



# Mental Health Service Delivery

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Why Do We Ignore the Most  
Important Factors?

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# Psychotherapy works

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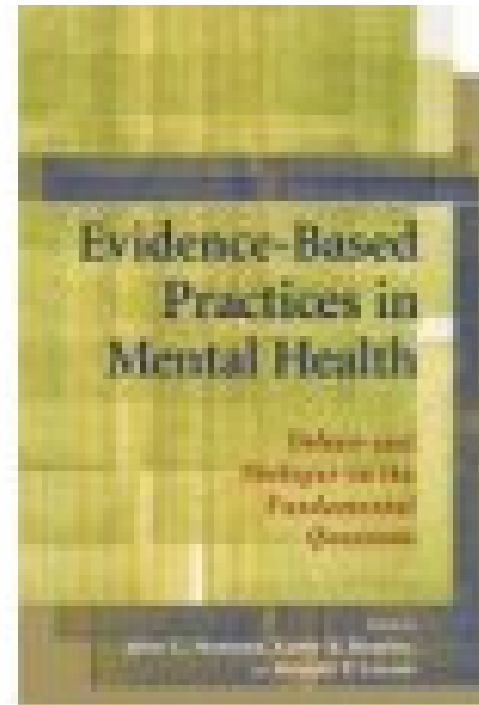
- Effect size for Tx v. no Tx:  $d = .80$
- Over 80% of treated patients better than those with no treatment
- 13% of variability in outcomes
- NNT = 3
- Aspirin as a prophylaxis for heart attacks (NNT = 129)
- Superior to almost all interventions in cardiology, geriatric medicine, asthma, flu vaccine, cataract surgery
- Psychotherapy = medication
- Elite club: Medicine and psychotherapy



# Possible Factors

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- Treatment
- The psychotherapy relationship
- Strategies of change
- Active client
- The therapist





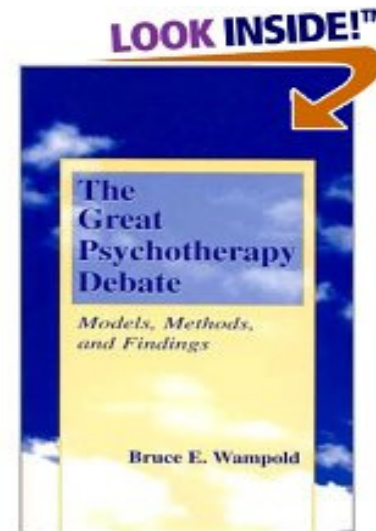
# Criteria

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- Accounts for variability in outcomes
- Appropriate target
- Acceptable to patients and clinicians

# Evidence for Treatments

- Wampold et al. 1997
  - All treatments equally effective
  - For particular disorders?
  - For children?





# Depression, Anxiety, Alcohol

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- Depression
  - All treatments tested including Process Experiential
- PTSD
  - Prolonged exposure, CBT, EMDR, hypnotherapy, psychodynamic, trauma desensitization, present-centered therapy
  - No differences (Benish, Imel, & Wampold, in press)
- Alcohol treatments
  - Motivational interviewing, 12 step, cognitive
  - No differences (Imel et al., in preparation)



# Children

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- Depression and Anxiety
  - CBT = non-CBT (when intended to be therapeutic) Spielmanns, Pasek, & McFall, 2007
- Depression, anxiety, conduct disorder, ADHD
  - Small differences
  - Entirely explained by allegiance of researcher
    - Miller, Wampold, & Varhely, in press



# Treatment

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- Easy to implement
- Appears to be scientific (fits medical model)
- Differences among treatment
  - $d = .20$  at most.
  - 1% of the variability in outcome





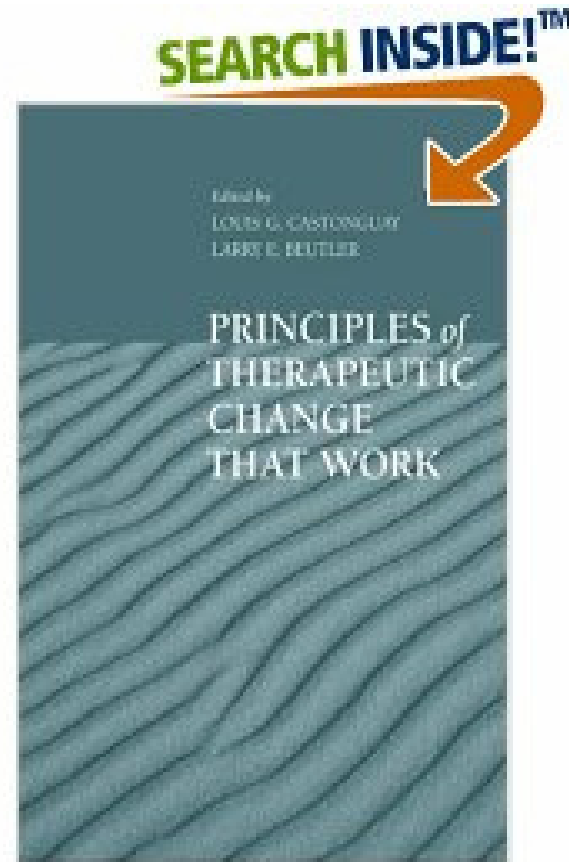
## Relationship

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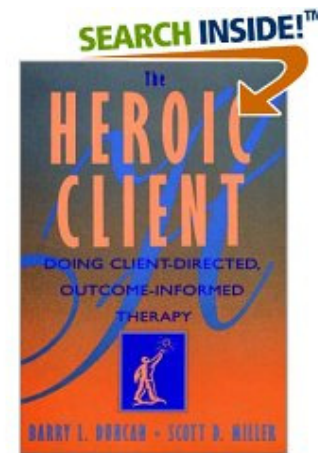
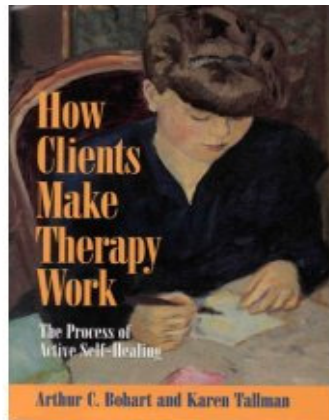
- Robust correlation of Session 3 alliance and outcome
- Not confounded by improvement
- Client rated alliance best predictor
- Predictive across therapies (including psychopharm)
- $d = .45$ , 5% of variability in outcome
- Therapist or patient contribution?

# Principles of Change (Beutler & Castonguay)

- Activation for depressed patients
- Exposure for avoidant patients
- Relationship to outcome is unclear
- Common factor?



# Active Clients (Bohart, Miller)



Variability in outcomes accounted for by patients (87% technically)

No choice in patients served (unless clinical trial)



# Effects as Percentage of Variability of Termination Score

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- Pretest – 40% to 50%
- Tx v. No Treatment– about 13%
- Treatment A v. Treatment B– at most 1%
- Alliance– 5% to 9%
- Therapist....



# Therapists

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- Do therapists vary in the outcomes achieved by their patients? (Above chance variation)
- Do some therapists consistently produce better outcomes than others, regardless of treatment and patient characteristics?

# Variance due to I x and Therapists in NIMH study of Depression (CBT & IPT)

Variable	Treatment	Therapist
BDI	0%	
HRSD	0%	
HSCL-90	0%	
GAS	0%	

# Variance due to Ix and Therapists in NIMH study of Depression (CBT & IPT)

Variable	Treatment	Therapist
BDI	0%	5% to 11%
HRSD	0%	1% to 12%
HSCL-90	0%	3% to 10%
GAS	0%	8% to 12%



## Variance due to therapists in practice

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- 581 Therapists, 6146 patients
- More heterogeneous patients
- Diagnosis, degree, experience, 0 percent
- Medication, 1 percent (but dependent on psychotherapist)
- Providers 5 percent
- Top quartile produced twice the effect of the lowest quartile in subsequent year
  - Wampold & Brown, JCCP, 2006



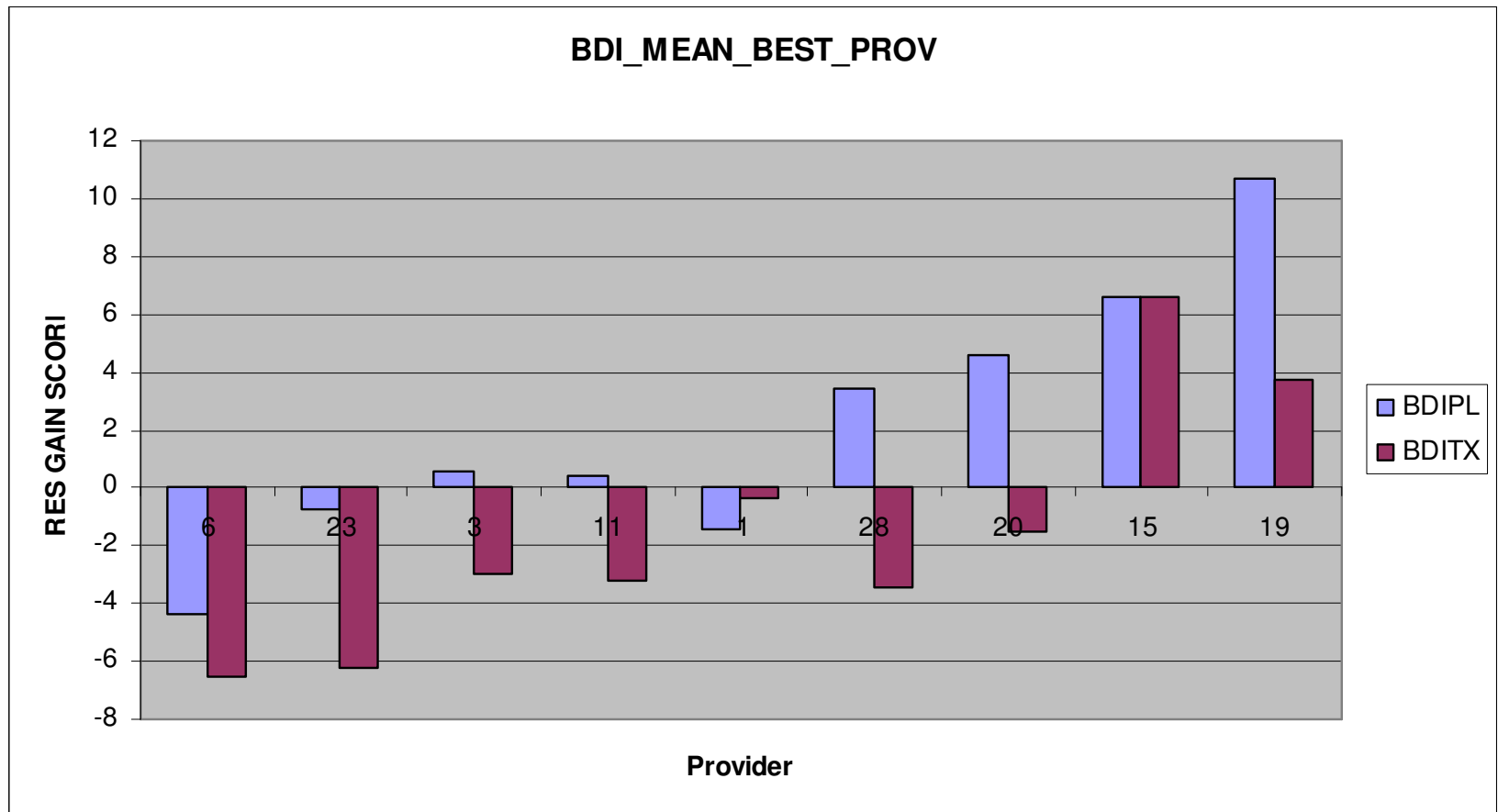


# Therapist Effects in Psychopharmacology

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- Antidepressants: Imipramine v. Placebo
- 3% due to treatment
- 9% due to therapist
- Best therapists get better outcome with placebo than worst therapists with imipramine
- McKay, Imel, & Wampold, 2006

# Therapists— Psychopharm





# Therapists make a difference

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- Characteristics and Actions of Effective Therapists?
- Consult Buetler (*Handbook of Psychotherapy and Behavior Change*)
  - We don't know
  - And we don't care
- Alliance?
  - Alliance measured early in therapy related to outcome
  - Therapist contribution?
  - Patient contribution?
  - Interaction?

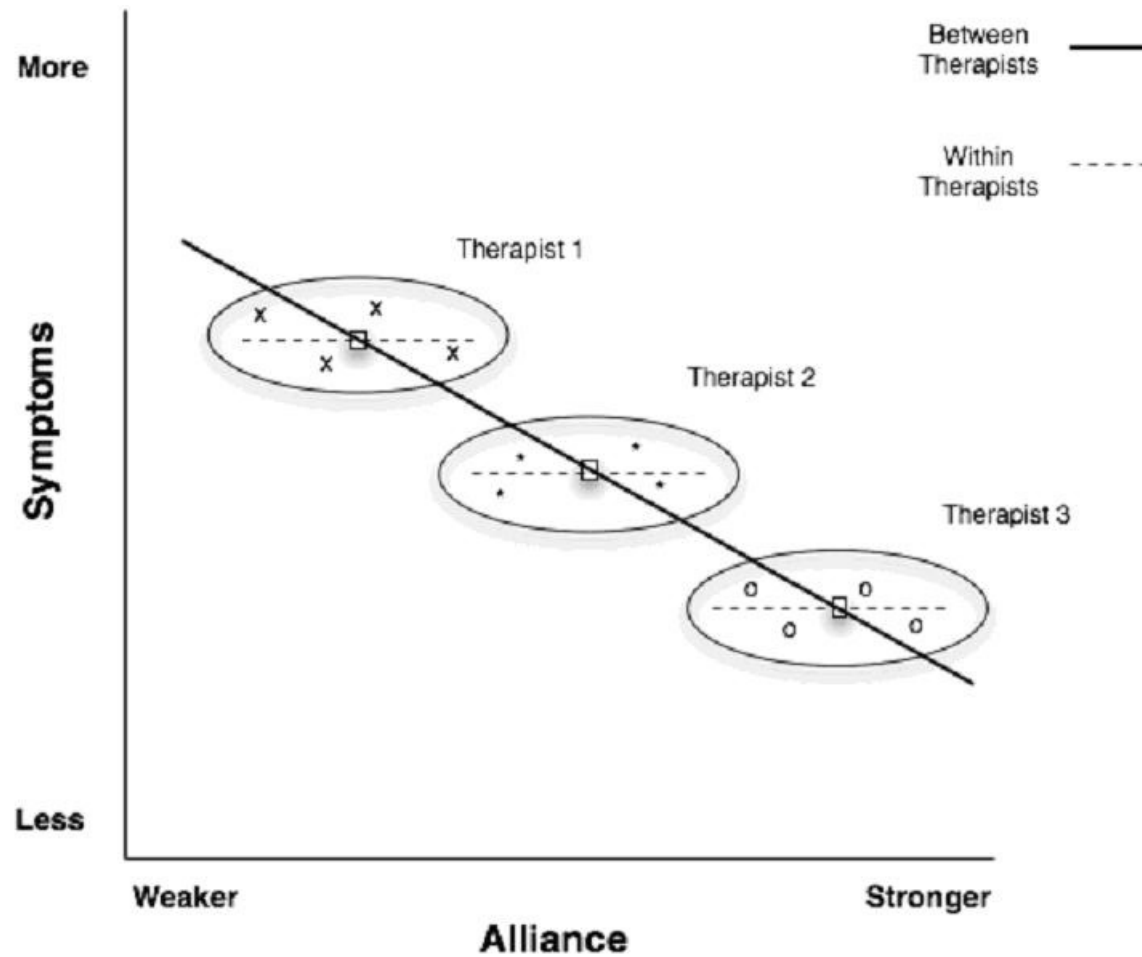


# Alliance: Patient v. Therapist Contribution to Alliance

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- Counseling center consortium data
- OQ pre and post, Alliance 4<sup>th</sup> session
- 331 patients, 80 therapists
- Alliance/outcome correlation .24
- 3% of variance due to therapists
- What is correlation of alliance with outcome
  - Within therapists?
  - Between therapists?
- And the results....

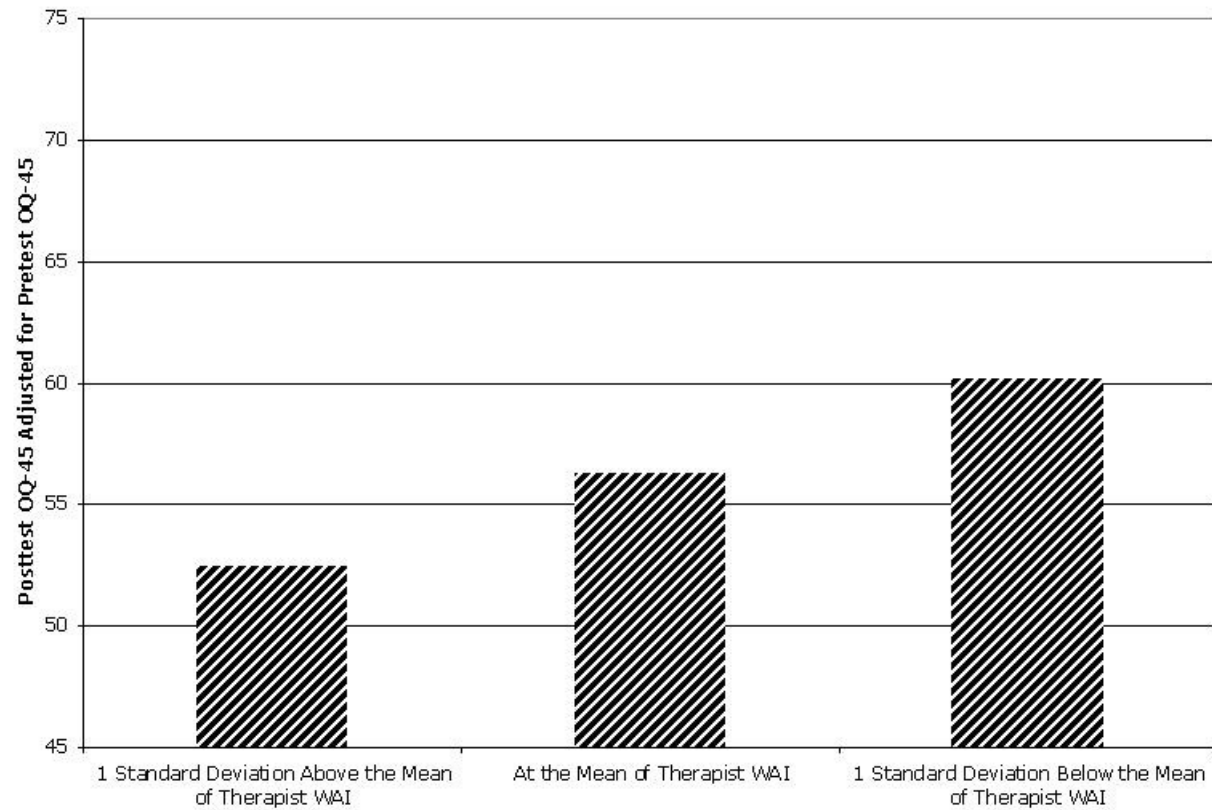
# Within or between?





# Size of Effect

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# Therapist contribution to alliance is critical

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- Patient contribution to alliance not predictive of outcome
- Therapist contribution is predictive of outcome
- Interaction not significant
- Alliance is not a result of outcome



# Therapist as the key factor

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- Related to outcome
- Can be target of intervention
- Outcomes must be measured
- ISSUE: What is a good outcome?
- Benchmarking





# Benchmarking

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- Compare naturalistic outcomes to RCT outcomes
- Establish the effectiveness of services
- Manage services— Effective and efficient



# Step 1: Establish benchmark Depression TX (pre to post effects, meta-analytic)

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Measure	Effect Completers	Effect ITT	Effect Nat Hist
HRSD	2.249	2.434	0.401
BD	1.859	1.706	0.371
Global	0.932	0.795	0.149

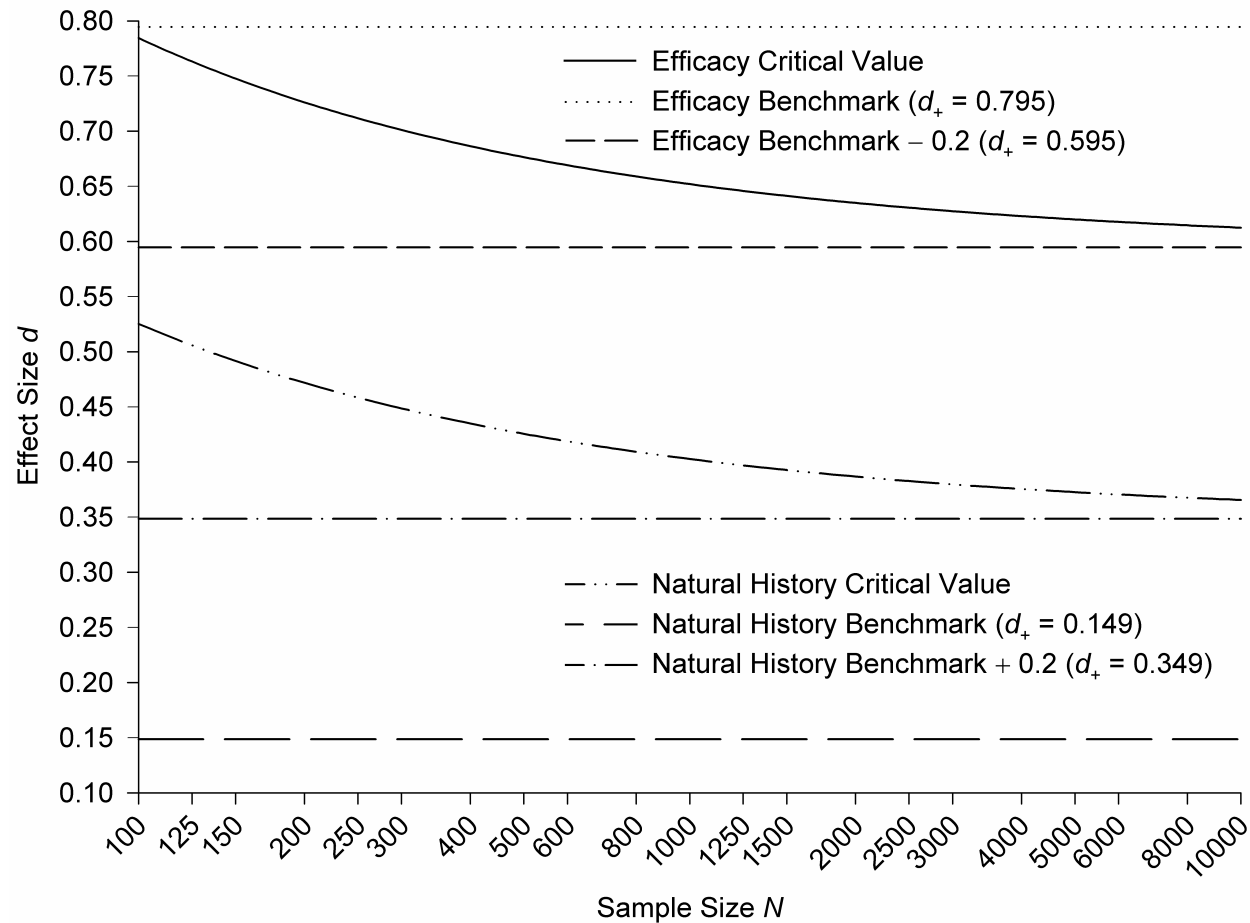


# Null Range Strategy

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- Cannot test equivalence hypothesis
  - Almost always will always be rejected for large samples
- Determine range, nonimportant differences
  - e.g.,  $d = .2$ ; 10%, ITT = .795, benchmark = .595 or greater
- Null hypothesis
  - True value is outside range
- Alternative hypothesis
  - True value is inside range
- Noncentral t distribution

# Null Range critical values





# Data from managed care environment

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- Clinical sample
  - Depressed (comparable to clinical trials)
  - N = 12,743
- Non-comorbid
  - Comparable to Ss in clinical trials
  - N = 939
- Completers
  - Completed



# Testing HMO outcomes

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Sample	hmo	vs. Treatment Efficacy <sup>a</sup>		vs. Natural History		
		Tx cv	<i>p</i>	RM	NH cv	<i>p</i>
Clinical	0.7445	0.7398	.025	0.9059	0.3711	.000
Non-Comorbid	0.8870	0.7766	.000	1.0362	0.4045	.000
Completer	1.1536	0.9652	.000	1.0931	0.4577	.000



# With medication

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Sample	Antidepressants	<i>N</i>	hmo	cv	<i>p</i>	RM
Clinical	Concurrent	3,225	0.8185	0.7480	.000	0.9879
	None	2,080	0.6752	0.7561	.950	0.7993
Non-Comorbid	Concurrent	440	0.9876	0.8058	.000	1.1219
	None	435	0.8330	0.8064	.017	0.9326
Completer	Concurrent	127	1.2286	1.0209	.000	1.1081
	None	112	1.0573	1.0259	.034	0.9235

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# Benchmarking conclusions

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- Effective— clinical practice meets benchmarks
- Efficient— less than 9 session (cf.  $M = 16$  RCT)
- In RCTs, selection, training, supervision, monitoring of therapists
- Don't mandate treatments shown efficacious in RCTs
- Not all therapists meet benchmarks
  - Critical focus of mental health service research





# Service System Improvement

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- Do NOT mandate treatment
  - costly
  - Probability gain is small, increased drop out, reduced provider allegiance
- Assess outcome system wide
  - Feedback to providers, managers, use in clinical care.