

# The Economic Value of Monitoring Patient Treatment Response

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MAKING PSYCHOLOGICAL TREATMENTS MORE COST-EFFECTIVE

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# Providers Have Three Problems

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1. They are overly optimistic by perceiving positive outcomes when standardized measures suggest treatment is failing, i.e., the patient has not changed or has even deteriorated.
2. Treatment lengths are determined by theory, a standard protocol, or policy (not empirically determined) rather than patient treatment response.
3. Therapist tend to be inefficient by BOTH failing to end successful treatments and allowing treatments to end that have not worked.

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The “burden of illness” born by patients with mental health problems is horrendous and is second only to cancer according to the World Health Organization.

These disorders have a significant negative effect on both family member functioning and society, including work productivity, absenteeism, and retention. Mental health problems cause considerable amounts of human suffering that has a highly negative economic impact (e.g., Depression can reduce work productivity by as much as 70%).

Mental health functioning can be briefly measured (5-minutes) and monitored on a weekly basis, with this information instantaneously fed back to practitioners and managers.

# Prob. 1 Too Much Optimism

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Since the first estimates of patient treatment response to the present, therapists believe that 85% of the patients they treat recover.

Psychotherapists and counselors (like engineers, carpenters, policemen, drivers) believe that they are more effective than their peers.

Walfish, et al found 90% of therapists believed they were above the 75<sup>th</sup> percentile compared to other therapists. No therapist rated him/herself as below the 50<sup>th</sup> percentile—we are all from Lake Woebegone.

# General Outcomes in Clinical Trials vs. Routine Care: The extent of the problem

- Meta-analysis shows in 28 studies, 2109 patients, and 89 treatment conditions an average recovery rate of **58%**, improvement rate = **67%** (M=12.7sessions).
- Routine adult care outcomes for 6072 patients were **14.1%** and **20.9%** (M=4.3 sessions). Child outcomes = 14-24% deterioration.

# Hatfield (2010)

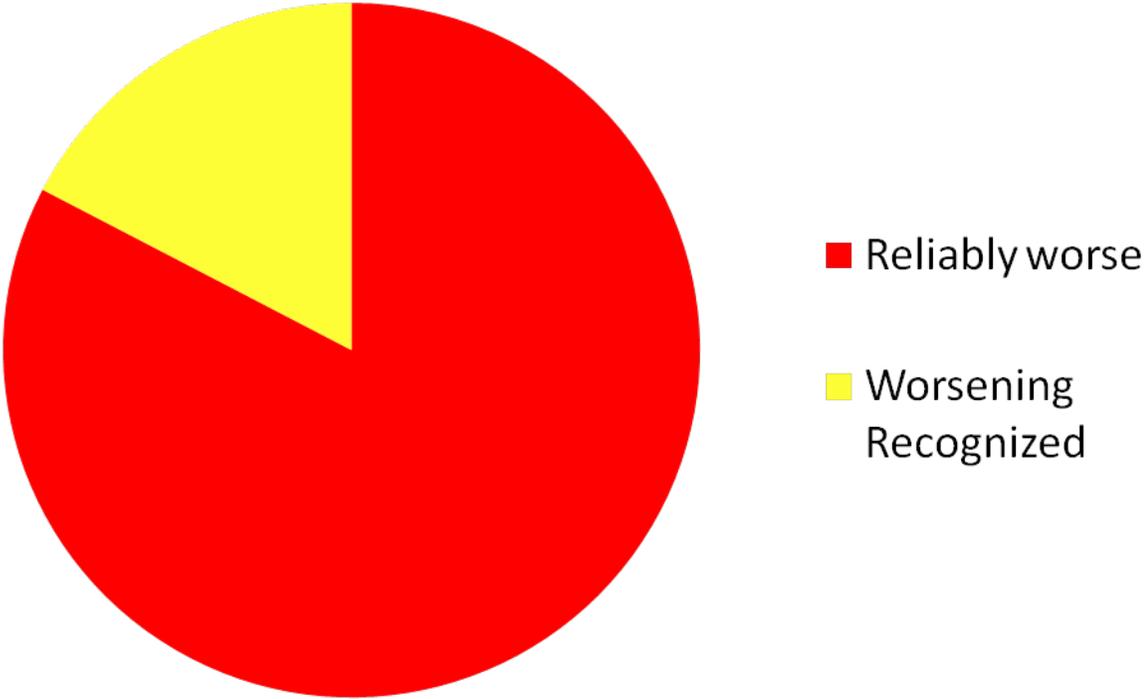
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Examined case notes of patients who deteriorated to see if therapists noted worsening at the session it occurred.

If the patient got 14 points worse was there any recognition? 21%

If the patient got 30 points worse was there recognition? 32%

# Case Note Recognition



# Problem 2: Treatment Lengths Not Empirical

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Psychoanalysis 5+ years, 4-5 days a week

Cummings single session treatment

UK experiment of 3 sessions

Many US counseling centers 10 sessions

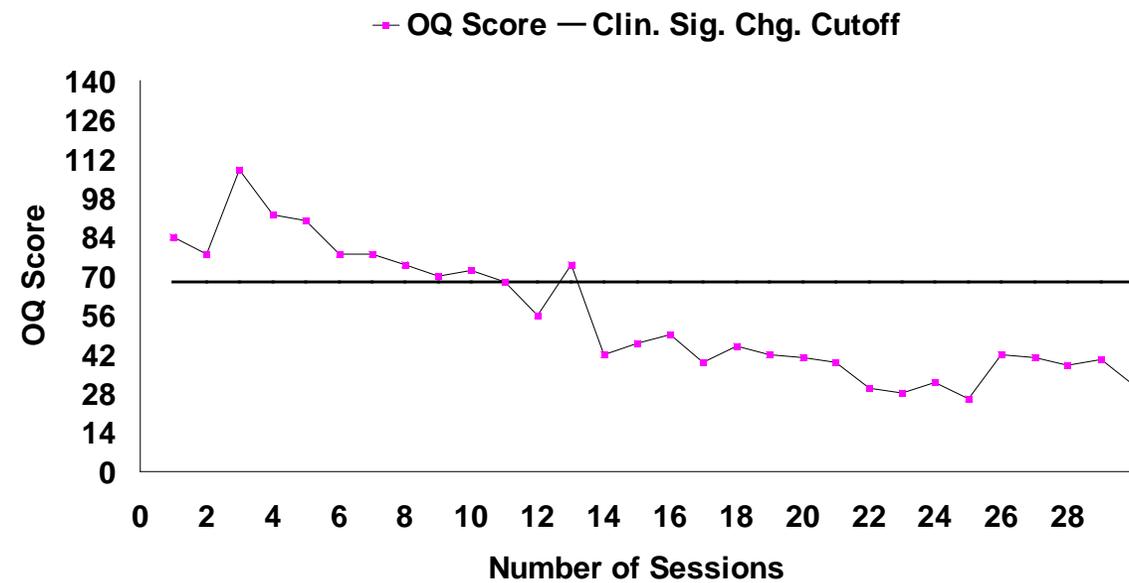
Research protocols 12-14

Germany 42 sessions

How about monitoring mental health functioning and using this information to help with decision making?

# Putting RCI & cut scores together to track individual patient change

## Subject A



FORMALLY MONITORING PATIENT  
TREATMENT RESPONSE AND USING THIS  
INFORMATION FOR EFFICIENT DECISION  
MAKING IS PROPOSED AS A METHOD  
THAT OVERCOMES THESE PROBLEMS

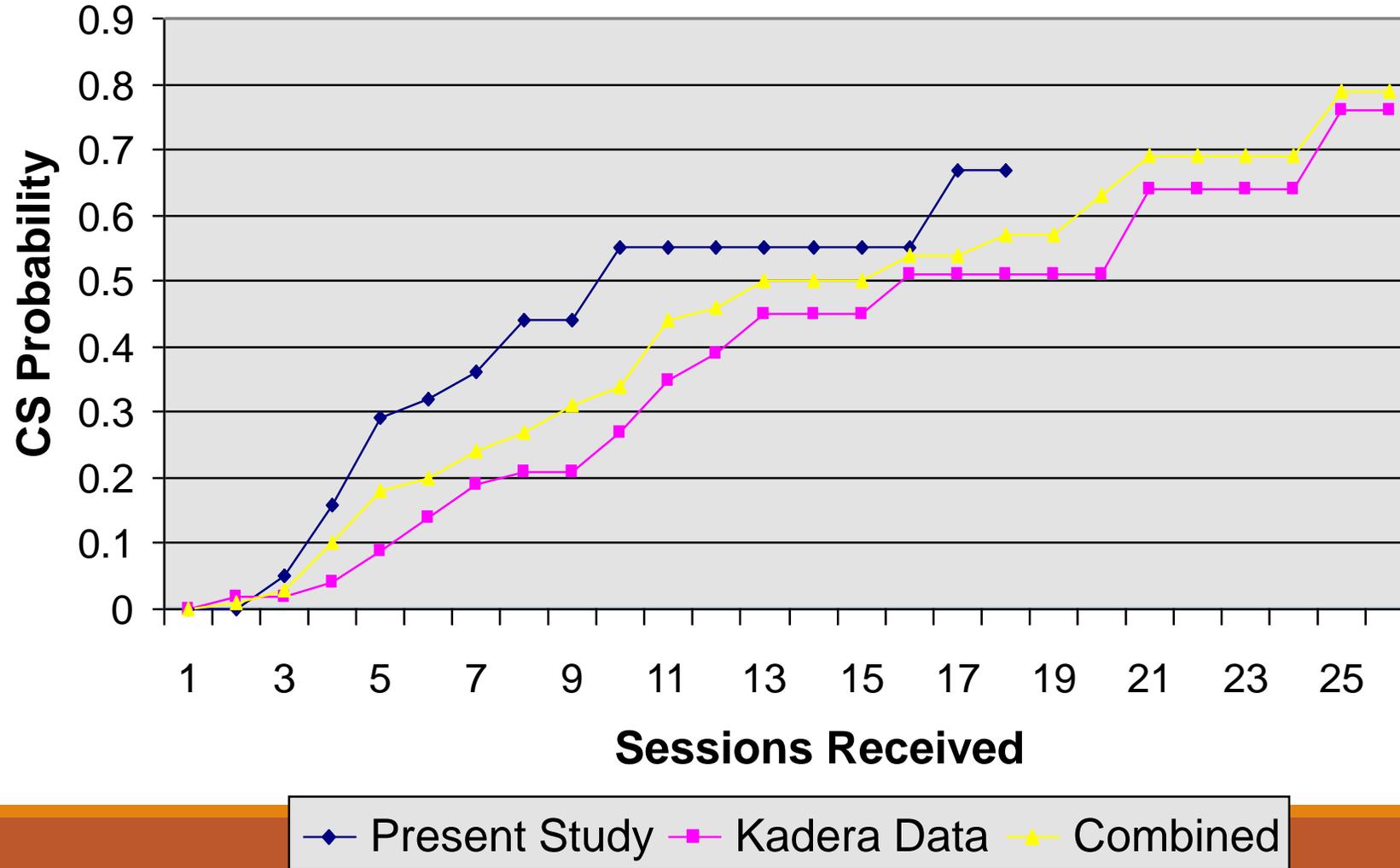
# USING SURVIVAL STATISTICS TO ESTIMATE

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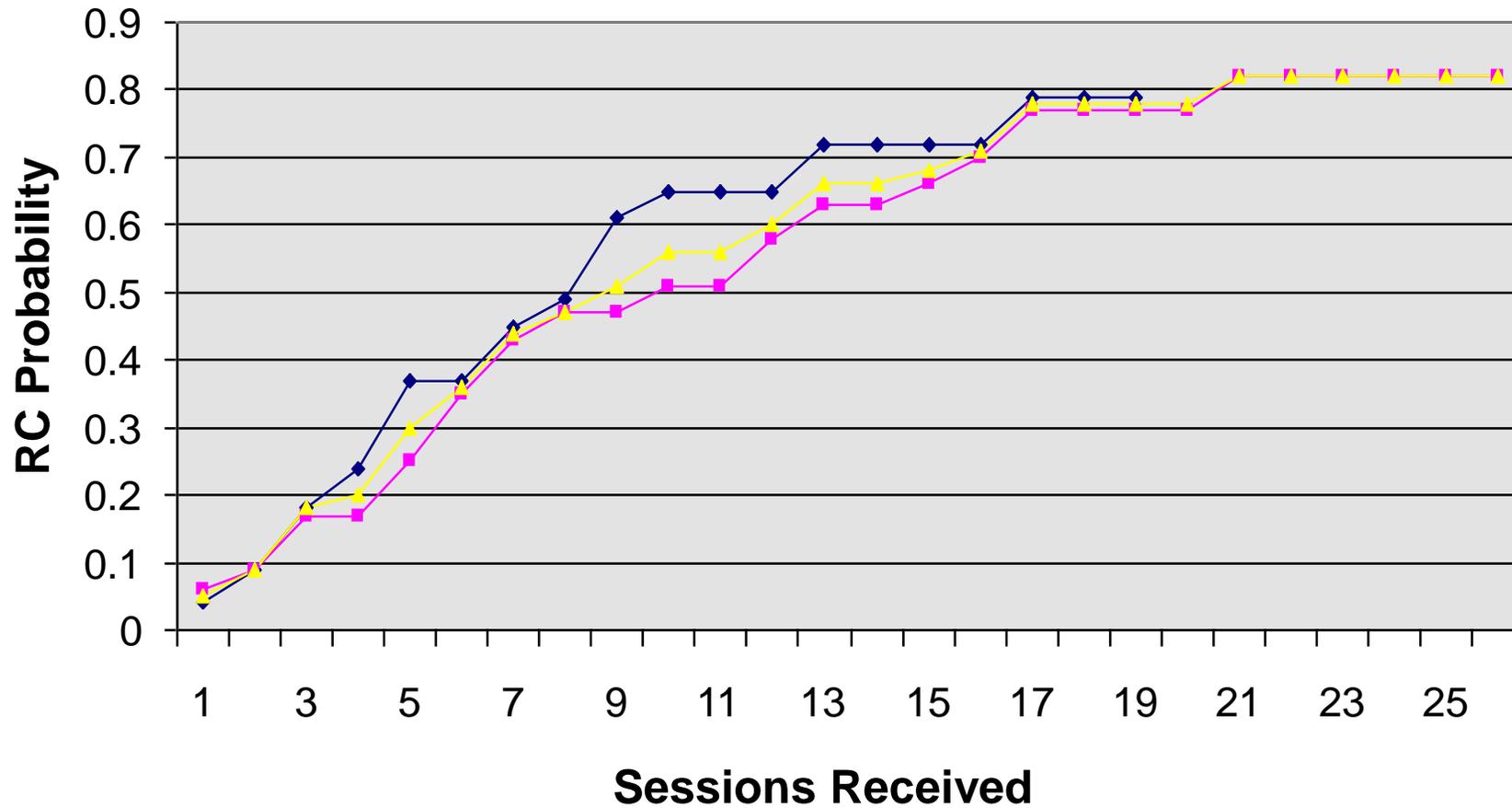
HOW MANY SESSIONS OF PSYCHOTHERAPY DOES IT TAKE FOR PATIENTS TO RELIABLY IMPROVE?

HOW MANY SESSIONS WILL IT TAKE FOR A PATIENT TO RETURN TO A STATE OF NORMAL FUNCTIONING?

# Percent of Patients Reaching Clinical Significance (CS) Criteria



# Reliable Change (RC) CRITERIA



◆ Present Study    ■ Kadera Data    ▲ Combined

# Summary of Findings

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## Estimating dosage for Reliable Change

- 5 sessions will result in 25% meeting criterion
- 9 sessions will result in 50%
- 17 sessions will result in 75%

## Estimating dosage for Recovery suggests:

- 8 sessions will result in 25% reaching criteria
- 13 sessions will result in 50%
- 25 sessions will result in 75%

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Density of treatment sessions (at least once a week) early in treatment maximizes positive patient outcome.

Treatment Failure can be predicted and providing feedback to clinicians reduces deterioration and maximizes positive outcomes.

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Unusually rapid & dramatic response is a positive sign for significant and lasting gains in psychotherapy but NOT anti-depressant medication

Formally monitoring patient treatment response and providing feedback to patients and therapists makes therapy more cost effective by shortening the course of treatment for the majority of clients and lengthening it for a minority of patients

Prob 3: Consider ending treatment when patient is recovered or improved or consistently showing no progress.

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Early Dramatic Treatment response:

Patient recovers in first 5 sessions, occurs in 20-40% of cases, Two year follow-up shows maintenance

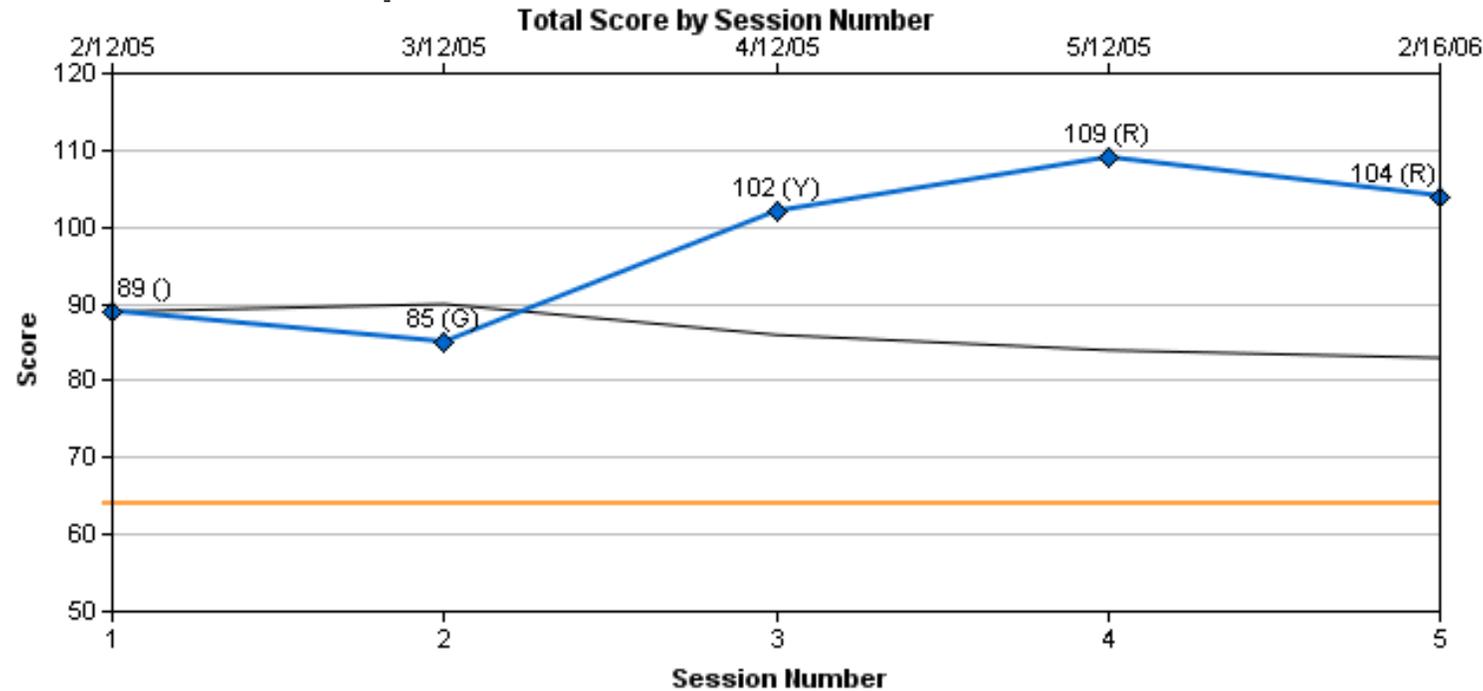
Substantial number of patients(25%?) remain in treatment although not responding.

# Clinician Report

## Red Alert – Part 1

<b>Name:</b> Adult, Melanie, R <b>ID:</b> ASDF0195 <b>Session Date:</b> 2/16/2006 <b>Session:</b> 5 <b>Clinician:</b> Clinician, Bob <b>Clinic:</b> North Clinic <b>Diagnosis:</b> Panic Disorder <b>Algorithm:</b> Empirical <input type="checkbox"/>	<b>Alert Status:</b> <b>Red</b> <b>Most Recent Score:</b> 104 <b>Initial Score:</b> 89 <b>Change From Initial:</b> Reliably Worse <b>Current Distress Level:</b> <b>Moderately High</b>																				
<b>Most Recent Critical Item Status:</b> 8. <b>Suicide</b> - I have thoughts of ending my life. <b>Sometimes</b> 11. <b>Substance Abuse</b> - After heavy drinking, I need a drink the next morning to get going. <b>Frequently</b> 26. <b>Substance Abuse</b> - I feel annoyed by people who criticize my drinking. <b>Almost Always</b> 32. <b>Substance Abuse</b> - I have trouble at work/school because of drinking or drug use. <b>Almost Always</b> 44. <b>Work Violence</b> - I feel angry enough at work/school to do something I might regret. <b>Sometimes</b>	<table border="1"> <thead> <tr> <th>Subscales</th> <th>Current</th> <th>Outpat. Norm</th> <th>Comm. Norm</th> </tr> </thead> <tbody> <tr> <td>Symptom Distress:</td> <td>63</td> <td>49</td> <td>25</td> </tr> <tr> <td>Interpersonal Relations:</td> <td>25</td> <td>20</td> <td>10</td> </tr> <tr> <td>Social Role:</td> <td>16</td> <td>14</td> <td>10</td> </tr> <tr> <td><b>Total:</b></td> <td><b>104</b></td> <td><b>83</b></td> <td><b>45</b></td> </tr> </tbody> </table>	Subscales	Current	Outpat. Norm	Comm. Norm	Symptom Distress:	63	49	25	Interpersonal Relations:	25	20	10	Social Role:	16	14	10	<b>Total:</b>	<b>104</b>	<b>83</b>	<b>45</b>
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# Clinician Report Red Alert – Part 2



## Graph Label Legend:

(R) = **Red**: High chance of negative outcome (Y) = **Yellow**: Some chance of negative outcome

(G) = **Green**: Making expected progress (W) = **White**: Functioning in normal range

## Feedback Message:

The patient is deviating from the expected response to treatment. They are not on track to realize substantial benefit from treatment. Chances are they may drop out of treatment prematurely or have a negative treatment outcome. Steps should be taken to carefully review this case and identify reasons for poor progress. It is recommended that you be alert to the possible need to improve the therapeutic alliance, reconsider the client's readiness for change and the need to renegotiate the therapeutic contract, intervene to strengthen social supports, or possibly alter your treatment plan by intensifying treatment, shifting intervention strategies, or decide upon a new course of action, such as referral for medication. Continuous monitoring of future progress is highly recommended.

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## Message Example (Red)

Please note that the following information is based on your responses to the questionnaire that you have completed prior to each therapy session.

It appears that you have not experienced a reduced level of distress. Because you may not be experiencing the expected rate of progress, it is possible that you have even considered terminating treatment, believing that therapy may not be helpful for you.

Although you have yet to experience much relief from therapy, it is still early in treatment and there is the potential for future improvement. However, we **urge** you to openly discuss any concerns that you may be having about therapy with your therapist because there are strategies that can be used to help you receive the most out of your therapy.



# The cost of referring clients

Average treatment lengths (see previous slide) allow estimation of session costs:

Every 100 clients kept by intake counselors can be expected to attend 1,270 sessions:

- $12.7 \text{ sessions/client} \times 100 \text{ clients} = 1,270 \text{ sessions}$

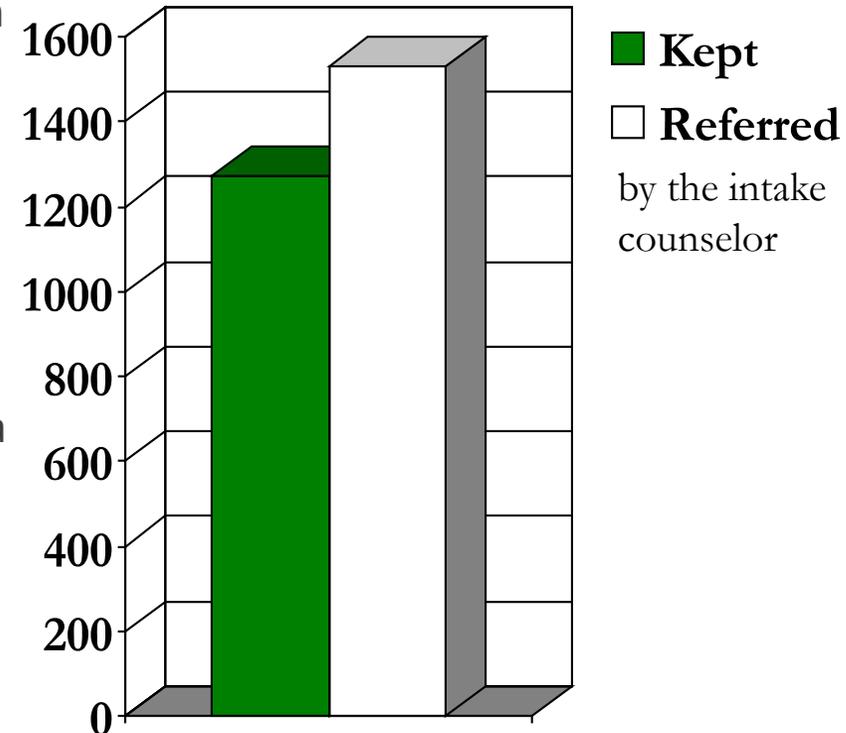
Every 100 clients referred by an intake counselor to a 2<sup>nd</sup> counselor can be expected to attend 1,530 sessions

- $15.3 \times 100 = 1,530 \text{ sessions}$

The best prediction available from current data suggests that keeping clients at intake consumes 260 fewer sessions per 100 clients

- For every 100 clients referred to a 2<sup>nd</sup> counselor, at least 120 clients could be treated if kept by the original counselor:
- $260 \text{ extra sessions} \div 12.7 \text{ average sessions/client} = 20.5 \text{ extra clients}$

Estimated Sessions Per 100 Clients Treated



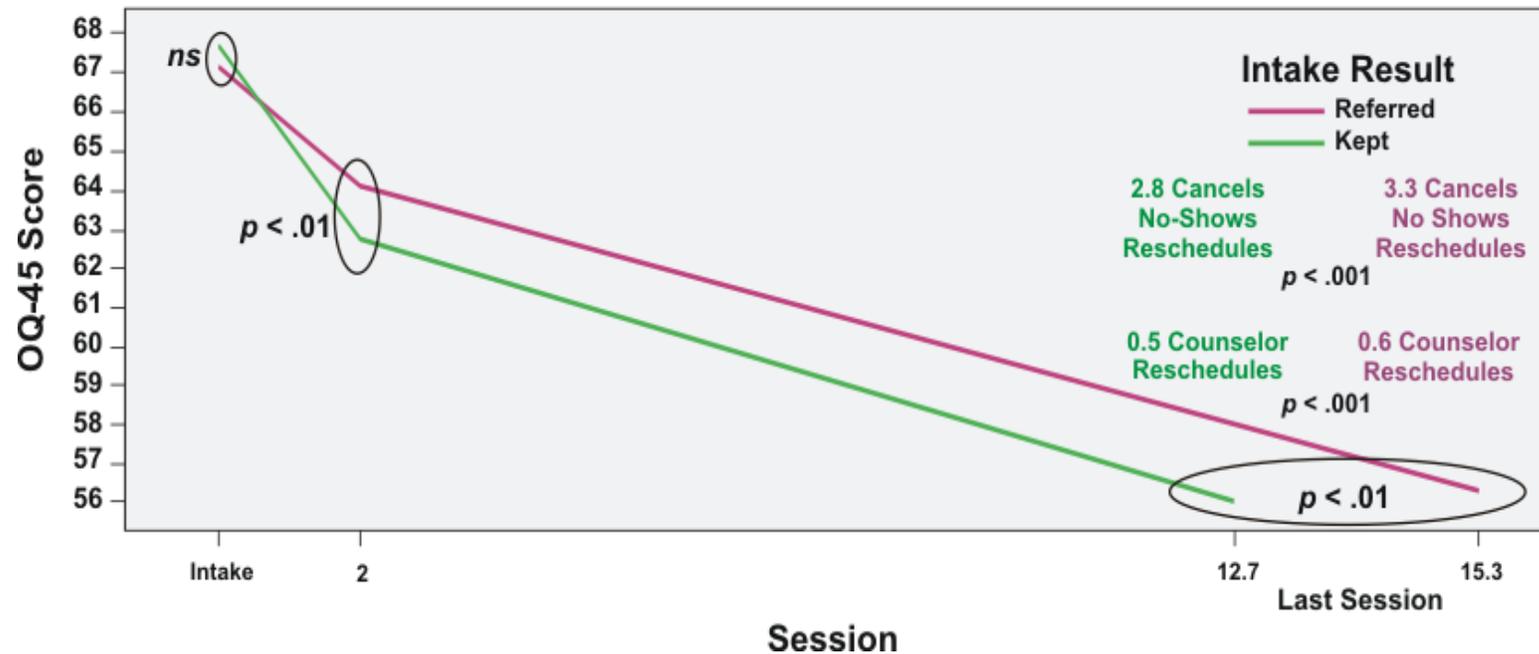
# The cost of referring clients

On the whole, clients kept by intake counselors and clients referred to a different counselor for session 2 arrive at similar levels of improvement when they terminate.

Clients kept by the intake counselor arrive at this point more quickly, however, using fewer treatment sessions

They also waste fewer appointments (fewer no shows, cancellations, and reschedules)

**OQ-45 Scores By Session**



# References

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