

Treatment Outcome Measures

Psychology Treatment and Diagnostics Board

Comprehensive Guide to Success Metrics and Progress Monitoring Tools

I. Overview of Treatment Outcome Measurement

Purpose and Importance

- **Evidence-Based Practice:** Demonstrate treatment effectiveness and guide clinical decisions
- **Quality Improvement:** Identify areas for treatment enhancement and professional development
- **Accountability:** Document progress for clients, supervisors, and third-party payers
- **Research Integration:** Contribute to the knowledge base of effective treatments
- **Client Engagement:** Increase client awareness of progress and treatment goals

Types of Outcome Measures

- **Symptom-Specific:** Target specific psychiatric symptoms (depression, anxiety, trauma)
- **Functional:** Assess daily living, work, social, and relationship functioning
- **Quality of Life:** Evaluate overall life satisfaction and well-being
- **Process Measures:** Monitor therapeutic alliance and treatment engagement
- **Behavioral:** Track specific behavioral changes and skill acquisition

II. Depression Outcome Measures

A. Patient Health Questionnaire-9 (PHQ-9)

Scoring and Interpretation:

Score Range	Severity Level	Clinical Action
0-4	Minimal Depression	Monitor; may not require treatment
5-9	Mild Depression	Consider watchful waiting; repeat PHQ-9
10-14	Moderate Depression	Treatment plan; consider counseling/medication
15-19	Moderately Severe	Active treatment with psychotherapy/medication
20-27	Severe Depression	Immediate treatment; consider intensive interventions

Clinical Significance Benchmarks:

- **Reliable Change:** ≥ 6 point change indicates reliable improvement/deterioration
- **Clinically Significant Change:** Move from clinical (≥ 10) to non-clinical (< 10) range
- **Response:** $\geq 50\%$ reduction from baseline score
- **Remission:** Final score < 5

Psychometric Properties:

- Internal consistency: $\alpha = 0.89$
- Test-retest reliability: $r = 0.84$

- Sensitivity: 88% for major depression
- Specificity: 88% for major depression

B. Beck Depression Inventory-II (BDI-II)

Scoring Guidelines:

- **0-13:** Minimal depression
- **14-19:** Mild depression
- **20-28:** Moderate depression
- **29-63:** Severe depression

Treatment Response Indicators:

- **Reliable Change Index:** ≥ 8 point change
- **Clinical Significance:** Score reduction to < 14
- **Effect Size Benchmarks:** Small ($d=0.2$), Medium ($d=0.5$), Large ($d=0.8$)

III. Anxiety Outcome Measures

A. Generalized Anxiety Disorder 7-Item Scale (GAD-7)

Score Interpretation:

Score	Anxiety Level	Treatment Recommendation
0-4	Minimal	No treatment needed
5-9	Mild	Monitor symptoms
10-14	Moderate	Consider treatment
15-21	Severe	Active treatment recommended

Change Indicators:

- **Minimal Important Difference:** 4-point change
- **Reliable Change:** ≥ 5 point change
- **Clinical Significance:** Score < 10 (non-clinical range)

B. Beck Anxiety Inventory (BAI)

Severity Ranges:

- **0-7:** Minimal anxiety
- **8-15:** Mild anxiety
- **16-25:** Moderate anxiety
- **26-63:** Severe anxiety

C. State-Trait Anxiety Inventory (STAI)

Interpretation Guidelines:

- **State Anxiety:** Temporary anxiety response to specific situations
- **Trait Anxiety:** General tendency to experience anxiety
- **Normative Scores:** Mean = 50, SD = 10 for general population
- **Clinical Cutoff:** T-score ≥ 60 indicates elevated anxiety

IV. Trauma and PTSD Outcome Measures

A. PTSD Checklist for DSM-5 (PCL-5)

Scoring and Cutoff Scores:

- **Total Score Range:** 0-80
- **Provisional PTSD Diagnosis:** Score ≥ 33
- **Symptom Cluster Scores:** Each item rated 0-4
- **Severity Levels:** Mild (33-49), Moderate (50-64), Severe (65-80)

Change Metrics:

- **Reliable Change:** ≥ 10 point change
- **Clinically Significant Improvement:** Score reduction to < 33
- **Treatment Response:** ≥ 10 point reduction + < 33 final score
- **Loss of PTSD Diagnosis:** No longer meets DSM-5 criteria

B. Clinician-Administered PTSD Scale-5 (CAPS-5)

Administration and Scoring:

- **Interview Format:** Structured clinical interview
- **Frequency Ratings:** 0 (Never) to 4 (Daily/Almost every day)
- **Intensity Ratings:** 0 (Not at all) to 4 (Extremely)
- **Diagnostic Rule:** Symptom present if Frequency ≥ 1 AND Intensity ≥ 2
- **Severity Score:** Sum of frequency and intensity ratings

V. Functional Outcome Measures

A. Global Assessment of Functioning (GAF)

Functioning Levels:		
Score Range	Level of Functioning	Description
91-100	Superior	No symptoms, superior functioning
81-90	Good	Absent or minimal symptoms
71-80	Fair	Transient symptoms, good functioning
61-70	Mild	Mild symptoms, some difficulty
51-60	Moderate	Moderate symptoms, moderate difficulty
41-50	Serious	Serious symptoms, serious impairment
31-40	Major	Major impairment in several areas
21-30	Severe	Unable to function in almost all areas

B. World Health Organization Disability Assessment Schedule (WHO-DAS 2.0)

Six Domains of Functioning:
<ul style="list-style-type: none">• Cognition: Understanding and communicating

- **Mobility:** Moving and getting around
- **Self-Care:** Attending to hygiene, dressing, eating
- **Getting Along:** Interacting with other people
- **Life Activities:** Domestic responsibilities, leisure, work/school
- **Participation:** Joining in community activities

Scoring:

- **Response Scale:** 1 (No difficulty) to 5 (Extreme difficulty/cannot do)
- **Domain Scores:** Average of items within each domain
- **Total Score:** 0-100 scale (higher = more disability)
- **Clinical Significance:** ≥ 10 point change indicates meaningful improvement

C. Sheehan Disability Scale (SDS)

Three Functional Domains:

- **Work/School:** 0-10 impairment rating
- **Social Life:** 0-10 impairment rating
- **Family Life:** 0-10 impairment rating
- **Total Score:** Sum of three domains (0-30)
- **Functional Remission:** Total score ≤ 6

VI. Quality of Life Measures

A. Quality of Life Enjoyment and Satisfaction Questionnaire (Q-LES-Q)

Scoring Method:

- **Raw Score:** Sum of item responses
- **Percentage Score:** $(\text{Raw score} - \text{minimum possible}) / (\text{maximum possible} - \text{minimum possible}) \times 100$
- **Normative Data:** Healthy adults typically score 75-85%
- **Clinical Populations:** Often score 40-60%
- **Improvement Indicator:** $\geq 10\%$ increase in percentage score

B. Short Form-36 Health Survey (SF-36)

Eight Health Domains:

- **Physical Functioning**
- **Role-Physical**
- **Bodily Pain**
- **General Health**
- **Vitality**
- **Social Functioning**
- **Role-Emotional**
- **Mental Health**

Summary Measures:

- **Physical Component Score (PCS):** T-score (mean=50, SD=10)
- **Mental Component Score (MCS):** T-score (mean=50, SD=10)

- **Minimal Important Difference:** 3-5 point change

VII. Process Measures and Therapeutic Alliance

A. Working Alliance Inventory (WAI)

Three Alliance Factors:

- **Task:** Agreement on therapeutic activities and techniques
- **Goal:** Consensus on treatment objectives
- **Bond:** Mutual trust and acceptance

Scoring and Interpretation:

- **Response Scale:** 1 (Never) to 7 (Always)
- **Total Score:** Sum of all items (12-84 for short form)
- **Strong Alliance:** Total score >65 (short form)
- **Weak Alliance:** Total score <50 (indicates need for alliance repair)

B. Session Rating Scale (SRS)

Four Alliance Dimensions:

- **Relationship:** Felt understood and respected
- **Goals and Topics:** Worked on important issues
- **Approach or Method:** Therapist's approach was a good fit
- **Overall:** Overall session rating
- **Scoring:** Visual analog scales (0-10)
- **Poor Alliance:** Total score <36
- **Strong Alliance:** Total score >36

VIII. Monitoring Schedules and Implementation

Standard Assessment Timeline: INTAKE ASSESSMENT: - Comprehensive diagnostic interview - Primary symptom measures (PHQ-9, GAD-7, PCL-5) - Functional assessment (WHO-DAS, SDS) - Quality of life measure (Q-LES-Q) - Treatment alliance baseline SESSION 2-3: - Brief symptom check (primary measures) - Alliance assessment (WAI, SRS) - Adjust measures based on presenting problems WEEK 4 (SESSION 4): - Early progress evaluation - Primary symptom measures - Functional assessment - Alliance strength check - Treatment plan modifications if needed WEEK 8 (MID-TREATMENT): - Comprehensive progress review - All baseline measures repeated - Clinical significance calculations - Treatment adherence assessment WEEK 12 (END OF ACUTE PHASE): - Outcome evaluation - Relapse prevention planning - Maintenance treatment decisions - Satisfaction measures 3-MONTH FOLLOW-UP: - Sustained improvement assessment - Relapse monitoring - Booster session needs 6-MONTH FOLLOW-UP: - Long-term outcome evaluation - Quality of life assessment - Service utilization review 12-MONTH FOLLOW-UP: - Treatment durability assessment - Life functioning evaluation - Future service needs

Frequency Guidelines by Treatment Phase

- **Acute Treatment (0-12 weeks):** Weekly brief measures, monthly comprehensive assessment
- **Maintenance Phase:** Biweekly to monthly brief measures
- **Crisis Periods:** Daily to weekly intensive monitoring
- **Stable Maintenance:** Monthly to quarterly assessment

IX. Technology and Digital Monitoring Tools

A. Ecological Momentary Assessment (EMA)

Real-Time Monitoring Features:

- **Mood Tracking:** Multiple daily ratings of mood states
- **Symptom Monitoring:** Real-time anxiety, depression, or trauma symptoms
- **Behavioral Tracking:** Activity levels, sleep patterns, social interactions
- **Trigger Identification:** Environmental and situational factors
- **Coping Strategy Use:** Implementation of learned skills

B. Smartphone Applications and Wearable Devices

- **Passive Data Collection:** Sleep, activity, heart rate variability
- **Active Self-Monitoring:** Daily mood, anxiety, and symptom ratings
- **Medication Adherence:** Reminder systems and compliance tracking
- **Crisis Detection:** Automatic alerts for concerning patterns
- **Progress Visualization:** Charts and graphs of improvement trends

X. Data Analysis and Interpretation

A. Statistical Approaches to Change

Reliable Change Index (RCI):

$$RCI = (X_2 - X_1) / SE_diff$$

- **X₂:** Post-treatment score
- **X₁:** Pre-treatment score
- **SE_diff:** Standard error of difference
- **Interpretation:** $|RCI| \geq 1.96$ indicates reliable change

Clinical Significance Criteria (Jacobson & Truax):

- **Criterion A:** Post-treatment score closer to functional than dysfunctional population mean
- **Criterion B:** Post-treatment score within normal range (within 2 SD of functional mean)
- **Criterion C:** Post-treatment score outside dysfunctional range (beyond 2 SD of dysfunctional mean)

B. Effect Size Interpretation

Cohen's d Guidelines:

- **Small Effect:** $d = 0.2$ (treatment accounts for ~1% of variance)
- **Medium Effect:** $d = 0.5$ (treatment accounts for ~6% of variance)
- **Large Effect:** $d = 0.8$ (treatment accounts for ~14% of variance)
- **Very Large Effect:** $d \geq 1.0$ (treatment accounts for $\geq 20\%$ of variance)

XI. Quality Assurance and Best Practices

A. Implementation Standards

- **Standardized Administration:** Consistent procedures across all assessments
- **Staff Training:** Proper training on measure administration and interpretation
- **Data Quality Checks:** Regular review of missing data and scoring accuracy
- **Client Feedback:** Share results with clients to enhance engagement
- **Clinical Integration:** Use results to inform treatment planning and modifications

B. Ethical Considerations

- **Informed Consent:** Explain purpose and use of outcome measures
- **Confidentiality:** Secure storage and transmission of assessment data
- **Cultural Sensitivity:** Consider cultural factors in measure selection and interpretation
- **Clinical Judgment:** Integrate quantitative results with clinical assessment
- **Transparency:** Share results and their implications with clients

C. Red Flags for Treatment Modification

- **No Change:** Less than reliable change after 4-6 sessions
- **Deterioration:** Reliable worsening of symptoms
- **Alliance Problems:** Consistently low alliance scores (<36 on SRS)
- **Functional Decline:** Worsening in daily life functioning
- **Increased Risk:** Elevated suicidal or violent ideation

XII. Outcome Reporting and Communication

OUTCOME SUMMARY TEMPLATE Client: _____ Treatment Period: _____
BASELINE ASSESSMENT: Primary Measures: - PHQ-9: _____
(Severity: _____) - GAD-7: _____ (Severity: _____) - PCL-5: _____
(PTSD: Yes/No) - WHO-DAS: _____ (Disability Level: _____)
OUTCOME ASSESSMENT: Post-Treatment Scores: - PHQ-9: _____
(Change: _____, RCI: _____) - GAD-7: _____ (Change: _____, RCI: _____) - PCL-5: _____
(Change: _____, RCI: _____) - WHO-DAS: _____ (Change: _____, RCI: _____)
CLINICAL SIGNIFICANCE: ☐ Reliable Change Achieved ☐ Clinically Significant
Change Achieved ☐ Treatment Response Achieved ☐ Remission Achieved
FUNCTIONAL OUTCOMES: ☐ Return to Work/School ☐ Improved Relationships ☐ Enhanced Self-Care
☐ Increased Social Participation RECOMMENDATIONS: ☐ Treatment Complete
☐ Maintenance Sessions ☐ Booster Sessions ☐ Referral for Additional Services
☐ Alternative Treatment Approach Clinician: _____ Date: _____

Implementation Note: This comprehensive outcome measurement system should be integrated into all psychological treatment protocols. Regular monitoring enhances treatment effectiveness, client engagement, and professional accountability. All outcome data should be reviewed in supervision and used to guide clinical decision-making.