Measurement Based Care: Ever Better Behavioral Healthcare

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Conflicts of Interest

Dr. Krishna

No financial conflicts

Dr. Fristad

Royalties:

American Psychiatric Press

Child & Family Psychological Services

Guilford Press

JK Seminars

Research:

Janssen

Learning Objectives

Participants will be able to…

1. identify 3 benefits of utilizing measurement based care
2. name 3 diagnostic domains in which NCH will utilize screening measures
3. articulate what capabilities are and are not associated with screening tools

Agenda

1. What is Measurement Based Care (MBC)?
2. Why should we use MBC?
3. How do we use MBC?
4. How will NCH be implementing MBC?

What is Measurement Based Care (MBC)?

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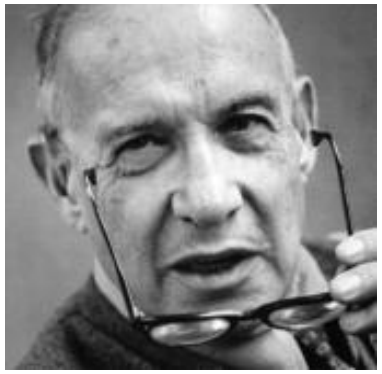
"What gets measured gets managed"

- Peter Drucker



Use Assessments

- Targeted (relevant)
- Valid
- Brief
- Inexpensive

Create Treatment Plans

- Specific
- Evidence Based
- Evaluable

Harding et al; "Measurement-Based Care in Psychiatric Practice: A Policy Framework for Implementation", J Clin Psychiatry 2011; 72(8): 1136-1143

Why should we use MBC?

Why should we use MBC?

- *Perils of "clinical judgement"*
  - Feedback systems to notify therapists of decline led to improved outcomes, changes in treatment.[1]
  - Comparing documentation to rating scales[2,3]
    - 21% identified worsening symptoms
    - 30% identified significant worsening symptoms across multiple visits

1. Lambert, M.J. (2007). Presidential address: What we have learned from a decade of research aimed at improving psychotherapy outcome in routine care. Psychotherapy Research, 17(1), 1–14.

2. Hatfield D, et al (2010). Do we Know When our Clients Get Worse? An Investigation of Therapists' Ability to Detect Negative Client Change, Clin. Psychol. Psychother.17, 25–32 (2010)

3. Hannan, C., Lambert, M., Harmon, C., Nielson, S., Smart, D., Shimokawa, K., et al. (2005). A lab test and algo-rithms for identifying clients at risk for treatment failure. Journal of Clinical Psychology, 61(2), 155–163

Why should we use MBC?

MBC is effective

- Clinical protocols in RCTs consistently result in better outcomes than routine care
- Guo et al (2015) - Treating major depression - MBC group had:
  - 87% vs 63% achieved response
  - 74% vs 29% achieved remission
  - More treatment changes, less time to achieve results
- Fortney et al (2016) – Literature review
  - 51 articles evaluating MBC
  - Frequent and timely feedback to provider → Improved outcomes
  - One-time screening, infrequent, out of context feedback → No big impact.

1: Guo et al, Measurement-Based Care vs Standard Care for Major Depression: A Randomized Controlled Trial with Blind Raters, Am J Psychiatry. 2015 Oct;172(10):1004-13.
2. Fortney et all. A Tipping Point for Measurement-Based Care; Psychiatric Services Online September 2016

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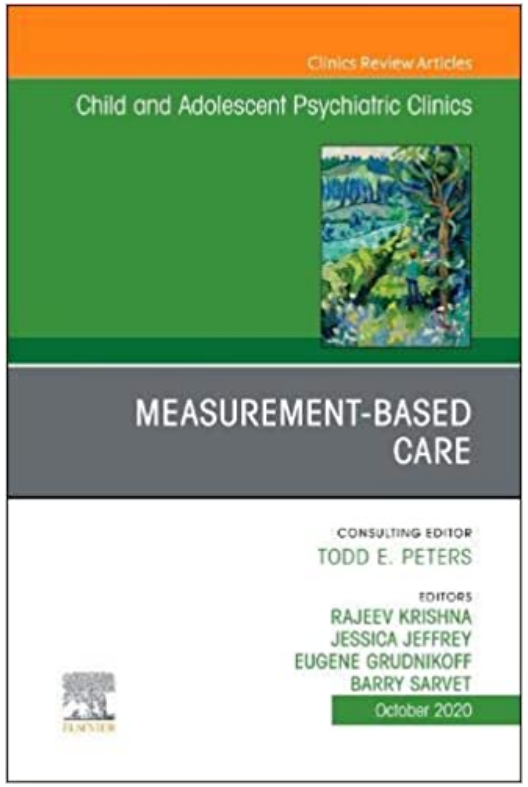


"Evidence Base for Measurement-Based Care in Child and Adolescent Psychiatry"

A. Parikh, M. Fristad, D. Axelson, R. Krishna

Current Requirement

- **Standard CTS.03.01.09** – The organization assesses the outcomes of care, treatment, or services provided to the individual served.
  - **EP 1** – The organization monitors the individual's progress in achieving his or her care, treatment, or services goals.
  - **EP 2** – The organization evaluates the outcomes of care, treatment, or services provided to the population(s) it serves.

How do we use MBC?

How do we use MBC?

- Clinical Decision Making
    - This can’t replace clinical assessment!
    - Can this replace clinical assessment?
- Workflow Efficiency
- Patient / Family Engagement

Clinical Decision Making

- MBC does NOT replace clinical assessment / decision making
- Measures augment the data available and add to the provider's assessment.
- Creates consistent data point across providers.
  - You don't know exactly how someone else asks about depressive symptoms, but you always know how the PHQ-9 does.
- Only measure what is relevant
  - 14yo with social anxiety and secondary depression. Treating social anxiety as primary.
    - ➢ Track social anxiety only; track depression clinically, or begin tracking later.
- MBC is a tool, and should be used as one.
  - Caveat: At NCH, we share our tools!

Clinical Decision Making

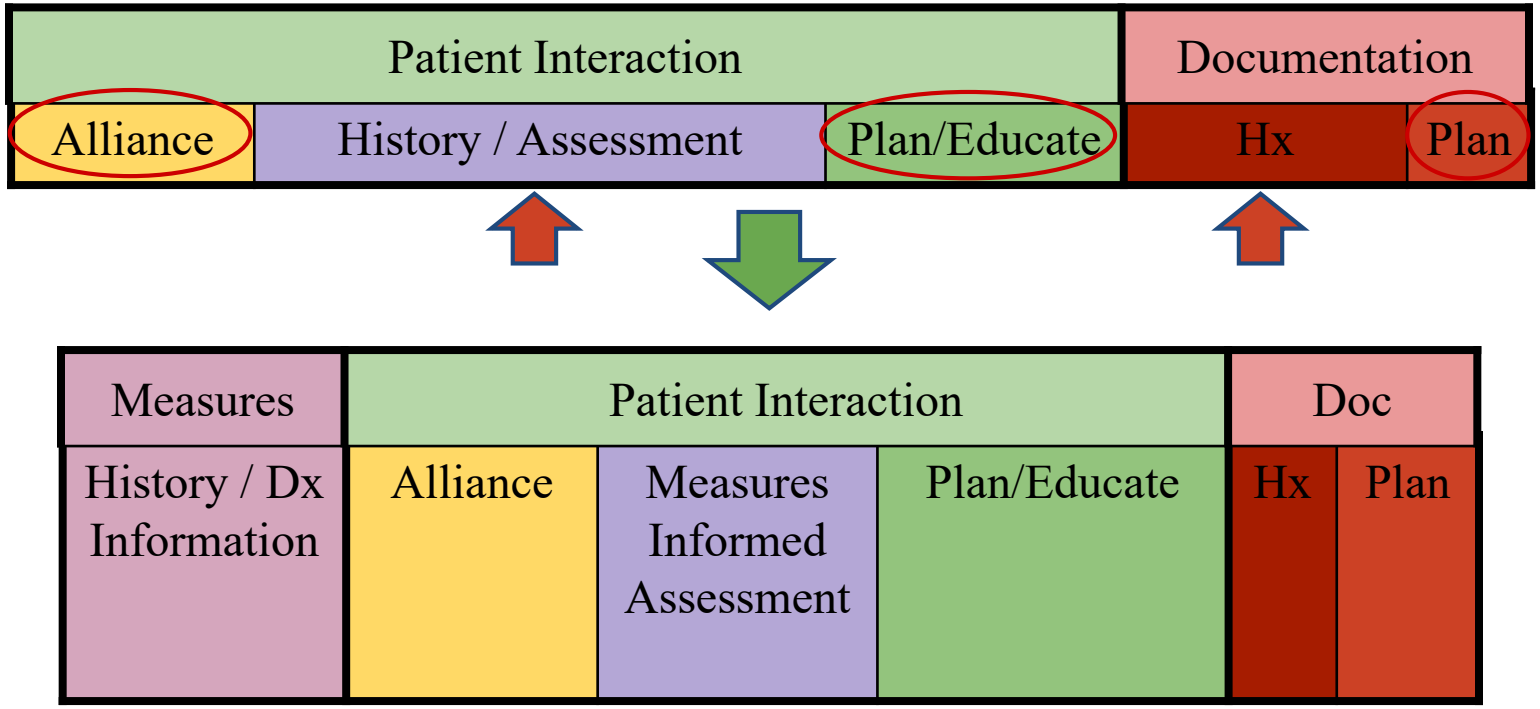
But… what if you disagree with the results?

- MBC does NOT replace clinical assessment / decision making!! (it bears repeating…)
- Document decision making

  Reviewed PHQ-9 scores and reviewed symptoms with patient and family. Patient report is inconsistent with assessment during interview or collateral from parent. Patient is reporting relative anhedonia but an actual notable improvement in enjoyment of pro-social activities when specifically identified by parent… … Suspect negative distortions are contributing to symptom over-reporting.

- Worst case: stop using the invalid measure.
  - But this should be rare!

Workflow Efficiency



- 17% **reduction** in the time required to complete a new patient assessment
- Improvement in **scope** and **quality** of assessment

Krishna R, Valleru J, Smith W. Implementing Outcome-based Care in Pediatric Psychiatry: Early Results and Overcoming Barriers. Pediatr Qual Saf. 2019 Feb 11;4(1):e132.

Patient and Family Engagement

Patients and families will do…

- *What is useful:*
    - If provider isn't reviewing results, patients will stop doing it.
- What is reasonable:
    - Only administer measures that provide relevant information for current treatment.
    - Change frequency / scope as needed to maintain relevance.
- *What is informative:*
    - Use / discuss results in session.
    - Use questions from measures to help educate on symptoms, identify specific needs.

How will NCH implement MBC?

Rollout of Metric Based Screener (MBS) at NCH-BH

1. All clinical sites will utilize the PSC-17
2. Psychiatry Clinics & Mood & Anxiety Program will pilot the rollout
3. Other clinics will follow after any de-bugging occurs
4. “Specialty” clinics/sites will have batteries tailored to their setting (eg, PCD, ECMH, CDC, CASD, Eating Disorders, THRIVE)

What Branching Screeners Do and Do Not Do

What They *Do*

- Provide systematic coverage of relevant clinical domains
- Streamline assessment process
    - For the family
    - For the clinician

What They *Don't Do*

- Make a diagnosis
- Replace the clinician, who synthesizes ALL information available, including the clinical interview/behavioral observations of the youth and parent, together and separately

Pediatric Symptom Checklist-17 (PSC-17)

Zima et al (2019), Psychiatric Services; 70:381-388, doi: 10.1176/appi.ps.201800424

- We are required by ADAMH to have a screening instrument
- Replaces the Ohio Scales
- Top performer in a review of 11 mental health screeners for youth
  - Broad age range (2-18 years)
  - 3 subscales (internalizing, externalizing, attention)
  - Available in 29 languages and 3 pictorial versions *(Arabic, Armenian, Dutch, English, Farsi, Filipino, French, German, Haitian-Creole, Hebrew, Hindi, Hmong, Indonesian, Italian, Japanese, Khmer, Korean, Malayalam, Nepali, Norwegian, Persian, Portuguese-Brazilian and European, Russian, Setswana, Somali, Spanish, Ukrainian, Vietnamese, and Pictorial with English/Spanish/Filipino subtitles)*

Pediatric Symptom Checklist-17 (PSC-17)

(Continued)

- Easy to use
- Brief to administer (~3 minutes) and score
- Consumer centered
- Parent + youth versions
- Public domain, no fiscal burden
- Already in EPIC, making it easy for hospitals/pediatric offices to use
- Easy to incorporate into tele-health sessions
- Good overall utility
- Can align with current episode of care

PSC-17: Acceptable Scientific Evidence

Jacobson et al (2019), Child Psychiatry & Human Development; 50:332-345, doi.org/10.1007/s10578-018-0845-1

- Tested utility as a continuous measure for tracking mental health functioning over time
- 6,492 foster parents of youth aged 5.5-17 years
- Good convergent and divergent validity and moderate 6 month test-retest reliability (as expected over this interval)

Murphy et al (2016), Pediatrics; 138(3):e230160038, doi: 10.1542/peds.2016-0038

- New national sample of 80,680 pediatric outpatients aged 4-15 years
- Comparable rates of positive screening, reliability, factor structure to original sample
- Findings support use as a screener in pediatric settings

Gardner et al (2007), JAACAP; 46(5): 611-618, doi: 10.1097/chi.0b013e318032384b

- Performed well compared to CBCL in 269 youth aged 8-15 years seen in primary care

Pediatric Symptom Checklist-17 (PSC-17)

Caregiver Completing this Form: _____ Date: _____

Name of Child: _____

		Please mark under the heading that best fits your child			For Office Use		
		NEVER	SOME-TIMES	OFTEN	I	A	E
1.	Fidgety, unable to sit still						
2.	Feels sad, unhappy						
3.	Daydreams too much						
4.	Refuses to share						
5.	Does not understand other people's feelings						
6.	Feels hopeless						
7.	Has trouble concentrating						
8.	Fights with other children						
9.	Is down on him or herself						
10.	Blames others for his or her troubles						
11.	Seems to be having less fun						
12.	Does not listen to rules						
13.	Acts as if driven by a motor						
14.	Teases others						
15.	Worries a lot						
16.	Takes things that do not belong to him or her						
17.	Distracted easily						
	(scoring totals)						

Scoring:

- Fill in unshaded box on right with: "Never" = 0, "Sometimes" = 1, "Often" = 2
- Sum the columns.
  PSC17 Internalizing score is sum of column I
  PSC17 Attention score is sum of column A
  PSC17 Externalizing score is sum of column E
  PSC-17 Total Score is sum of I, A, and E columns

Suggested Screen Cutoff:
PSC-17 - I ≥ 5
PSC-17 - A ≥ 7
PSC-17 - E ≥7
Total Score ≥ 15

Higher Scores can indicate an increased likelihood of a behavioral health disorder being present.

Created by W Gardner and K Kelleher (1999), and based on PSC by M Jellinek et al. (1988)
Formatted by R Hilt, inspired by Columbus Children's Research Institute formatting of PSC-17

NCH-BH Metric Based Screener: Overview, Routine Intake Assessments

Parent Battery

(All ages)

- History questions
- PSC-17
- SCARED5+4
- AQ-10 (child & adolescent versions)
- *36 Q + history*

Adolescent Battery

(12-18 yrs)

- History questions
- PSC-17
- SCARED5+4
- CRAFFT2.1
- *30 Q + history*

PLUS BRANCHING

Child Battery

(8-11 yrs)

- PSC-17
- SCARED5+4
- PAM
- *30 Q*

Information on Routine Intake Instruments

All Batteries—PSC-17 +

SCARED5+4: one screening Q each for Social Anxiety, Generalized Anxiety, Separation Anxiety, School Avoidance, Panic/Somatic + 4 trauma Qs (dreams, avoid thinking, remember, flashbacks), any 5 + → full SCARED, if 4 +, note for clinical interview

Parent Battery

AQ-10: 10-item Autism Spectrum Quotient-Child & Adolescent versions, scores ≥6→ CAST (a second screener)

Adolescent Battery

CRAFFT2.1: 4-item screener-alcohol, marijuana, other drugs, vaping/tobacco, if A/M/D + →6 impairment Qs; if V/T + → 10 addiction Qs

Child Battery

PAM: 4-item Physical Activity Monitoring (score 0=minimum; 8=maximum)

Parent Branching

Vanderbilt IF *PSC-17 Attention subscale* + (18 ADHD items)

Vanderbilt IF *PSC-17 Externalizing subscale* + (22 ODD/CD items)

MFQ/PHQ-9A IF *PSC-17 Internalizing subscale* + (13 child or 11 teen items)

SCARED IF *SCARED5+4* + (41 items)

CAST IF *AQ-10* + (39 items)

CMRS IF *starts projects/risky behavior or sleeps ↓/↑ energy* + (21 items)

7PS IF *auditory/visual hallucinations* + (7 items)

ASWS IF *sleep disturbance* is + (10 items)

PAM-P IF *psychomotor ↑ or ↓* + (4 items)

HHS IF *Eating Screen* is Mild, Moderate or Severe (15 items)

Discrimination Measure if Discrimination Screener + (5 items)

Adolescent Branching

PHQ-9A IF *PSC-17 Internalizing subscale* + (9 items)

SCARED IF *SCARED5+4* + (41 items)

CRAFFT2.1 IF *A/M/D* + (5 items) IF *N/V* is + (10 items)

CMRS IF *starts projects/risky behavior or sleeps ↓/↑ energy* + (21 items)

7PS IF *auditory/visual hallucinations* + (7 items)

ASWS IF *sleep disturbance* + (10 items)

PAM IF *psychomotor ↑ or ↓ (*4 items)

SOCS IF *obsessions/compulsions* + (7 items)

Discrimination Measure if *Discrimination screener* + (5 items)

Child Branching

MFQ IF *PSC-17 Internalizing subscale* + (13 items)

SCARED IF *SCARED5+4* + (41 items)

Summary

- MBC is effective, allows for cross-site comparisons, and can increase efficiency
- NCH-BH MBC routinely screens for internalizing, externalizing, and inattention (PSC-17)
- No screening instrument will replace YOU, the clinician
- We welcome feedback on your experience with the MBS

Thank you