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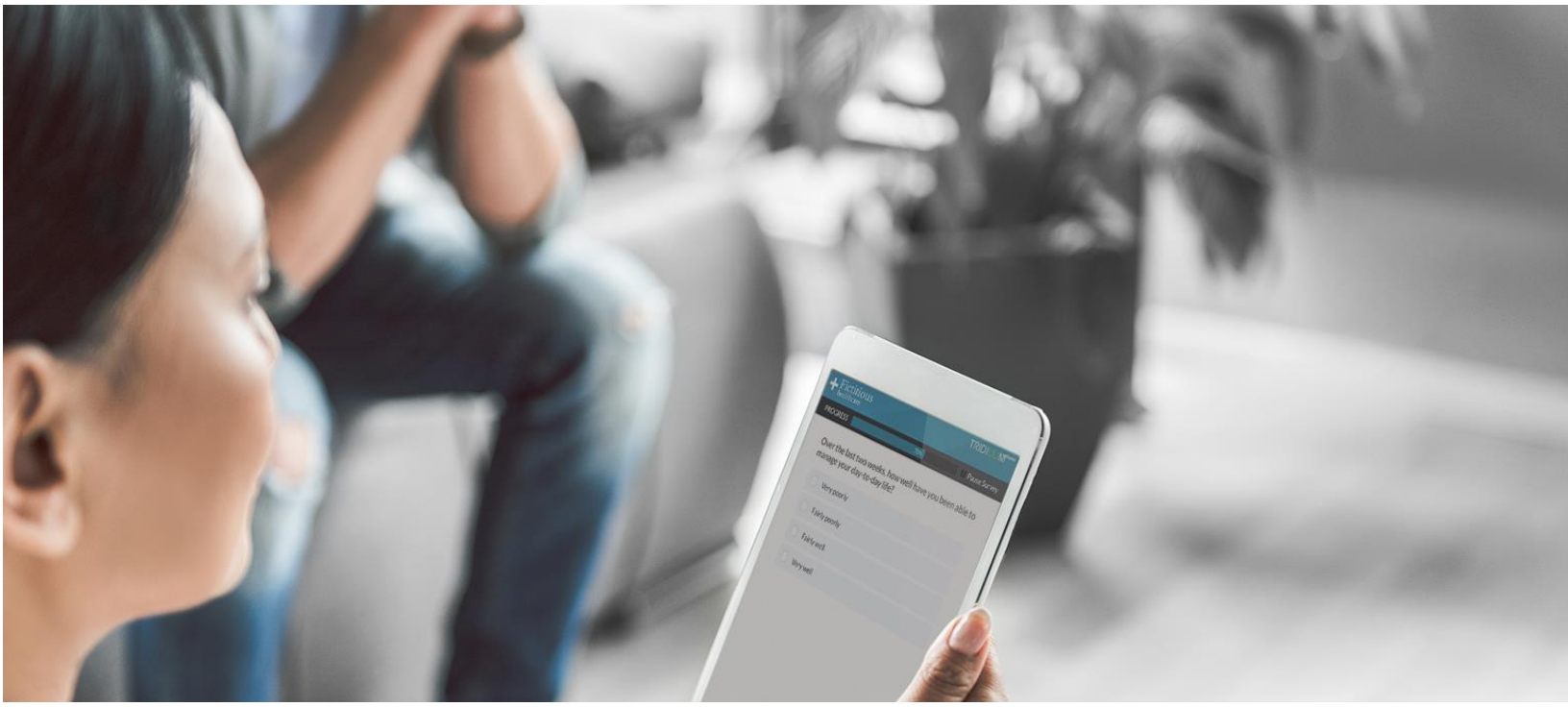

Managing Behavioral Health Clients Based on Treatment Trajectories

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Introduction

Routine measurement of clients' behavioral health symptoms allows the clinician to monitor progress and individualize their treatment. Sharing with clients improved outcomes can reassure them that they are progressing. On the other hand, outcomes monitoring can reveal client deterioration or stagnation (Boswell et al., 2013). Tracking these outcomes over time produces a treatment outcomes trajectory, which can support clinicians in making therapeutic decisions tailored to the clients' specific needs.

Tridiuum has developed this guide based on the latest measurement-based care (MBC) and psychotherapy trajectory research. It can help guide clinicians in the interpretation of client outcome metrics presented in the Tridiuum ONE software. It is *not* meant to be prescriptive, suggest particular treatment models or techniques, or predict treatment outcomes (positive or negative). It is meant to supplement the provider's clinical judgment, the availability of other clinical data, and client-centered treatment preferences. Taken together, we believe that the confluence of this information will result in the best treatment for clients.

Why are change trajectories important?

Trajectories are patterns of change in clients' reported symptoms over a period of time. This is actual change that can be seen in clients when measurement is used concurrently with treatment—it is not predicted or expected change. Because early changes in client baseline characteristics (e.g., psychiatric severity, social functioning) and symptoms can identify different trajectories, clinicians can factor this information into treatment planning and thus improve outcomes (Saunders et al., 2019). There are potential risks in disregarding trajectories. For instance, slowly improving clients may be perceived as "off track," resulting in premature or unnecessary treatment plan changes (Saunders et al., 2019).

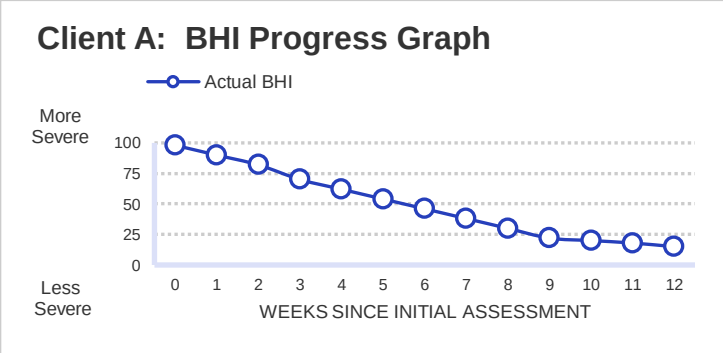
In addition, treatment trajectories are an integral part of MBC, which offers a distinct advantage over measurement-only approaches by introducing a client feedback loop into the assessment process. Research has shown that this type of continuous client feedback is associated with improved outcomes (Reese et al., 2014). As utilized in behavioral health treatment, MBC includes four components:

According to the influential Kennedy Forum on measurement-based care (Fortney et al., 2015):

> *… behavioral health providers are empowered to fine-tune treatment plans when clients are not improving, and clients who participate in rating their symptoms are likely to become more knowledgeable about their disorders, attuned to their symptoms, and cognizant of the warning signs of relapse or reoccurrence, enabling them to better self-manage their illness and seek treatment without delay.*

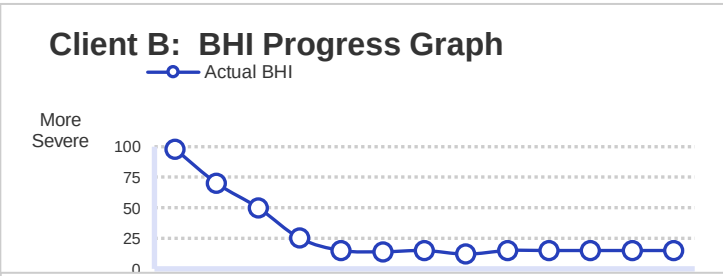
Why is routine assessment needed to pick up trajectories?

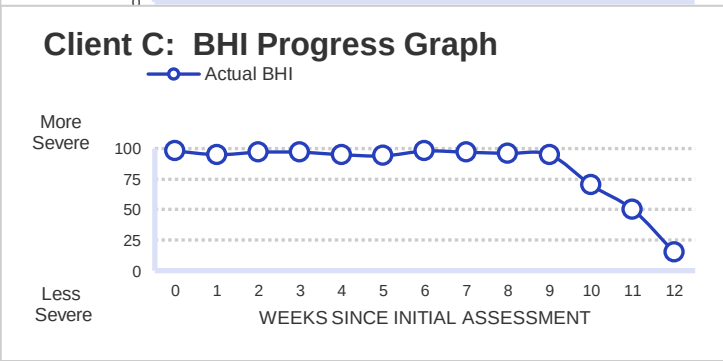
Trajectories are best identified by *routine assessment throughout treatment*. Periodic assessments (e.g., baseline, three-, six-month assessments) are ineffective in detecting ongoing changes and informing actionable steps (Fortney et al., 2018). Recall the Behavioral Health Index (BHI) score, which indicates overall level of distress. Consider three hypothetical clients who all started treatment with a BHI of 98 (severe) and three months later had a BHI of 15 (subclinical). According to the pre- and post-treatment outcomes data, all three have benefitted significantly. But has treatment been equally *effective and efficient* for these clients? Inspecting their outcomes trajectories reveals three distinct patterns of client improvement.



Client A appears to have made slow, but steady progress throughout treatment, entering the subclinical range by week 12.

Compare this to **Client B**, who quickly improved in the first weeks of therapy, achieving a subclinical score by week four and maintaining subclinical symptoms for two more months. What therapeutic benefit was achieved during those last eight sessions? Could this client have been discharged earlier or stepped down to a less-intensive form of care?





Client C presents a completely different picture of change. This client appeared to have little therapeutic benefit in terms of outcomes for *nine weeks of treatment*. Then suddenly there was significant and consistent improvement. What triggered the rapid improvement? Is it something that could have happened earlier in the process and perhaps may have saved this client weeks of significant suffering?

Meaningful client trajectories cannot be detected unless formal monitoring is initiated routinely at the outset of treatment. It is critical to begin regular monitoring early because clients who progress often exhibit most of their change early in treatment (Rubel et al., 2015).

Why not assess by observing just session-by-session changes?

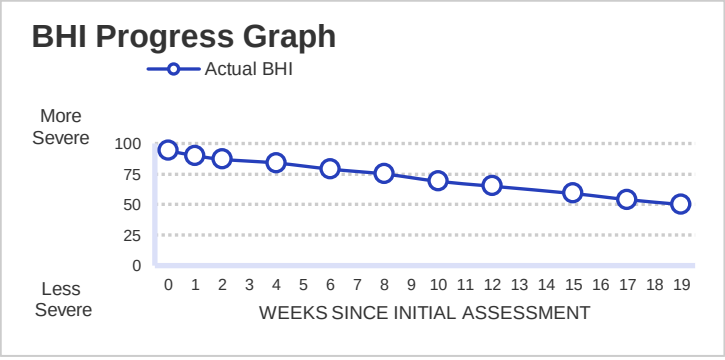
It is important to assess frequently, but smaller session-by-session changes, particularly those that are not clinically significant, may be less informative than observing the overall trajectory. Recall Client A above who had slow but consistent improvement. Shifts between sessions contribute little to the prediction of overall outcome (Koffman, 2019). Because of the potential for measurement error ("statistical noise"), there are risks in overinterpretating small, random fluctuations in session-by-session assessment scores. Assessing longer-term patterns reduces the risk of misinterpretation. *However, a large shift in scores between consecutive sessions warrants careful consideration.*

Working With Clinical Treatment Trajectories

Sanders et al (2019) identified several common patterns of outcome for clients in behavioral health treatment. Much of the content in the following section is adapted from their work and extended to Tridiuum's Behavioral Health Index (BHI). Recognizing which pattern your client is following can help you maximize the *effectiveness and efficiency* of the treatment episode.

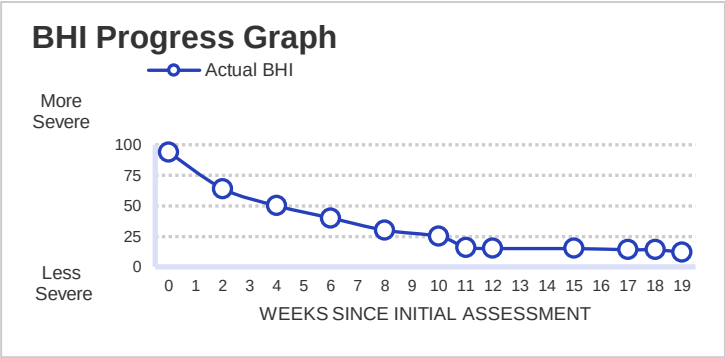
Positive Outcome Trajectories

Although estimates vary, the American Psychological Association reported that 75% of psychotherapy clients find some improvement in behavioral health symptoms (2016). These clients generally follow one of three positive outcome trajectories: Gradual Improvement (44% of all clients), Fast Improvement (14% of clients) and Slow Traction Improvement (13% of clients) (Saunders et al, 2019).



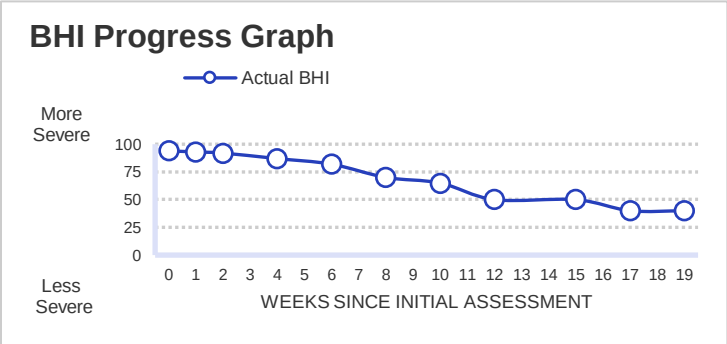
Gradual Improvement: My client has been improving gradually since treatment began.

This is the most common of the positive outcome trajectories and is characterized by gradual improvements throughout treatment. With this trajectory especially, it is important to look at the overall trend rather than session-by-session change which may under-represent progress. The exception would be a large, sudden change that may indicate a meaningful alteration in the client's circumstances. By initially allowing three to five sessions for the gradual improvement to be revealed, clinically significant changes will become more obvious.



Fast Improvement: My client improved quickly early in treatment.

Although some may consider this trend to represent a “flight into health,” early change in psychotherapy is a well-established occurrence and predictive of later positive outcomes. Much of the change during the treatment episode will occur before the fifth session (fifth blue dot).



Slow Traction: It took awhile, but then my client started improving noticeably.

The Slow Traction trajectory is typified by a slow rate of change through session three with quickening of pace thereafter. It is possible that greater treatment intensity may be required before session five to support slow traction improvers.

Some clients may feel frustrated at the slow pace of change. Expectation management and enhancement of social support are important in this clinical scenario (Zagorscak et al., 2020). Some clinical targets involve discussion of:

- Different types of treatment trajectories in psychotherapy;
- Changing tasks as treatment progresses;
- Sometimes inconsistent pacing of change (which may quicken later on);
- Potential challenges of treatment that may arise at different stages; and
- Expectations at different stages of treatment.

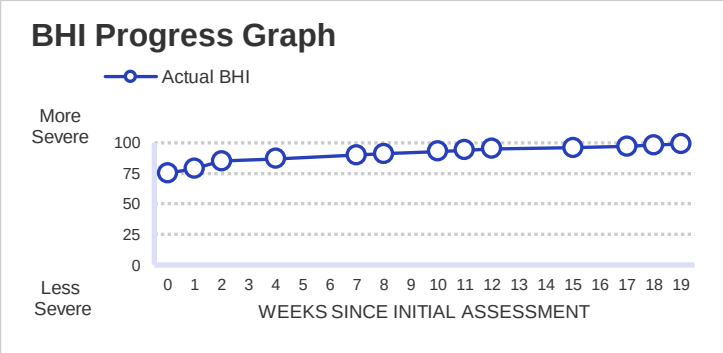
General Guidelines for Positive Outcome Trajectories

1. Early improvement is a strong and reliable predictor of positive outcome (Koffman, 2020).
2. Session three is a key early monitoring point. By then, some improvement *should be evident* (Lewis et al., 2012; Saunders et al., 2019). Even small change at this point is good.
3. Session five is a key inflection point (Koffman, 2020). All positive responder subtypes begin to evidence change by session five.
4. Plateauing of progress for several consecutive sessions indicates possible opportunities for therapeutic redirection. If this occurs while the client is in the subclinical range, one might consider possible discharge or step-down in intensity. If the client is still in the clinical range, consider alternative treatment approaches, including the possibility of a change in therapists.

Negative Outcome Trajectories

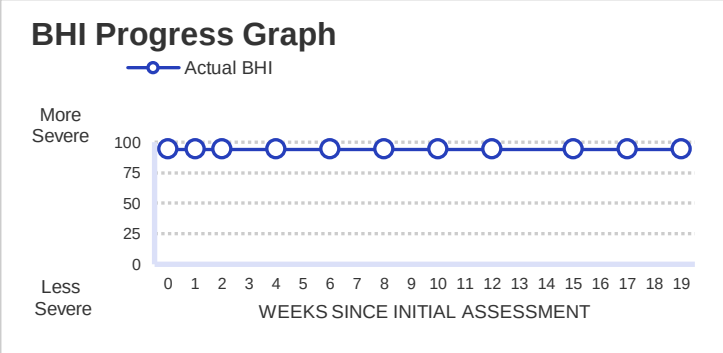
Even with the best therapy, some clients will not get better. Treatment failure is a difficult subject, and research suggests that as many as 30–50% of clients do not improve by the end of therapy (Wolpert, 2016). Approximately 5–20% of psychotherapy clients actually deteriorate during treatment (Linden & Schermuly-Haupt, 2014). Another third or so show no change at all (Saunders et al, 2019).

Monitoring the outcome trajectory for these clients can be especially important because treatment failure can be difficult to detect without objective data. On the basis of clinical judgment alone, only about one in five mental health providers detect deterioration in their clients with increased symptom severity (Hatfield et al., 2010). With formal outcome monitoring, 85% of these clients can be discerned by the third treatment session and appropriate interventions initiated (Hannan et al., 2005).



Deterioration: My client has been getting worse since treatment began.

It is important to consider whether deterioration is due to treatment-emergent reactions, the effects of life events, and/or new symptoms (Linden, 2012). As treatment begins, clients may become sensitive to strong emotions, feel strains in the therapeutic relationship and/or experience life challenges such as occupational problems or stigmatization.



Nonresponse: My client has not changed since treatment began.

Both these trajectories are emergent by session three and a clinician might begin addressing lack of progress with the client.

- Is the client answering the questions accurately to capture a good picture of current behavioral health? If not, revisit the purpose of the assessment.
- Are there any treatment goals that need to be clarified or to be re-established?
- Is it time to shift to a different treatment approach (e.g., increase engagement between sessions, different intervention)?

If no positive change has been achieved by session five, improvement is improbable, and an alternative treatment strategy (frequency, intensity, type) or transfer to another clinician should be strongly considered.

Some potential points for discussion with the client include:

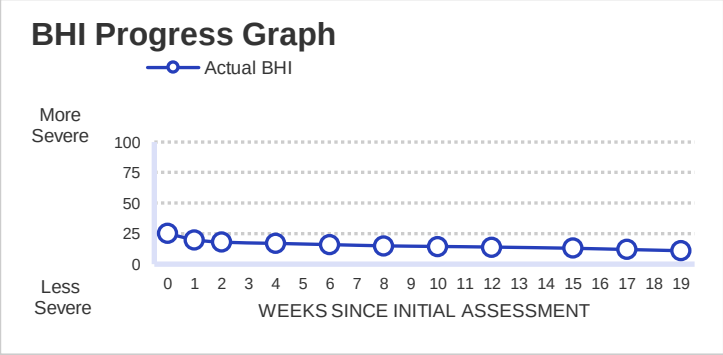
- Client education focused on exploring reasons for deterioration/non-response;
- Importance in finding the best fit in therapeutic relationship; and,
- Normalize that it is not always the best fit and a next step might include seeking a better fit provider or changing course in treatment.

For nonresponders, it is also important to consider the presence of treatment-resistant depression or anxiety, particularly when past pharmacological treatment attempts have been made. Treatment-resistant depression is typically defined as a minimum of two prior pharmacologic treatment failures and confirmation of prior adequate dose and duration (Gaynes et al., 2020). Treatment-resistant anxiety is defined as treatment failure after at least one first-line pharmacologic and one psychological treatment with adequate dosing, duration, and client compliance (Bokma et al., 2019). The clinical plan may require changes in treatment modalities or pharmacologic augmentation.

Addressing these patterns early can make a significant difference at the client and organizational level in terms of preventing further symptom deterioration/stagnation, premature termination, or “clinical inertia” (failure to intensify treatment when clinically indicated).

Low Information Trajectories

The low information trajectories are so named because the data is doing little to inform the treatment process. Two types are discussed here: subclinical (about 10% of clients) and fluctuating (5% of clients) (Tridiuum Inc., 3/28/2018). Both profiles generate more questions than answers. Is the client appropriate for this level of treatment? Are they responding to the assessment accurately? Is the assessment adequately capturing the client’s condition?



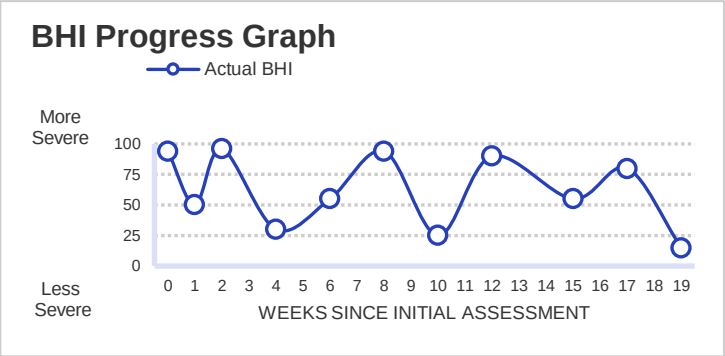
Subclinical: My client has been maintaining a low level of severity since treatment began.

There are a few considerations when a client produces a subclinical intake. First, it is important to verify that they have completed the assessment correctly and that these are not outlying scores. If the scores are not representative of the client’s actual behavioral health, the outcomes trajectory will not be reflected accurately. If the client is actually at a higher severity level, then the trajectory could rise and incorrectly reflect deterioration.

Second, if the subclinical intake is accurate, then the best-case scenario is that the trajectory remains flat and the need for treatment is in question. If low severity assessment is maintained after intake, consider alternative lower intensity resources (e.g., bibliotherapy, wellness apps, coaching, etc.). Given the presentation of low severity, exploratory therapies are *not* indicated.

Third, if the client is presenting for a specific, circumscribed problem (e.g., dental phobia) that merits treatment but isn’t impacting assessment scores, consider encouraging them to answer assessment questions in the spirit of that specific problem so changes can be tracked. For example, “how are you getting along with your thoughts and feelings (as they pertain to your dental phobia)?”

Fourth, there is a possibility that the assessment is not tapping into symptoms that the client is presenting (e.g., bipolar disorder or psychosis). The presence of such disorders will require additional assessment.



Fluctuating: My client's scores fluctuate a lot and do not correspond to any trajectory.

This should be considered a "red flag" pattern, because it is not possible to practice MBC with this data. These response patterns may result from:

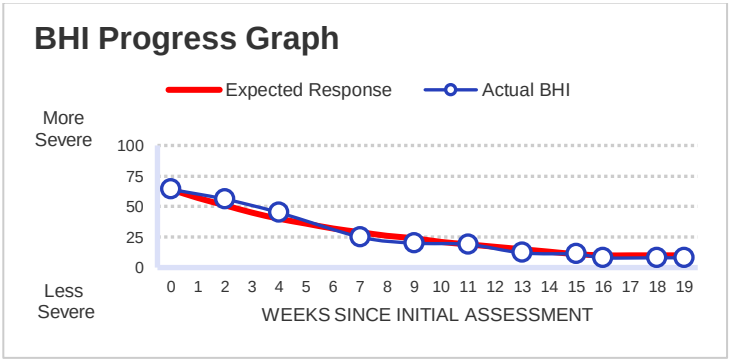
- A lack of understanding of assessment questions; and/or
- Answering questions in response to short-term, immediate stressors rather than reflecting longer-term problems that led to treatment.

Assess whether the client is understanding questions, responding randomly, or misinterpreting basic instructions. Focus on only short-term status when responding may indicate problems in emotion regulation or coping skills (e.g., overreaction to recent life events), that may warrant therapeutic attention. Otherwise, discuss with the client their reasons for seeking treatment and relate the assessments to tracking longer-term issues.

Working with Expected Treatment Response (ETR) Curves

What is the Expected Treatment Response curve?

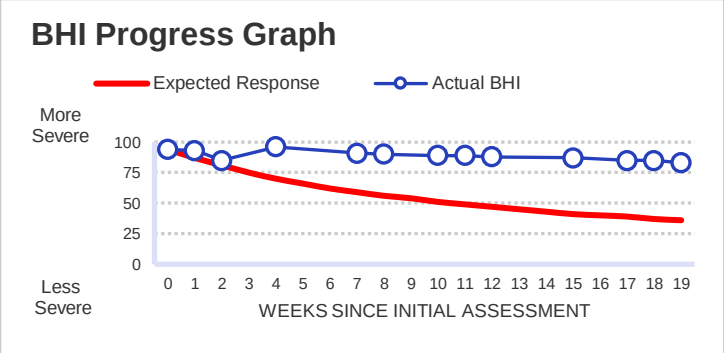
The Expected Treatment Response or ETR helps answer the question: "How does the average client like this one usually progress?" Rather than relying on subjective impressions, the ETR helps the clinician to track and document client progress against quantitative data from thousands of other similar clients.



The red line on the graph depicts how clients with similar characteristics at intake are "expected to" or "typically" progress through treatment. It is essentially an average of the response trajectories for clients with a defined set

of presenting characteristics (e.g., BHI severity, taking psychiatric medications, suicidal history, past psychiatric hospitalizations, etc.). *For each client, the ETR shows how clients like them generally improve.*

In terms of averages, some clients will do better and some clients will do worse. Clinicians, however, should be alert to significant deviations from the ETR such as the following example, where the client's scores consistently indicate more severe distress than the ETR suggests should be present.



Used together, knowledge of outcomes trajectories and the ETR can be a valuable tool in supporting clinical decisions and improving outcomes.

Other Clinical Uses of Trajectory Data

Motivational Interviewing

Motivational interviewing (MI; Miller & Rollnick, 2013) is a clinical approach that complements MBC and the use of trajectories. MI makes effective use of clinical data from clients for feedback and self-reflection. By discussing trajectories with clients as they proceed through treatment, they can draw a linkage between the data that they are providing and changes in their outcomes across time. Discussing their trajectories may help identify treatment barriers and offer clients "permission" to raise new concerns that affect the course of their treatments. Routine completion of outcome measures will increase the likelihood that clients will become more informed and aware of symptom fluctuations and trends that act as warning signs of relapse or recurrence.

Residual Symptoms

It is important to detect the presence of residual symptoms during remission periods, particularly in depression. Even clients who achieve remission may be troubled by symptoms such as fatigue, sleep problems, and cognitive dysfunction (Zajecka, 2013). These symptoms may not only adversely affect daily functioning but act as precursors to relapse and recurrence. If there are changes in trajectories after remission has occurred, further assessment of such symptoms may be warranted.

Real-World "Experiments"

The observation of trajectories in an office setting provides a good snapshot of clients' functioning and response to treatment, but application of these observations to real-world contexts is critical. Asking clients to track symptom fluctuations in daily life allows clients to observe the effects of their behavior on their outcomes, thus improving insight and health literacy..

Significant Other Observations

Inviting the client to check their trajectories against the impressions of family, friends, and other significant contacts provides additional confirmation (or areas of disagreement) in the effects of treatment that can be explored in session.

QUICK VIEW GUIDE

Adapting Treatment to Specific Trajectories

PROFILE DIRECTION	TRAJECTORY TYPE	TRAJECTORY DESCRIPTION*	CLINICAL CONSIDERATIONS
Positive Outcome Trajectories	**Gradual Improvement**	*44% of clients* *Slow, but steady improvement followed by plateauing*	Important to look at overall trend as session-by-session change may not suggest clinically significant change Continue treatment until progress plateaus and consider discharge
	Fast Improvement	*14% of clients* *Rapid decrease after intake followed by plateauing*	Much of change will happen before fifth session Continue treatment until progress plateaus and consider discharge
	Slow Traction Improvement	*13% of clients* *Initial slow improvement followed by increased rate of improvement*	May see slow rate of change through session three with quickening of pace thereafter May need greater treatment intensity before session five to support slow improvers Look for plateauing later in treatment process than fast or gradual improvers Continue treatment until progress plateaus and consider discharge
Negative Outcome Trajectories	**Deterioration**	*5-20% of clients* *Worsening after intake*	Client education and exploration of potential reasons for deterioration If no improvement by session five, consider alternative treatment strategy (frequency, intensity, type) or transfer to another clinician
	Nonresponse	*30% of clients* *Flat line*	If change is not evident by session three, begin addressing lack of response with client If no positive change has been achieved through session five, progress is unlikely Strongly consider transferring client to different clinician
Low Information Trajectories	**Subclinical**	*10% of clients* *Low symptom severity throughout treatment*	Focus on specific presenting problem Consider additional assessments (targeting specific problem areas not covered in the BHI) If low severity assessment is maintained after intake, consider alternative lower intensity resources (bibliotherapy, wellness apps, coaching, etc.); Avoid exploratory therapies
	Fluctuating	*5% of clients* *No discernible pattern or sawtooth pattern*	Red flag pattern – cannot practice MBC with this data May represent lack of understanding of assessments May be responding to short-term, immediate stressors rather than reflecting longer term adjustment May reflect problems in emotion regulation or coping skills – may represent a possible treatment target May be useful to relate assessments to reasons for seeking treatment

*Note: Percentages do not add to 100% because they were taken from different sources. They do, however, give a sense of how common each trajectory type is.

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