

Measurement-Based Care (MBC): How, When, and Why It Supports Clinical Practice



Lexi Smith, PhD

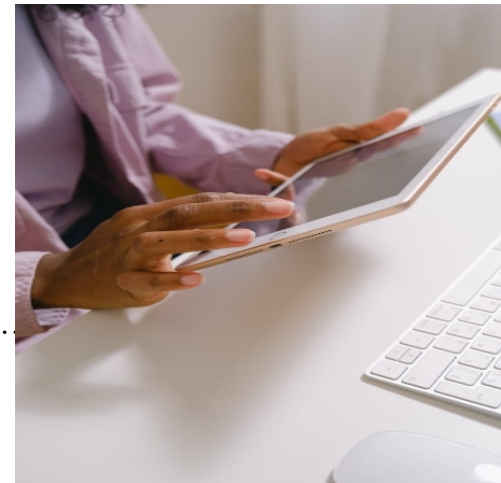
Adapted from slides originally developed by Courtney Cleminshaw-Mahan, PhD,
Sydney Risley, PhD, Lexi Smith, PhD, and Kelly Wesolowski, PsyD

What is Measurement Based Care?

- Measurement based care (MBC) is an evidence-based practice
- Uses quantitative measures to inform treatment decisions on an ongoing basis.
 - ***Not just pre- and post-treatment***
 - ***Therefore, adjustments can be made throughout treatment***

What is Measurement Based Care?

- **ALL** stakeholders should be included (e.g., patients/families)
- Includes multiple components:
 - 1.) Routinely administered measure
 - 2.) Clinician review of data
 - 3.) Review of data with stakeholders (patients and families)
 - 4.) Collaborative re-evaluation of treatment plan



Why Measurement Based Care?

- Literature supports using consistent and routine assessment of symptoms to determine **treatment progress** and appropriate ***level of care***
 - Meta-analyses support small but significant positive effects on treatment outcomes and retention (de Jong et al., 2021)
 - “What gets measured gets done” (Conners et al, 2021)
 - Focus on quantitative outcomes from regulatory bodies such as the Joint Commission

NCH values—***Do what works!***

Why Measurement Based Care?

- Nevertheless, typically less than 20% of behavioral health practitioners integrate MBC into their practice
- Barriers to implementing MBC occur at multiple levels:
 - Patient (eg, concerns about confidentiality)
 - Practitioner (eg, beliefs that measures are no better than clinical judgment)
 - Organization (eg, limited resources for training)
 - System (eg, competing requirements)

Selecting Outcome Measures

- Considerations for selecting an appropriate measure:

Consistent with treatment goals

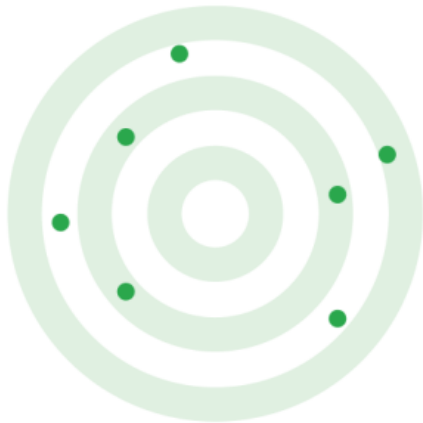
- What information is the measure giving us?

Feasible to use

- Brief, free, available in multiple languages

Psychometrics

Reliability vs validity



Poor validity
Poor reliability



Poor validity
Good reliability



Good validity
Good reliability



Age considerations

- Selecting a measure designed for your patient's age range:
 1. Helps ensure accurate comparison between your patient and norming sample or cut-scores
 2. Helps ensure that items are developmentally appropriate

Who Should Fill out Measures

- Multiple informants = best practice
 - Multi-setting, if possible
 - Caregivers, teachers, self-report, etc.
 - Children ages 7-8 can provide self-report data with similar quality as informant data from adults

Who Should Fill out Measures

- Disagreement between reports is very common
 - Informant discrepancies provide significant information
 - Helps us understand how behavior changes across contexts (e.g., school, home, community)
 - Provides useful info about how different informants observe and interpret behavior (e.g., negativity bias, social desirability)
 - Can provide pertinent info about how interactions between reporters influence outcomes

SCARED

- **Age:** 8-18
- **Estimated time to administer:** 10 minutes
- **Description:** self-report measures designed to assess anxiety disorders/symptoms
- Total score with 5 subscales (generalized anxiety, panic, separation anxiety, social, school avoidance)
- **Versions:** child- and parent-report

Screen for Child Anxiety Related Disorders (SCARED)
Parent Version—Pg. 1 of 2 (To be filled out by the PARENT)

Name: _____
Date: _____

Directions:

Below is a list of statements that describe how people feel. Read each statement carefully and decide if it is "Not True or Hardly Ever True" or "Somewhat True or Sometimes True" or "Very True or Often True" for your child. Then for each statement, fill in one circle that corresponds to the response that seems to describe your child for the last 3 months. Please respond to all statements as well as you can, even if some do not seem to concern your child.

	0 Not True or Hardly Ever True	1 Somewhat True or Sometimes True	2 Very True or Often True
1. When my child feels frightened, it is hard for him/her to breathe.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. My child gets headaches when he/she is at school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. My child doesn't like to be with people he/she doesn't know well.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. My child gets scared if he/she sleeps away from home.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. My child worries about other people liking him/her.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. When my child gets frightened, he/she feels like passing out.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. My child is nervous.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. My child follows me wherever I go.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. People tell me that my child looks nervous.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. My child feels nervous with people he/she doesn't know well.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. My child gets stomachaches at school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. When my child gets frightened, he/she feels like he/she is going crazy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. My child worries about sleeping alone.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. My child worries about being as good as other kids.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. When he/she gets frightened, he/she feels like things are not real.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. My child has nightmares about something bad happening to him/her parents.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. My child worries about going to school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. When my child gets frightened, his/her heart beats fast.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. He/she gets shaky.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. My child has nightmares about something bad happening to him/her.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

GAD-7

- **Age:** 13 and up
- **Estimated time to administer:** <10 minutes
- **Description:** self-report measures designed to screen for GAD symptoms
- **Versions:** self-report

Generalized Anxiety Disorder 7-item (GAD-7) scale

Over the last 2 weeks, how often have you been bothered by the following problems?	Not at all	Several days	Over half the days	Nearly every day
1. Feeling nervous, anxious, or on edge	0	1	2	3
2. Not being able to stop or control worrying	0	1	2	3
3. Worrying too much about different things	0	1	2	3
4. Trouble relaxing	0	1	2	3
5. Being so restless that it's hard to sit still	0	1	2	3
6. Becoming easily annoyed or irritable	0	1	2	3
7. Feeling afraid as if something awful might happen	0	1	2	3
<i>Add the score for each column+</i>			+	+
Total Score (<i>add your column scores</i>) =				

If you checked off any problems, how difficult have these made it for you to do your work, take care of things at home, or get along with other people?

Not difficult at all _____
 Somewhat difficult _____
 Very difficult _____
 Extremely difficult _____

PHQ-8

- **Age:** 12 and up
- **Estimated time to administer:** <10 minutes
- **Description:** self-report measures designed to screen for depressive symptoms
- **Versions:** self-report

Over the last 2 weeks, how often have you been bothered by any of the following problems?
(circle **one** number on each line)

How often during the past 2 weeks were you bothered by...	Not at all	Several days	More than half the days	Nearly every day
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed, or hopeless	0	1	2	3
3. Trouble falling or staying asleep, or sleeping too much	0	1	2	3
4. Feeling tired or having little energy	0	1	2	3
5. Poor appetite or overeating	0	1	2	3
6. Feeling bad about yourself, or that you are a failure, or have let yourself or your family down	0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
8. Moving or speaking so slowly that other people could have noticed. Or the opposite – being so fidgety or restless that you have been moving around a lot more than usual	0	1	2	3

EPIC Tools for Utilizing Measures and Keeping Track of Data

The screenshot displays the EPIC interface for a patient visit on 12/6/2022 with Zzuser, Therapist for Office Visit. The interface is organized into a sidebar on the left and a main content area on the right. The sidebar lists various assessment tools, and the main content area shows the details for each tool, including a 'New Reading' button and a 'No data found' message.

Assessment Tool	Data Status
AAQ-II	No data found.
ECBI	No data found.
GAD-7	No data found.
PSC-17 Parent	No data found.
PSC-17 Patient/Self	No data found.
SCARED Scores	No data found.
Child Scores	No data found.
Parent 1 Scores	No data found.
Parent 2 Scores	No data found.
Vanderbilt 3-Parent	No data found.
Initial T-Scores	No data found.
Follow-Up T-Scores	No data found.
Vanderbilt 3-Teacher	No data found.
Initial T-Scores	No data found.
Follow-Up T-Scores	No data found.
Specialty Forms	No data found.
SmartSets	No data found.

Communicating with Families

- Frequency of *administration* depends on:
 - Type of measure, frequency of sessions, severity of symptoms, feasibility, etc.

Communicating with Families

- Facilitates regular, honest feedback
 - Use a collaborative approach to empower families
 - Patients know themselves best
 - Compassion and empathy are key
 - Help families understand/ contextualize the data
 - » **E.g.) Symptoms can get worse before getting better**
 - May be helpful to share norms if appropriate (e.g., what is typically expected of same-aged peers)
 - Moderate effect sizes on patient outcomes are found when regular feedback is incorporated (Conners et al., 2021)
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Informing Treatment Decisions

- Allows assessment of how current interventions are influencing progress (or lack thereof) and personalize next clinical steps
- Tracking numbers visually can be a helpful aid in interpreting information and sharing with families
- Use data to generate discussions with patients and families about their perspective of progress
- Reflections:
 - How have scores changed from other administration of the measure?
 - How do current scores compare to clinical cut-off scores?
 - Are scores fairly stable or wildly varying?
 - Are there other aspects of progress and change unable to be measured here?.....

Incorporating into ISP and Discharge Criteria

- Very individualized process for every family
- Identify *reasonable* benchmark and target goals
 - **e.g.** reduction in SCARED total score to 35 from baseline of 40 by session 6
- Connect quantitative data to the family's unique and/or qualitative goals
 - **e.g.** reduction in SCARED total score to 30 from baseline of 40 AND participation in at least three sleepovers

Gaps/problems/troubleshooting

- Age group considerations
- Validation samples may not match *your specific patient or family*
- Numbers may not tell the whole story
 - Think about supplementing with qualitative outcomes—*what is important to this family?*
- Think about sensitivity, specificity, and reliability

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