clients), and providing therapists with problem-solving strategies. It is becoming clear that such procedures are well substantiated, not just matters for debate or equivocation. When implemented, these procedures enhance client outcome and improve quality of care."

- Michael Lambert (2009); From Yes It Is Time for Clinicians to Routinely Monitor Treatment Outcomes; in Duncan, Miller, Wampold & Hubble (Eds); page 259

What is outcomes informed care?

- Routine use of patient self report outcome and therapeutic alliance questionnaires to inform the treatment process.
- Questionnaires are administered a frequent intervals throughout an episode of care.
- Clinicians are given access to continuous feedback on patients improvement as measured by the outcome questionnaires.

Measuring “global distress”

- All measures commonly used in mental health research to correlate strongly with a common factor, generally referred to as the “global distress factor”
- Global Distress includes items assessing:
  - Symptoms of depression & anxiety
  - Attention and concentration problems
  - Family and interpersonal relations
  - Work place productivity & functionality

Use of feedback

- Routine use patient self-report questionnaires provides clinicians with additional “channels” of communication
  - Research indicates that use of questionnaires improves clinicians ability to identify “at risk” cases and prevent premature termination
- Algorithms used to compare patient improvement on questionnaires against “expected” improvement based on large normative samples of comparable patients.
- Strong evidence from controlled studies and real world applications that patients benefit.
  - Higher probability of improvement
  - Fewer treatment failures

ACORN

A Collaborative Outcomes Resource Network

https://www.psychoutcomes.org

- Non-profit dedicated to encouraging the use of client/patient-completed outcome measures in behavioral health care and related fields.
  - TWiki site provides information, fosters collaboration, and offers support for organizations launching and nurturing outcomes-informed care initiatives.
  - Organization supported by health plans, managed care companies & employers seeking to improve treatment outcomes in mental health care

APS Healthcare

Sample ACORN Questionnaire

Item content varies depending on measurement needs

Global Distress Items

Suicidal ideation

Substance Abuse

Productivity

Alliance Items

Questionnaires faxed to data center for cost effective scoring, analysis & data warehousing

32365

ACORN
A Collaborative Outcomes Resource Network

Brief Adult Screening & Outcome Questionnaire
Version 10.0

Org ID: 3 Site ID: 1 Clinician ID: 937812

Date completed __/__/__ Session # __ Client ID: __________

Please print clearly *Numerals only please*

This brief questionnaire asks about some of the most commonly reported thoughts, feelings and behaviors among adults seeking behavioral health treatment. Please think about the past two weeks and indicate how often each of the following occurred. This will help you and your therapist/doctor to plan your treatment and monitor your improvement.

In the past two weeks, how often did you	Never	Hardly ever	Some-times	Often	Very often
…feel unhappy or sad?	O	O	O	O	O
…have little or no energy?	O	O	O	O	O
…have a hard time getting along with family, friends or coworkers?	O	O	O	O	O
…feel hopeless about the future?	O	O	O	O	O
…have a hard time paying attention.	O	O	O	O	O
…feel unproductive at work or other daily activities?	O	O	O	O	O
…feel tense or nervous?	O	O	O	O	O
…have problems with sleep (too much or too little)?	O	O	O	O	O
…feel lonely?	O	O	O	O	O
…think about harming yourself?	O	O	O	O	O
…have someone express concerns about your alcohol or drug use?	O	O	O	O	O
…have more than five drinks of alcohol at one time?	O	O	O	O	O
…have a problem at work, school, or home because of alcohol or drug use?	O	O	O	O	O

Please estimate the percent of your productivity at work, school or other important daily activities that is lost due to symptoms of stress, anxiety or depression. __ %

If this is not your first session, please take a moment to give feedback on your most recent session.	Agree	Somewhat agree	Not sure	Somewhat disagree	Do not agree
I felt that we talked about the things that were important to me.	O	O	O	O	O
I felt that the therapist liked and understood me.	O	O	O	O	O
I felt that the session was helpful.	O	O	O	O	O
I felt confident that the therapist and I worked well together.	O	O	O	O	O

For more information on this and other questionnaires visit www.psychoutcomes.org

32365

Fax completed forms to: 800 961-1224

Meta Questionnaire

- Were the questionnaires helpful in your treatment?
- Did you have concerns about their use?
- Was your doctor/therapist interested in your responses?
- Were you honest?

ACORN
A Collaborative Outcomes Resource Network

6396

We appologize for yet another questionnaire! We want to learn about your experiences completing ACORN questionnaires. We want to know if the questionnaires were helpful to you and your doctor/therapists, and how you think they could be improved.

Thank you for your help!

Client ID (optional):

Clinician ID (optional):

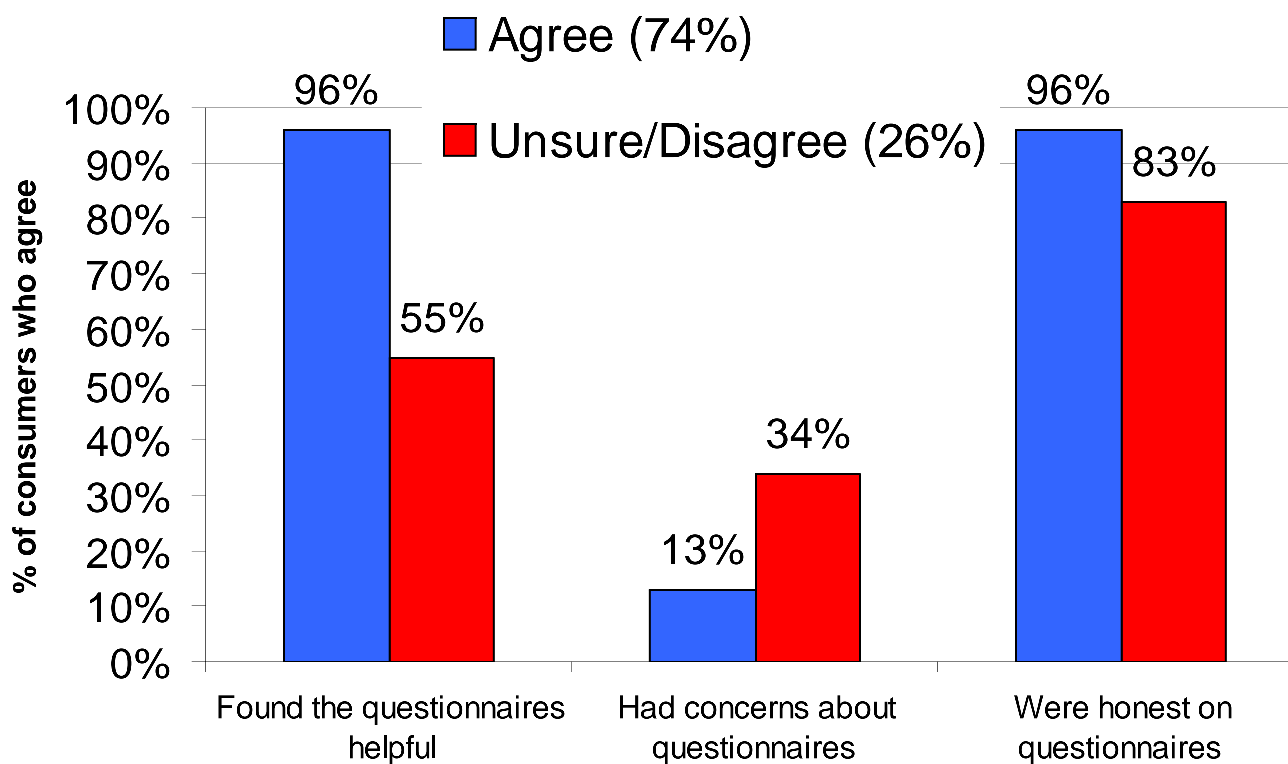
Date completed __ / __ / __ Org ID

Please indicate how much you agree with each of the following statements.	Agree	Somewhat agree	Not sure	Somewhat disagree	Do not agree
The questionnaires asked about some of symptoms and problems for which I sought help.	○	○	○	○	○
I found that the questionnaires were a helpful part of the treatment process.	○	○	○	○	○
I think that the questionnaires could have helped my doctor/therapist understand how I feel.	○	○	○	○	○
I believed that the doctor/therapist was interested in how I answered the questions.	○	○	○	○	○
The questionnaires did not ask about the things that were most important to me.	○	○	○	○	○
My responses to the questionnaires were an honest reflection of how I really felt.	○	○	○	○	○
The questionnaires were too long.	○	○	○	○	○
I was afraid that the questionnaires might be used in ways that there were not in my best interest.	○	○	○	○	○
I was afraid that the questionnaires would compromise my confidentiality. .	○	○	○	○	○

Please use the space below to add any comments or suggestions as to how the ACORN questionnaires can be improved. You may continue on the back.

For more information on this and other questionnaires visit www.psychoutcomes.org

I believe the therapist was interested in how I answered the questions...



Sample size = 183 respondents

Relationship building is an *Evidence Based Practice!*

"Practitioners are encouraged to routinely monitor patients' responses to the therapy relationship and ongoing treatment. Such monitoring leads to increased opportunities to repair alliance ruptures, improve the relationship, modify technical strategies, and avoid premature termination."

- Norcross & Lambert (2006) in *Evidence-Based Practices in Mental Health*, Norcross, Beutler & Levant (Eds), p. 218

Therapeutic Alliance

Three Components:

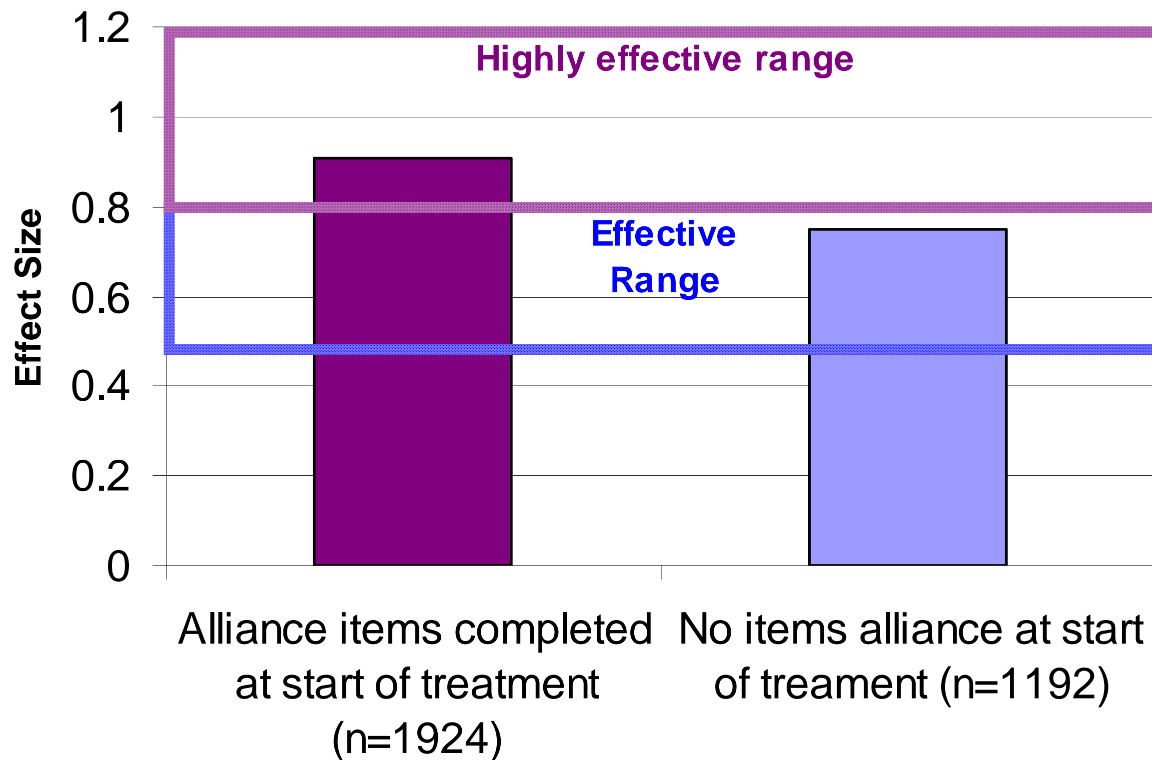
- **Goals:** Objectives of therapy that both client and therapist endorse
- **Tasks:** Behaviors and processes within the therapy session that constitute the actual work of therapy
- **Bonds:** The positive interpersonal attachment between therapist and client of mutual trust, confidence, and acceptance

Alliance Scale Psychometrics

- Items are heavily skewed in positive direction.
- Scale scores are not normally distributed.
- Cannot calculate reliability & validity using parametric statistics that assume normality of distribution
- ***Items are only as "valid" as clinician's ability to illicit honest and frank responses!***

Alliance measurement & better outcomes

Alliance analyses performed using data from the ACORN data repository



APS Healthcare

Alliance change & outcome

	Effect Size
Alliance Change for Worse	
No Change	
Alliance Change for Better	

Highly effective range

Effective Range

Effect Size: 0.00, 0.20, 0.40, 0.60, 0.80, 1.00, 1.20

Understanding Analysis of Variance in clinical trials

- Clinical trails used to test differences between methods
- ANOVA uses to test the statistical significance of differences between treatments
- ANOVA as commonly employed in clinical trails makes the assumption that there is no variance at the clinician level…all clinicians have similar results
- If there is variance due to the clinician, simple ANOVA will magnify the differences between treatments where none exist

Hierarchical linear modeling

- Clinician may be treated as a variable
  - Patients “nested” by clinician
  - Estimates percentage of variance due to clinician
- Recent research strongly suggests that the individual clinician accounts for much more of the variance in treatment outcomes than the specific treatment methods
- Clinicians found to have a significant effect on probability of positive response to medications

Clinician as active ingredient

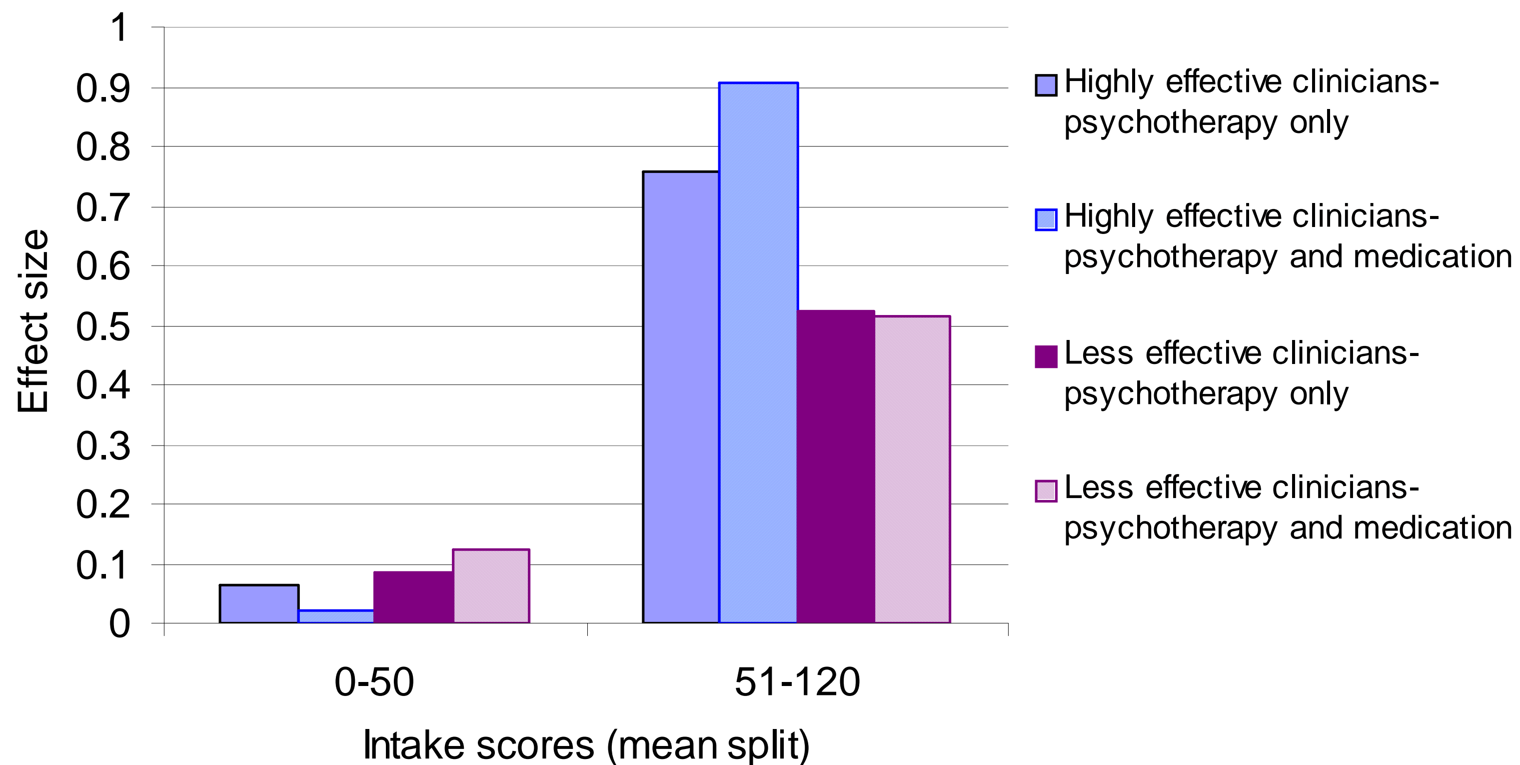
Recent studies employing HLM to treat clinician as a variable suggest strongly that the probability of response of medications is highly dependent on the clinician.

- Wampold, B. E. & Brown, G. S. (2005). Estimating variability in outcomes attributable to therapists: A naturalistic study of outcomes in managed care. *Journal of Consulting and Clinical Psychology, 73,* 914-923.
- McKay, K. M., Imel, Z. E., & Wampold, B. E. (2006). Psychiatrist effects in the psychopharmacological treatment of depression. *Journal of Affective Disorders, 92,* 287-290.

Cross validation analysis

- Psychotherapists in PacifiCare network ranked based on all cases from 1999-2002 if sample size =>30
- If a therapist's outcomes were better average at 90% confidence, the clinician was labeled "Highly effective", otherwise "less effective".
- Outcomes evaluated in the 2003-2004 cross validation period for a new sample of cases.

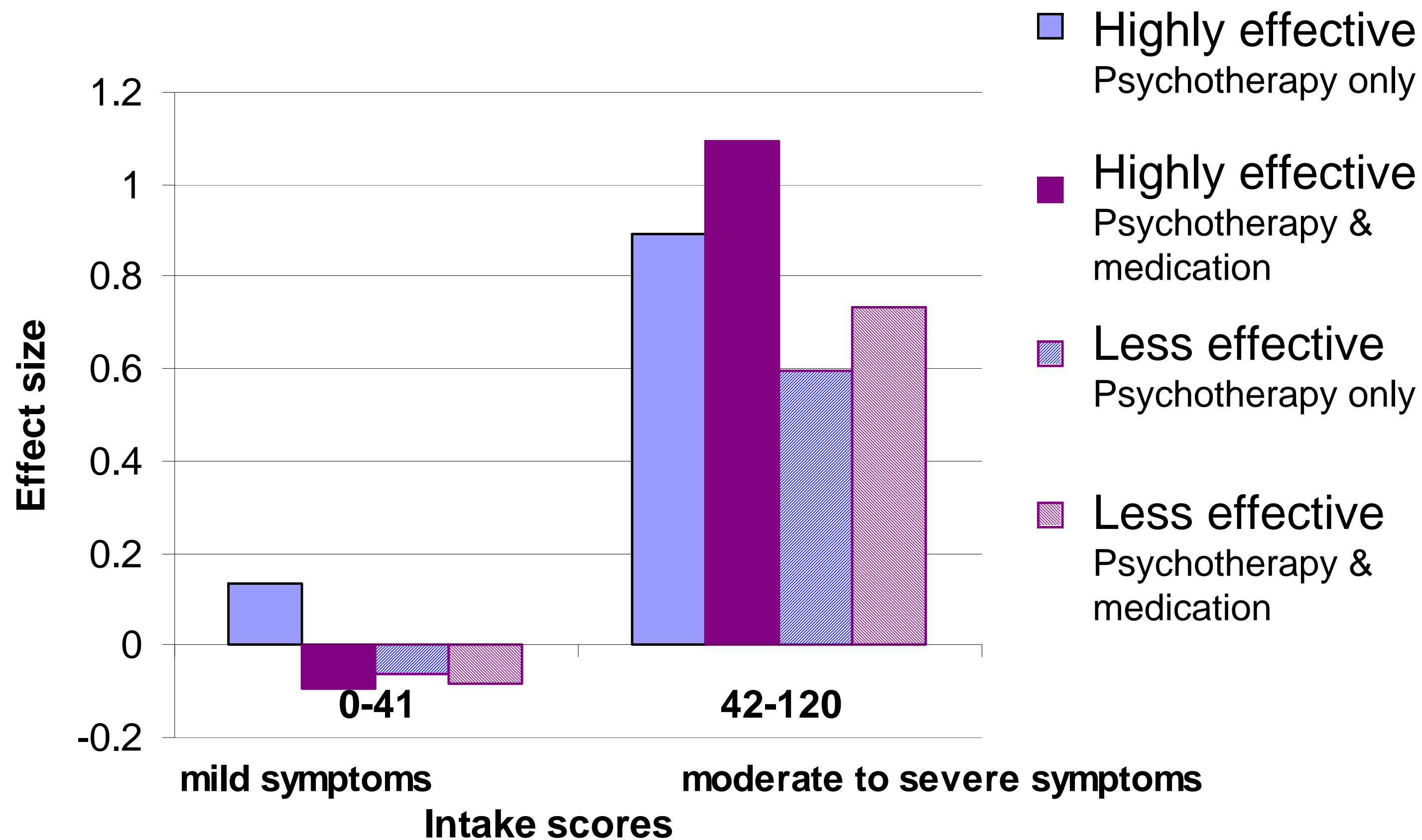
Cross validation results



Therapists, Children & Medications

- Clinicians groups as “highly effective” or “less effective” clinicians based on their outcomes with adult patients only.
- Therapist included in the study if they treated at least one child/adolescent with psychotherapy only and one with psychotherapy plus medication. (929 Highly effective, 1352 Less effective)
- Compared outcomes for children and adolescents

Result: Outcomes for adults predicts outcomes for children



Outcomes Benchmarking

- Benchmarking refers to the practice of comparing one set of outcomes to a comparison sample (the benchmark)
  - Comparison of effect sizes to “benchmarks” obtained from meta-analyses of clinical trials
  - Comparison of an effect size of an individual clinicians to the effect sizes of all clinicians in a large normative sample.
- Severity Adjusted Effect Size
  - Employs multivariate analysis of variance to control for differences in case mix
  - Statistic employed by health plans and managed care companies to evaluate clinician effectiveness

Sample Benchmark: Depression

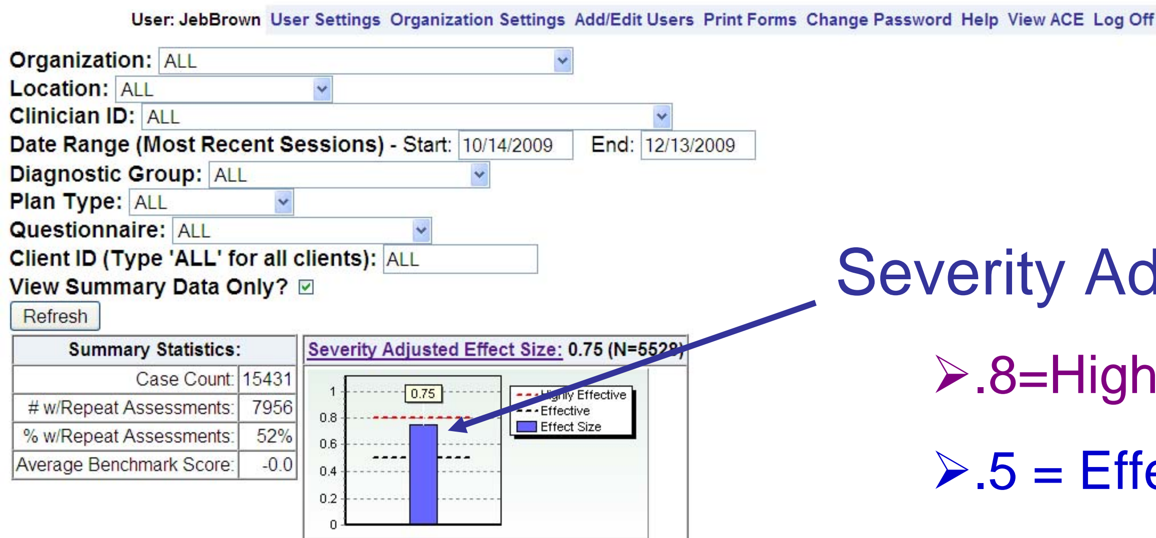
- Meta-analysis of well conducted studies of psychotherapy for depression
- Estimated effect size for patient self report questionnaires with low specificity and low reactivity
- Benchmark = .79 effect size
  - Average length of treatment: 16 weeks

Minami T, Serlin RC, Wampold BE, Kircher JC, Brown GS. Using clinical trials to benchmark effects produced in clinical practice. Quality & Quantity*.* 2008;*42:*513-525.

Minami T, Wampold BE, Serlin RC, Kircher JC, Brown GS. Benchmarks for psychotherapy efficacy in adult major depression, Journal of Consulting and Clinical Psychology. 2007;75:232-243.

Clinician's Toolkit

- Data warehouse and web based Clinician's Toolkit permits clinicians, agencies, practices and health plans to monitor outcomes.
- Health plans and managed care companies encourage clinicians to use questionnaires on all patients and use the Toolkit to monitor their own outcomes.
- Clinicians can use data to market their services



Severity Adjusted Effect Size

- .8=Highly effective
- .5 = Effective

Send comments, suggestions, questions, or bug reports to: datacenter@clinical-informatics.com

Select Language

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Clinician's Decision Support Toolkit

User: JebBrown | Home | ACE | OTR | Admin | Settings | Help | Log Off

Organization: ALL

Location: ALL **Clinician ID:** ALL

Date Range (Most Recent Sessions) - Start: 1/1/2009 End: 12/31/2010

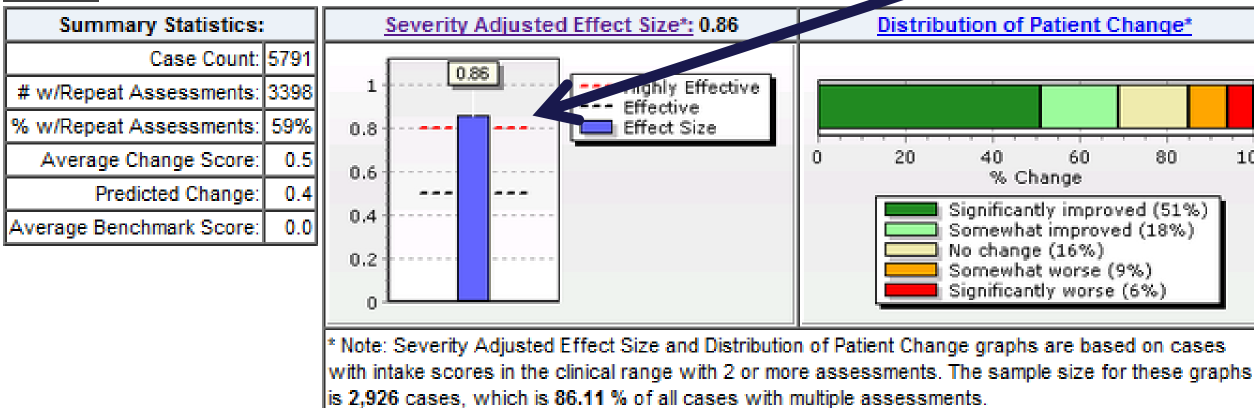
Diagnostic Group: Depressive Disorders **Plan Type:** ALL **Payer:** ALL

Questionnaire: ALL

Client ID (Type 'ALL' for all clients): ALL

View Summary Data Only? ☑

Refresh



Summary Statistics:	
Case Count:	5791
# w/Repeat Assessments:	3398
% w/Repeat Assessments:	59%
Average Change Score:	0.5
Predicted Change:	0.4
Average Benchmark Score:	0.0

* Note: Severity Adjusted Effect Size and Distribution of Patient Change graphs are based on cases with intake scores in the clinical range with 2 or more assessments. The sample size for these graphs is **2,926** cases, which is **86.11** % of all cases with multiple assessments.

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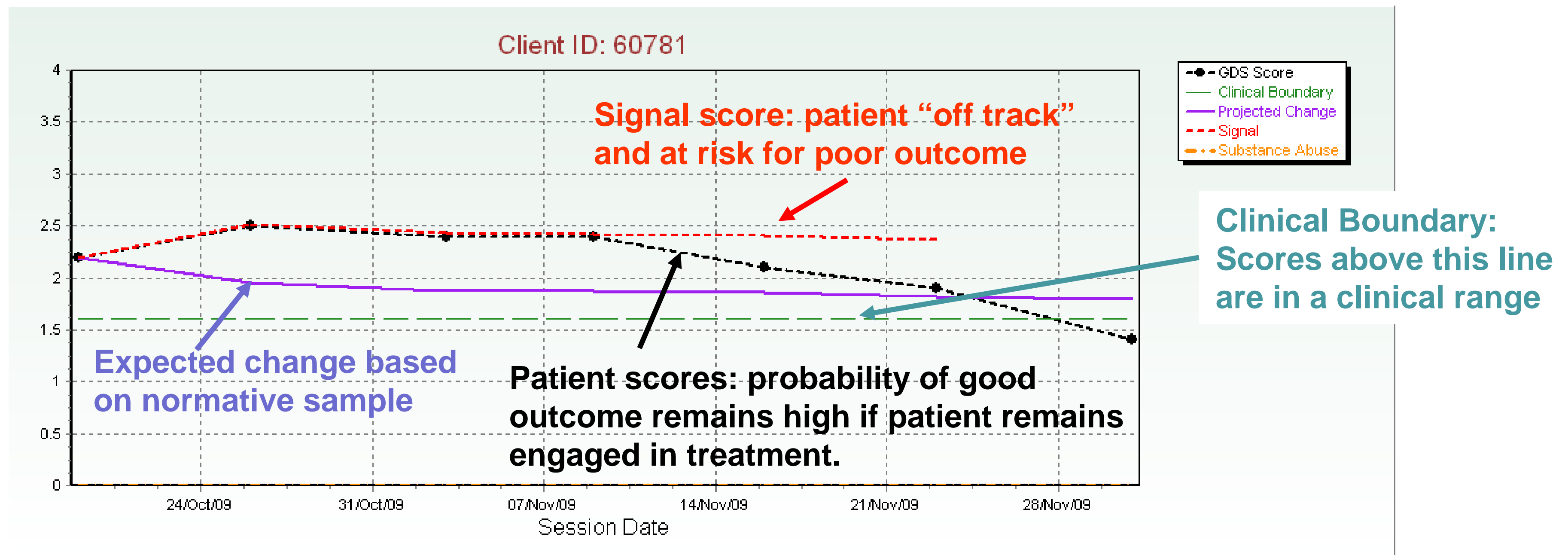
Depression Effect size=.86

Average length of treatment < 14 weeks

If clinicians in real world practice get better outcomes in less time than published psychotherapy studies, why do we insist the use only “evidence based treatments” based on these studies?

Monitoring trajectory of change

- Graphing change permits clinician to quickly identify cases that are “off track”
- If patient remains engaged in treatment, probability of a change remains if scores are in the clinical range.



APS Healthcare

Select Language

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Clinician's Decision Support Toolkit

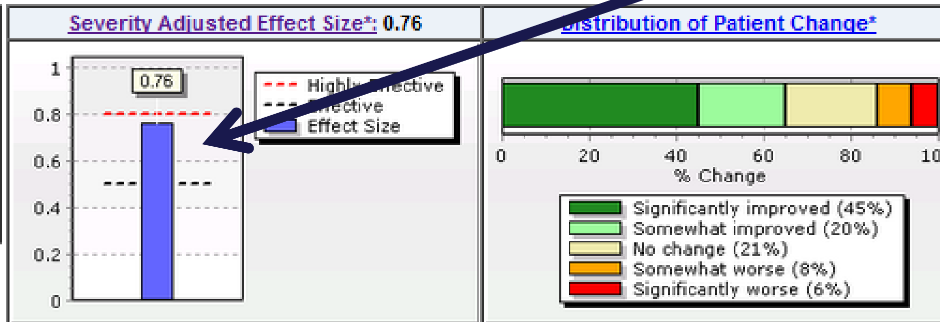
User: JebBrown | Home | ACE | OTR | Admin | Settings | Help | Log Off

Organization: Western Psychological and Counseling (3)
Location: ALL **Clinician ID:** ALL
Date Range (Most Recent Sessions) - Start: 1/1/2008 End: 12/31/2008
Diagnostic Group: ALL **Plan Type:** ALL **Payer:** ALL
Questionnaire: ALL
Client ID (Type 'ALL' for all clients): ALL
View Summary Data Only? ☑

Refresh

Summary Statistics:	
Case Count:	5829
# w/Repeat Assessments:	1689
% w/Repeat Assessments:	29%
Average Change Score:	0.4
Predicted Change:	0.4
Average Benchmark Score:	-0.0

Severity Adjusted Effect Size*: 0.76 | Distribution of Patient Change*



* Note: Severity Adjusted Effect Size and Distribution of Patient Change graphs are based on cases with intake scores in the clinical range with 2 or more assessments. The sample size for these graphs is **1,374** cases, which is **81.35** % of all cases with multiple assessments.

2008

Effect size=.76

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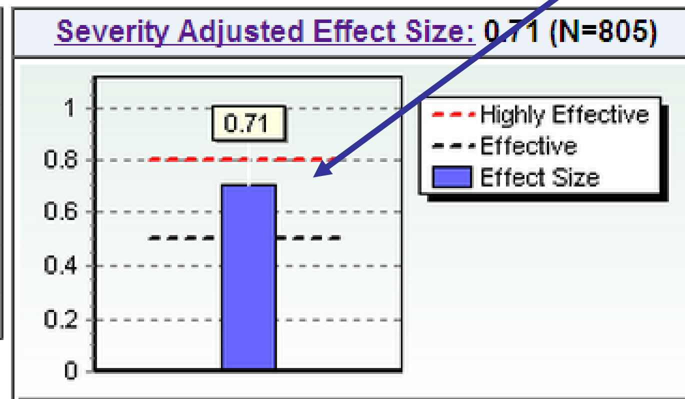
User: RegenceAdmin Print Forms ACE Statistics User Settings Organization Settings Add/Edit Users Change Password Log Off Help

Organization: ALL
Location: ALL
Clinician ID: ALL
Date Range (Most Recent Sessions) - Start: 1/1/2007 **End:** 12/31/2007
Diagnostic Group: ALL
Plan Type: ALL **Payer:** ALL
Questionnaire: ALL
Client ID (Type 'ALL' for all clients): ALL
View Summary Data Only? ☑

Refresh

Summary Statistics:	
Case Count:	4686
# w/Repeat Assessments:	1073
% w/Repeat Assessments:	23%
Average Change Score:	0.3
Predicted Change:	0.4
Average Benchmark Score:	-0.1



Regence BlueCross

Baseline effect size=.71

2007

Exit full screen (F11)

Select Language

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Clinician's Decision Support Toolkit

User: RegenceAdmin Print Forms ACE Statistics User Settings Organization Settings Add/Edit Users Change Password Log Off Help

Organization: ALL

Location: ALL

Clinician ID: ALL

Date Range (Most Recent Sessions) - Start: 1/1/2008 **End:** 12/31/2008

Diagnostic Group: ALL

Plan Type: ALL **Payer:** ALL

Questionnaire: ALL

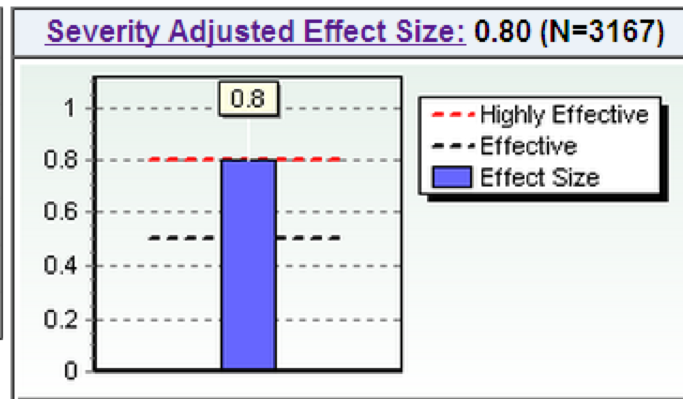
Client ID (Type 'ALL' for all clients): ALL

View Summary Data Only? ☑

Refresh

Summary Statistics:	
Case Count:	11359
# w/Repeat Assessments:	4393
% w/Repeat Assessments:	39%
Average Change Score:	0.3
Predicted Change:	0.3
Average Benchmark Score:	-0.0

Severity Adjusted Effect Size: **0.80 (N=3167)**



Regence BlueCross

2008

Washington State Psychological Association cautions its members against participation in the project.

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Clinician's Decision Support Toolkit

User: RegenceAdmin Print Forms ACE Statistics User Settings Organization Settings Add/Edit Users Change Password Log Off Help

Organization: ALL
Location: ALL
Clinician ID: ALL
Date Range (Most Recent Sessions) - Start: 1/1/2009 **End:** 12/31/2009
Diagnostic Group: ALL
Plan Type: ALL **Payer:** ALL
Questionnaire: ALL
Client ID (Type 'ALL' for all clients): ALL
View Summary Data Only? ☑

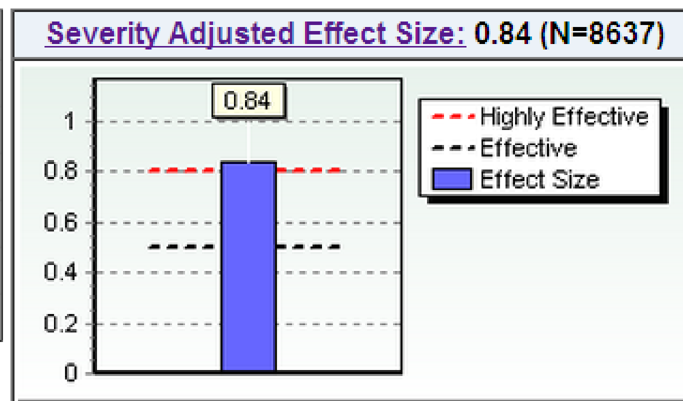
Refresh

Regence BlueCross

2009

Summary Statistics:	
Case Count:	23445
# w/Repeat Assessments:	11455
% w/Repeat Assessments:	49%
Average Change Score:	0.4
Predicted Change:	0.3
Average Benchmark Score:	0.0

Severity Adjusted Effect Size: **0.84 (N=8637)**



Select Language
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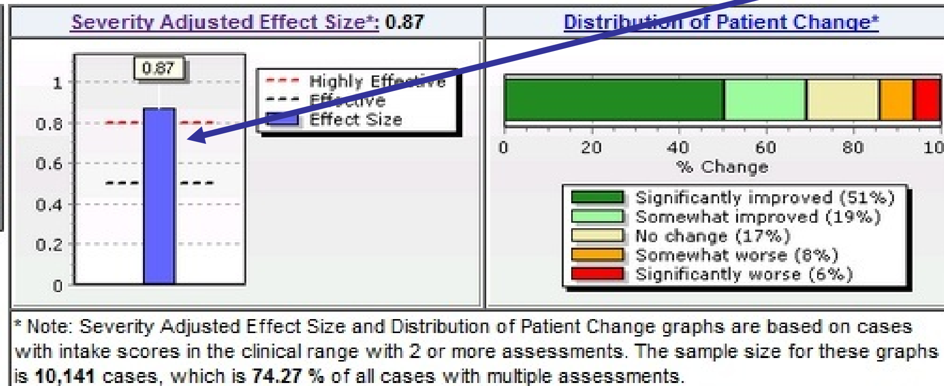
Clinician's Decision Support Toolkit

User: RegenceAdmin | Home | ACE | Admin | Settings | Help | Log Off

Organization: ALL
Location: ALL **Clinician ID:** ALL
Date Range (Most Recent Sessions) - Start: 1/1/2010 End: 12/31/2010
Diagnostic Group: ALL **Plan Type:** ALL **Payer:** ALL
Questionnaire: ALL
Client ID (Type 'ALL' for all clients): ALL
View Summary Data Only? ☑
Refresh

Summary Statistics:	
Case Count:	28019
# w/Repeat Assessments:	13654
% w/Repeat Assessments:	49%
Average Change Score:	0.4
Predicted Change:	0.3
Average Benchmark Score:	0.0

Severity Adjusted Effect Size*: 0.87 | Distribution of Patient Change*



* Note: Severity Adjusted Effect Size and Distribution of Patient Change graphs are based on cases with intake scores in the clinical range with 2 or more assessments. The sample size for these graphs is **10,141** cases, which is **74.27 %** of all cases with multiple assessments.

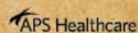
Regence BlueCross

2010

.87 effect size!

Regence outcomes increased for 3rd year in a row

Send comments, suggestions, questions, or bug reports to: datacenter@clinical-informatics.com



Select Language

Powered by Google Translate

Clinician's Decision Support Toolkit

User: VerityAdmin | Home | ACE | Admin | Settings | Help | Log Off

Organization: ALL

Location: ALL **Clinician ID:** ALL

Date Range (Most Recent Sessions) - Start: 1/1/2010 End: 3/18/2011

Diagnostic Group: ALL **Plan Type:** ALL **Payer:** ALL

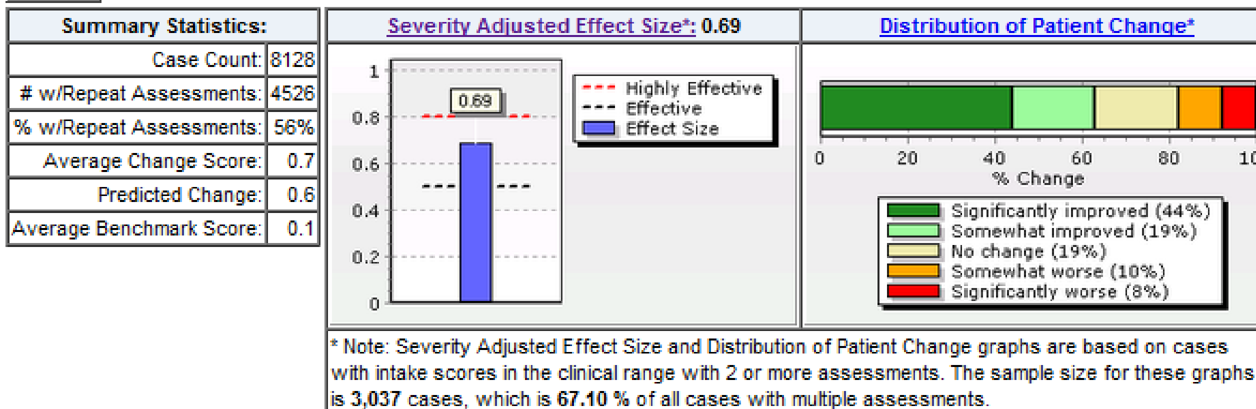
Questionnaire: ALL

Client ID (Type 'ALL' for all clients): ALL

View Summary Data Only? ☑

Refresh

Urban community mental health system



Summary Statistics:	
Case Count:	8128
# w/Repeat Assessments:	4526
% w/Repeat Assessments:	56%
Average Change Score:	0.7
Predicted Change:	0.6
Average Benchmark Score:	0.1

* Note: Severity Adjusted Effect Size and Distribution of Patient Change graphs are based on cases with intake scores in the clinical range with 2 or more assessments. The sample size for these graphs is **3,037** cases, which is **67.10 %** of all cases with multiple assessments.

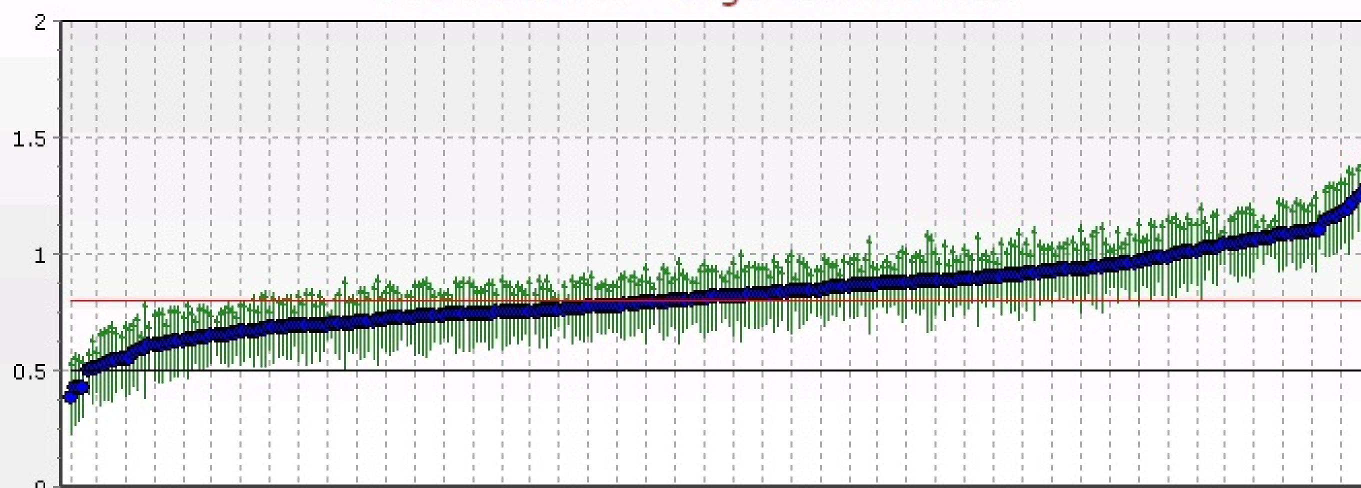
Send comments, suggestions, questions, or bug reports to: datacenter@clinical-informatics.com

Distribution of clinicians' effect size

ACE Statistics

User: JebBrown | Home | ACE | OTR | Admin | Settings | Help | Log Off

Organization: ALL
View Data For: ALL Data
Service Type: ALL
View ACE Clinicians Only?
Minimum # of Clinical Range Cases With >1 Assessments 50
View Statistics



Myth busters…

- Experienced clinicians do not achieve significantly larger effect sizes than newly trained clinicians
- No differences based on degree type or years of experience
- No “school” of psychotherapy shown to produce consistently better outcomes
- Differences between clinicians are large even when using the same drug or psychotherapy

Can clinicians' outcomes improve their outcomes?

- We looked for predictors of improvement in clinicians who had collected data for at least two years
- Improved calculated as change in their average effect sizes in 2010 compared to 2009 and earlier
- Frequency of Toolkit usage correlated with improvement ($r=.32$, $p<.01$)

Toolkit usage and change in effect size in 2010 compared to prior year(s)

Toolkit Login Count & Change in Effect Size

0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
-0.01
-0.02

0 (n=24)
1 or 2 (n=19)
3 to 20 (n=27)
More than 20 (n=17)

Common objections from clinicians

- Reduction in global distress is not necessarily the goal of therapy
- Clinician judgment is a better measure of outcomes than patient self report
- Paranoia….how will they use the data against me?
- Too much work, we're not being paid enough
- Who cares?
  - Doesn't matter what we do, insurance companies only care about money

Common objections from health plans

- It costs to much
- It upsets clinicians
- It doesn’t save money
- The customer (employer, government) doesn’t care

How much does it cost
…..and is it worth it?

- Therapist and support staff time, data capture, analysis and data warehouse services add an estimated 5% to the cost of care
- Is it worth 5% to know the outcome of the services purchased?
- Is it worth 5% to achieve better outcomes for consumers?
- Can the 5% cost be offset by finding opportunities for cost effectiveness in delivery of services based on analysis of cost and outcome?

Reasonable questions…

- How long are your patients in treatment?
- How do your outcomes compare to results from clinical trials?
- What percentage of your patients get worse and drop out of treatment prematurely?
- Have your outcomes improved over time?

APS Healthcare

Certificate of Effectiveness

Presented to: Your Name

This clinician has met or exceeded all of the ACORN Criteria for Effectiveness (ACE) as established by the ACORN work group for effectiveness. The ACORN Organization is a non-profit organization devoted to the improvement of treatment outcomes through the routine use of consumer self-report outcome questionnaires.

Performance criteria are based on treatment outcomes for cases with intake scores that are indicative of clinically significant levels of symptom severity and emotional distress. Performance indicators include consistency of data collection, adequate sample size, and an effect size in a range characteristic of effective treatments.

Attestation: I am a qualified statistician with expertise in evaluating outcomes in behavioral healthcare. I have performed an independent analysis of the outcome data using the methodology specified in the ACORN Criteria for Effectiveness (www.psychoutcomes.org/ACE). I personally certify that these results are an accurate reflection of the data made available for analysis, and that this clinician meets or exceeds the ACORN Criteria for Effectiveness.

Signed:

Name: Jeb Brown, PhD
Contact information: jebbrown@clinical-informatics.com; (801) 541-9720
Date Issued: 12/12/2009