


# MA SMIHC



District-wide Mental Health  
Screening: Using Data to  
Promote Early Identification  
and Quality Services



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# Screening: One Piece of a Much Larger Puzzle



- Grant funded partnership with the University of Maryland's Center for School Mental Health (CSMH)
  - Methuen is 1 of 12 districts selected nationally for participation in the first cohort
  - Implementation of National Performance Measures to improve the quality and sustainability of school mental health services
  - Methuen receives ongoing support, resources, training, and assistance with implementation of project initiatives from the CSMH
  - Communication is frequent, ongoing, and involves the reporting out of progress made toward achieving CoIN goals (PDSA cycles)
- School Mental Health Improvement and Innovation Task Force
- National Coalition for the State Advancement of School Mental Health (NCSA-SMH)

# Mental Health Initiative Implementation Highlights

- District and building-based school mental health teaming
  - District-wide SMH resource mapping and needs assessment
  - Universal mental health screening in grades 3-12
  - Group therapy program established in all schools
  - Mental Health Parent and Student Advisory Council
  - CSMHS accountability report
  - MOUs established with local CBH providers to increase access to
  - Established the Massachusetts School Mental Health Consortium (MASMHC)
  - MHS Bridge program
  - Professional development:
    - Cognitive Behavioral Therapy (CBT)
    - Treatment planning
    - Suicide risk assessment
    - Use of psychosocial and behavioral data
    - PBIS
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# Comprehensive School Mental Health System (CSMHS)

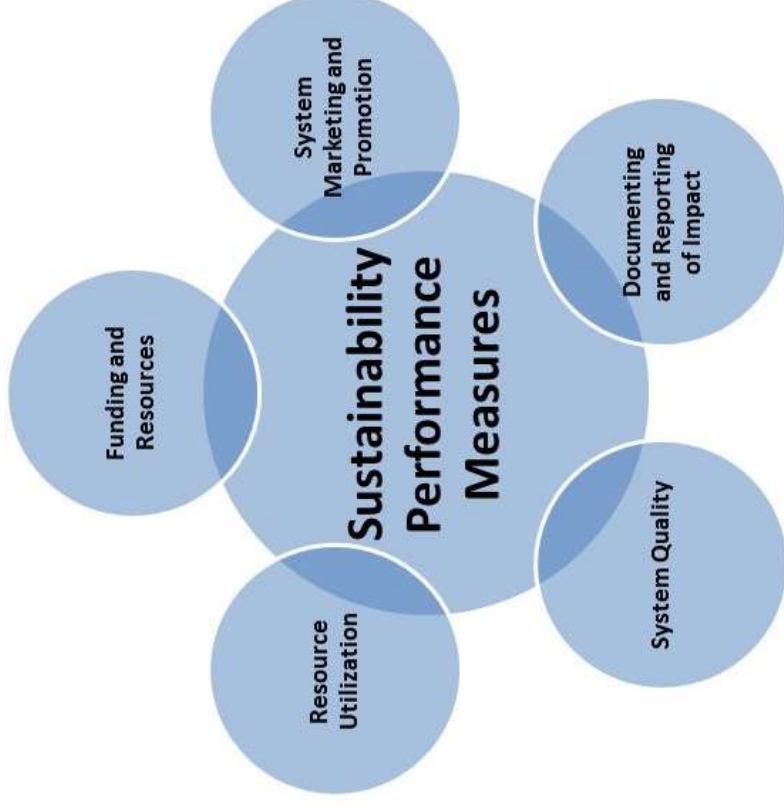
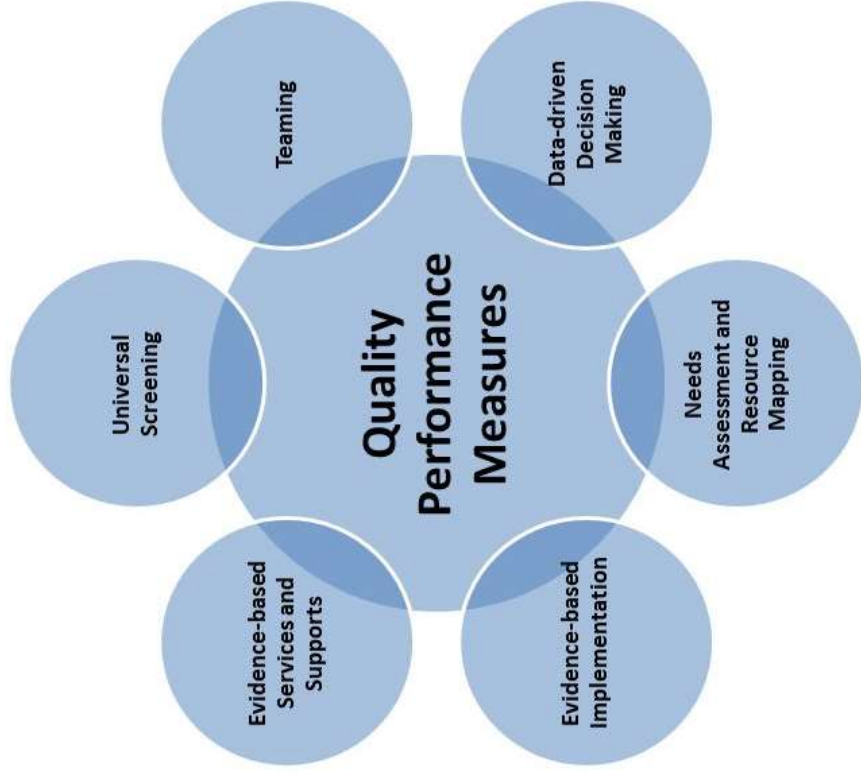
“Comprehensive School Mental Health System (CSMHS ) is defined as school-district-community-family partnerships that provide a continuum of evidence-based mental health services to support students, families and the school community.”

- Provides a full array of tiered mental health services
- Includes a variety of collaborative partnerships
- Uses evidence-based services and supports

# School Mental Health National Performance Measures

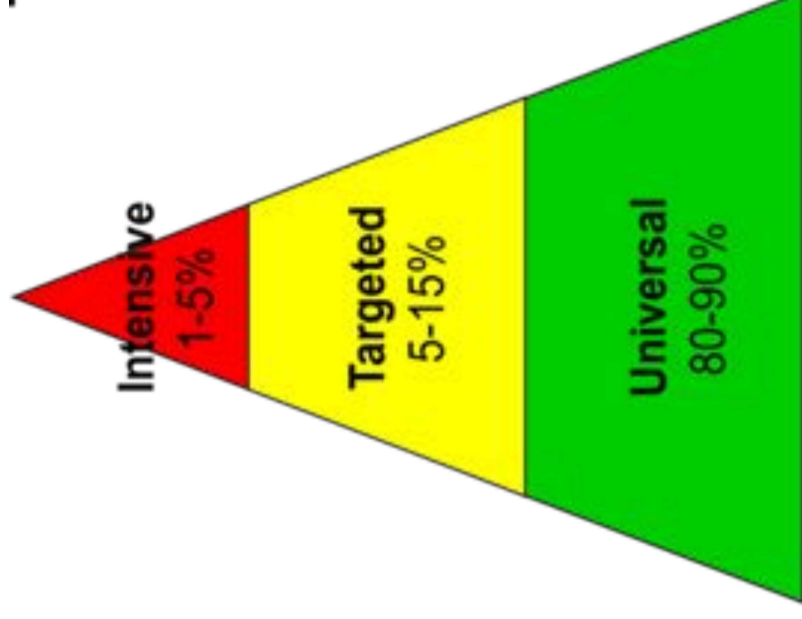


NATIONAL CENTER FOR SCHOOL MENTAL HEALTH



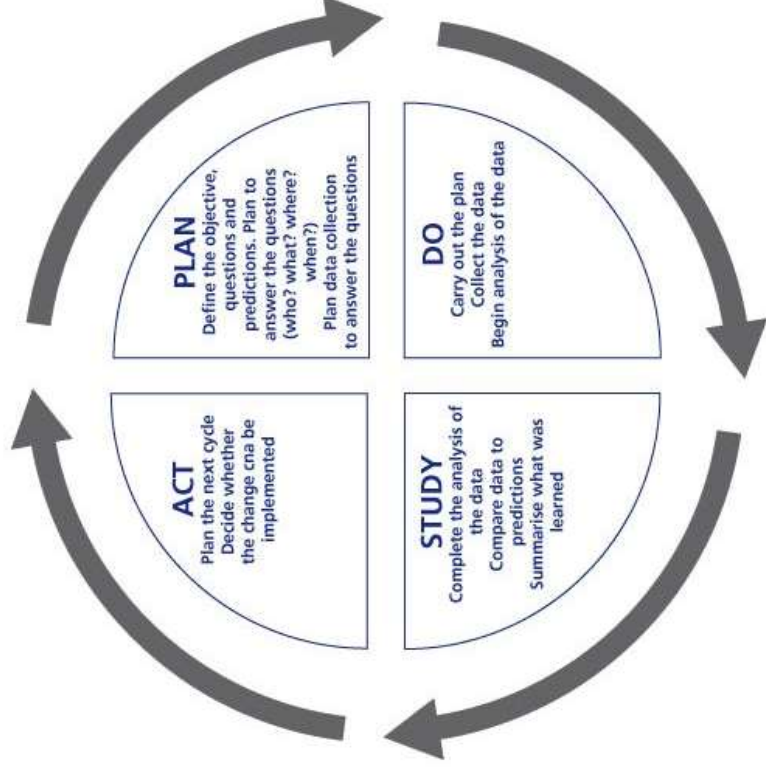
# Tiered System of Mental Health Services and Supports

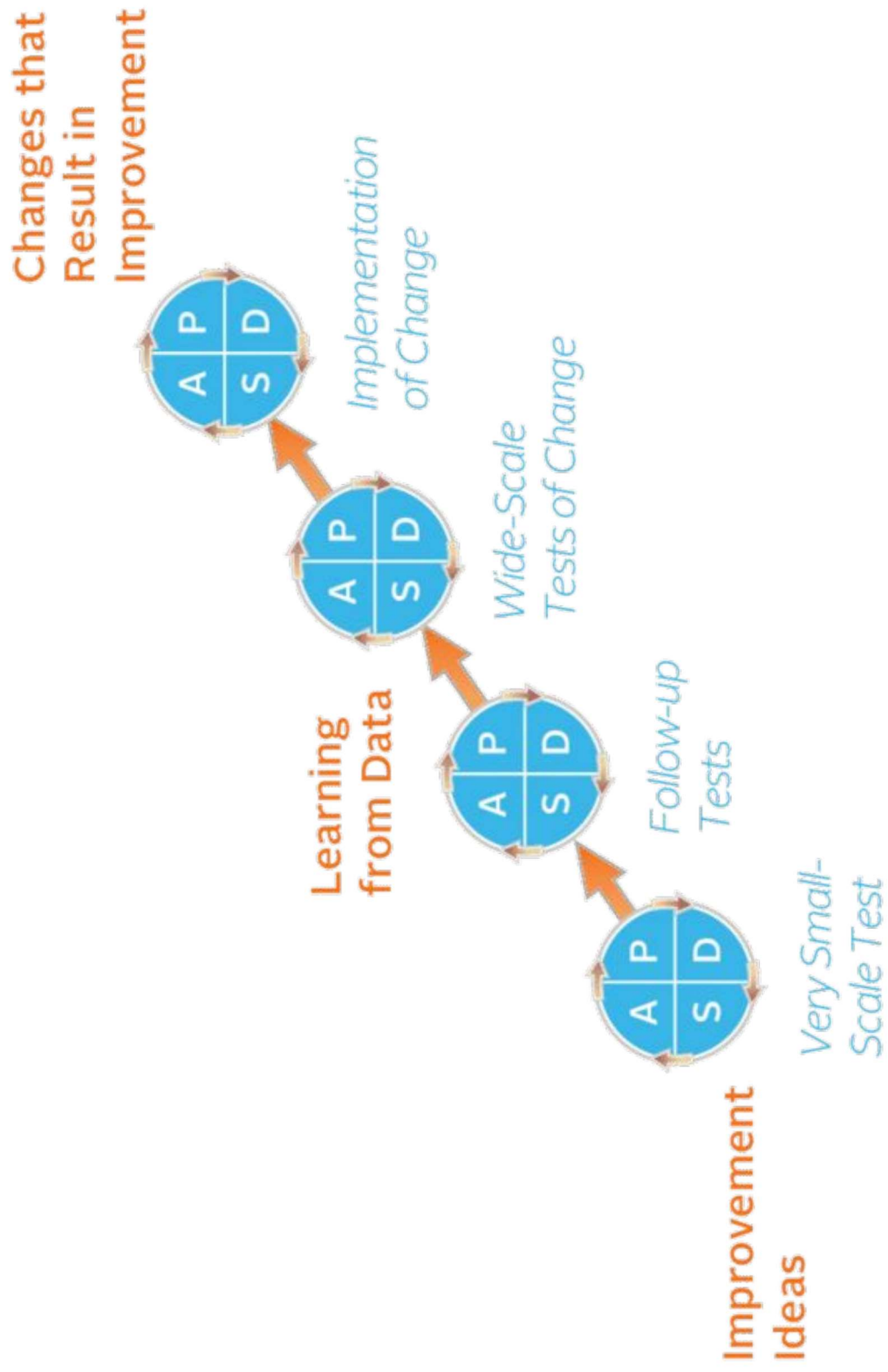
- Tier I - Universal Supports and Interventions; Prevention Practices
- Tier II - Targeted/Selected/Group Supports and Interventions
- Tier III - Intensive/Individualized Supports and Interventions



# Action Planning and PDSA Cycles

- **Plan**
  - Define the objective, questions, and predictions
  - Plan for data collection
- **Do**
  - Carry out the plan
  - Collect and analyze data
- **Study**
  - Complete the analysis of the data and compare the results to the predictions
  - Summarize what was learned
- **Act**
  - Determine whether the change will be abandoned, adapted, or adopted





# Mental Health Screening: Questions to Consider

Where do we start?

Which students should we screen?

How do we choose our screening tools?

What about consent?

What about staff readiness?

What will the parent population say?

How are we going to pay for this?



# Preparing for Mental Health Screening

- **Generating buy-in and support**
  - Marketing and promoting school mental health
  - Justifying universal mental health screening
    - Community stakeholders
    - Staff
    - Parents and students
  - Aligning goals and potential outcomes with existing efforts
- **Mapping out the steps to implementation**
  - What resources can we draw upon?
  - What resources do we need?
  - What policies/practices do we need to develop?
- **Accounting for potential barriers**
  - Funding
  - Professional development
  - Readiness to provide follow-up services



# Staff Readiness & Teaming

- Staff Readiness
  - Defining and promoting a consistent view of mental health staff district-wide
    - Traditional vs. evolving role of school mental health staff
  - Professional development
- Teaming
  - Representation from all schools on district-wide teams to promote the fidelity implementation
    - Mental Health Initiative Committee
  - Increased collaboration and consultation regarding the implementation of new practices and policies
  - Sub-committees (SEL, Screening, EBP)



# Implementing Universal Screening: Starting Small

- Rapidly testing at the micro-level allowed the team to:
  - Identify areas to improve
  - Establish systems to make screening efficient and sustainable
  - Build off of successes to ensure sustainability after scaling up
- Ad hoc screening with individual students
  - Allowed the team to assess the utility of various measures
  - Small tests of change + High confidence in success = Low cost of failure
- Active consent
  - Written consent secured during the initial phase of screening
  - What were the drawbacks?
  - How can we build the capacity to screen students more readily?



# Selecting Screening Measures

- Identifying tools that matched our population's needs
- Accounting for funding barriers
- Seeking efficient measures that produce actionable data



# Rationale for Using a Problem-Specific Screener

- Needs assessments
  - Counseling log analysis (2013-2015)
  - Prevalence survey administered to all mental health staff
    - What are the most prevalent presenting problems that mental health staff are addressing across all tiers?
    - What are students reporting to be the most pressing issues related to their mental health?
  - Youth risk behavior survey
- Global vs. specific screening
  - Efficiency of screening
  - Obtaining actionable data
  - Using multiple specific screeners to piece together a richer and more comprehensive view of the student population

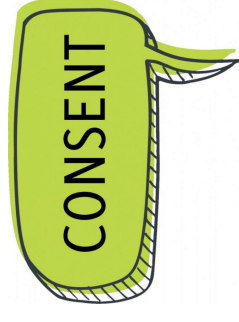


# Making Mental Health Screening a Sustainable Practice

- Electronic screening using Google forms
    - Efficient
    - Allows for easy data analysis
    - Movement from screening to coordinated follow-up in 20 minutes
  - Parent notification and opt-out process established in advance of the screenings to secure passive consent
  - Administration during the school's advisory block and/or classroom-based (grammar schools)
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# Securing Consent to Engage in Screening

- What options do we have for securing consent?
- What is the difference between active and passive consent?
- What else do we screen for in schools?



# Passive Consent Message



A consistent message is delivered regarding mental health screening in advance of and immediately prior to all screenings.

**“In an effort to promote the health and well-being of students in Methuen Public Schools, students will be periodically provided with questionnaires, surveys, and screeners that address issues related to mental health. The information gained will support the school’s ability to provide comprehensive and timely support for your son or daughter if they require any assistance. Students can opt-out of filling out any questionnaire, survey, or screener that they are not interested in taking and you can opt-out your son or daughter at any time by contacting the Guidance Office of your son’s/daughter’s school or filling out the opt-out form here. A list of the questionnaires, surveys, and screeners is available below for you to review.**

**We are committed to ensuring your son or daughter is supported academically, socially, and emotionally, and we look forward to partnering with each of you toward achieving this goal.”**

The message above (or a slightly adapted version) is:

- Posted on the district’s website
- Delivered immediately prior to screenings
- Sent directly to parents/guardians in advance of screenings via an automated calling system

# Securing & Maintaining the Psychosocial Database



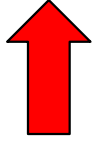
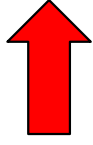
OR...

G	H	I	J	K	L
Feeling bad about yourself or that you are a failure or have let yourself or your family down	Trouble concentrating on things, such as reading the newspaper or watching television	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	Thoughts that you would be better off dead, or of hurting yourself in some way	Total	If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?
3	1	2	3	23	Very difficult
3	3	1	3	23	Very difficult
3	2	1	3	22	Somewhat difficult
3	3	1	3	21	Extremely difficult
3	2	1	3	20	Very difficult
3	2	2	3	19	Somewhat difficult
3	1	1	3	16	Very difficult
3	3	2	2	25	Somewhat difficult
3	2	1	2	23	Very difficult
3	2	1	2	22	Very difficult
3	3	2	2	22	Very difficult
0	0	0	0	4	Not difficult at all
3	3	2	2	21	Extremely difficult
3	3	2	2	21	Very difficult
3	3	2	2	20	Very difficult

# Evolving Practice: Seeking Innovative Strategies

## Initial Phase of Implementation

- Active Consent
- Paper and pencil screening
- Single-student or small group screening
- Administration facilitated by SMH staff



## Improved Practices

- Passive Consent and Opt-out
- Electronic screening
- Grade-level or school-wide screening
- Administration through advisory and tech courses



# Post-Screening: Coordinated Follow-up

- Data review and coordinated follow-up planned for all screenings
- Mental health staff receive the data within twenty minutes of the completed screening, allowing for immediate follow-up to be conducted with students who had elevated scores
  - Parent/guardian follow-up
  - Follow-up procedural guide developed and data rules established prior to screening to identify the population receiving follow-up
  - Clinical interview professional development
- Mental health staff can then make an informed decision about whether or not to offer services: in-school group or individual therapy, outside referral, etc.



## Post-Screening: Other Considerations

- 100% of students who required follow-up received it within 7 days of the screening
- Students who indicated any degree of suicidal ideation or intent to self-harm received follow-up within 24 hours (same day)
- Crisis teams were placed on call in advance of all screenings and local community mental health partners were informed of the screenings



# 2015-2016: Testing Practices on a Large Scale

- Using specific screeners to match our population's needs
    - GAD-7 - Generalized Anxiety Disorder, 7-question anxiety screener
    - PHQ-9 - Patient Health Questionnaire, 9-question depression screener
    - RCADS - Revised Child Anxiety and Depression Scale, 47-question anxiety and depression screener
  - Two large scale screenings at Methuen High School
    - Grades 9-12 - GAD-7 (January 2016)
    - Grades 9-12 - PHQ-9 (April 2016)
  - Piloting screening at the grammar schools
    - Grade 5 - RCADS anxiety/internalizing screener (March 2016)
    - Grade 4 - RCADS (May 2016)
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# Screening for Anxiety (January 2016)

- GAD-7 administered electronically
- 839 responses (approx. 45% of the high school pop.)
- 85 students scored in the severe range (10.1% of respondents)
- 104 students scored in the moderate range (12.4% of respondents)

GAD-7 15-16	Student Population	%
Sample	839	100.00
No Concern	443	52.80
Mild Anxiety	207	24.67
Moderate Anxiety	104	<b>12.40</b>
Severe Anxiety	85	<b>10.13</b>

# Screening for Depression (April 2016)

- PHQ-9 administered electronically
- 852 responses (approx. 45% of the high school pop.)
- 69 students scored in the severe range (8.1% of respondents)
- 102 students scored in the moderate range (12.0% of respondents)

PHQ-9 15-16	Student Population	%
<b>Sample</b>	852	100.00
<b>No Concern</b>	494	57.98
<b>Mild</b>	187	21.95
<b>Moderate</b>	102	<b>11.97</b>
<b>Moderately Severe</b>	36	<b>4.23</b>
<b>Severe</b>	33	<b>3.87</b>

# 2016-2017: Scaling Up Screening

- Addition of a global scale - Strengths and Difficulties Questionnaire (SDQ)
  - 25-question screener covering five subscales:
    - Emotional problems
    - Conduct problems
    - Peer problems
    - Pro-social
    - Hyperactivity
  - All students in grades 9-12
  - Pilot use in grades 3 and 4 with a multi-gated approach
    - Teacher selects 3-5 students who are perceived as most at risk
    - Teacher completes the SDQ teacher-reported screening on behalf of those students
- Piloting substance use screening using the SBIRT model and the CRAFFT screener
  - Grade 9 and grade 7 at one grammar school
- Scale up RCADS screening to all students in grades 5-8



# Screening for Substance Use (SBIRT)

- 580 students were screened using the CRAFFT II
- 2.2% of students screened positive and received follow up using a motivational interviewing approach and the option for continued services
- 6.4% of students received follow up to address the fact that they had ridden in a car with an individual under the influence of drugs or alcohol
- Building rapport with students and identifying the protective factors associated with not using a substance were the highest reported benefits of this screening



08/18/16 09/17/16 10/17/16 11/16/16 12/16/16 01/15/17 02/14/17 03/16/17 04/15/17 05/15/17

Gr. K-12 Passive Consent Message

Gr. 9-12 SEL Needs Assessment

Gr. 7 & 9 CRAFFT Substance Use Screening & Follow-up

Gr. 9-12 SDQ Screening & Data Review (Baseline)

Gr. 8 RCADS Screening & Follow-up

Gr. 4 SDQ Screening & Data Review

Gr. 10 & 12 PHQ-9 Screening & Follow-up

Gr. 6 RCADS Screening & Follow-up

Gr. 9 & 11 PHQ-9 Screening & Follow-up

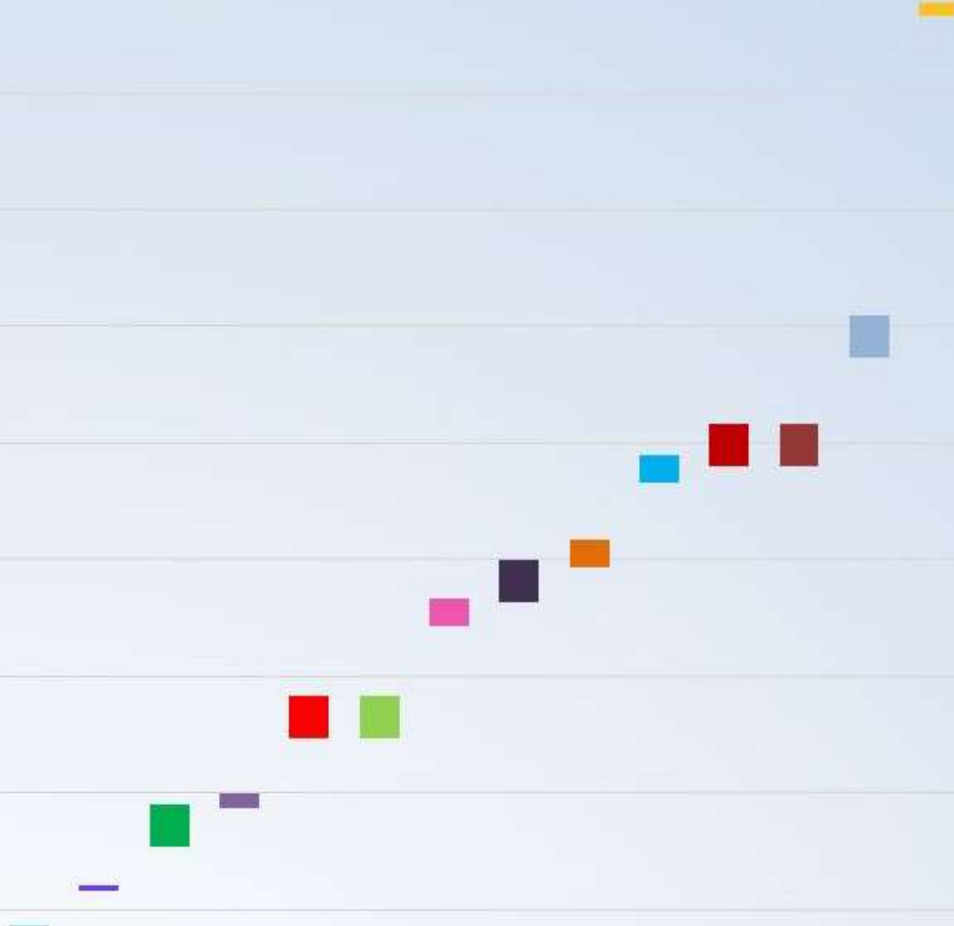
Gr. 9-12 GAD-7 Screening & Follow-up

Gr. 7 RCADS Screening & Follow-up

Gr. 3 SDQ Screening & Data Review

Gr. 5 RCADS Screening & Follow-up

Gr. 9-12 SDQ Screening & Data Review (Outcome)



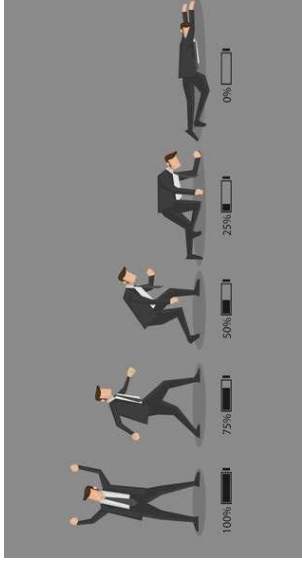
# Screening by Area of Concern

Grade	Anxiety	Depression	Substance Use	Global Scale	
3					
4					
5					GAD-7
6					PHQ-9
7					CRAFT
8					RCADS
9					SDQ
10					
11					
12					



# Recent Developments with Screening

- Piloting use of the “Student Engagement Instrument” (SEI) to provide a more comprehensive understanding of the impact of services and guide adjustments to practice
- Embedding screening practices into the tiered support process in grades K-8
- SHAPE System online repository of screening and progress monitoring tools



# Identifying Students and Increasing Services

Increasing proactive service delivery for students who require mental health services.

- Identification of individual students who may require mental health services and supports
  - Proactive identification and referral for services serves to reduce the overall impact of mental health problems on students
  - The reduction of crises through preventative care improves the overall functioning of a mental health system and decreases the larger impact of crises on the school as a whole.

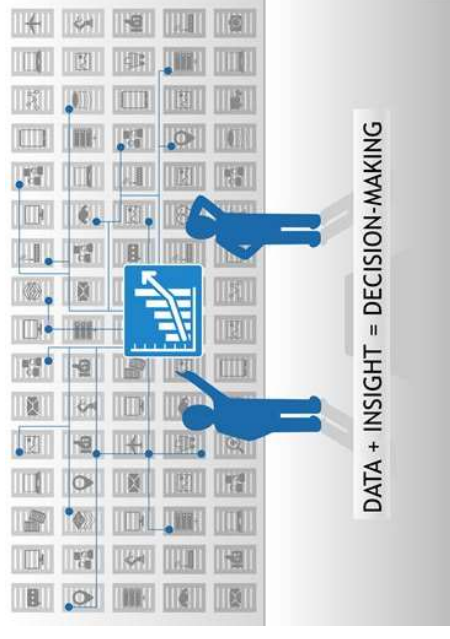


**63% increase in identification of students who require mental health services following implementation of mental health screening in 16-17.**

# Using Aggregated Psychosocial Data

Understanding the mental health needs of the district comprehensively to inform the design of the mental health system.

- Aggregated data can function as a needs assessment
- Informs SEL curriculum design and delivery
- Informs prevention work
- Informs the design of Tier II interventions that target specific areas of need identified through the data collection
- Identifies funding and resources gaps
- Understanding the connection between psychosocial functioning and academic achievement



# 17-18 Depression Screening - PHQ-9

PHQ-9 17-18	Student Population	%
Sample	1161	100.00
No Concern	757	65.20
Mild	240	20.67
Moderate	105	<b>9.04</b>
Moderately Severe	41	<b>3.53</b>
Severe	18	<b>1.55</b>

Approximately 14% of students reported moderate to severe symptoms of depression.

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# 17-18 Anxiety Screening - GAD-7

GAD-7 17-18	Student Population	%
Sample	1029	100.00
No Concern	649	63.07
Mild Anxiety	238	23.13
Moderate Anxiety	95	<b>9.23</b>
Severe Anxiety	47	<b>4.57</b>

Approximately 14% of students reported moderate to severe symptoms of anxiety.

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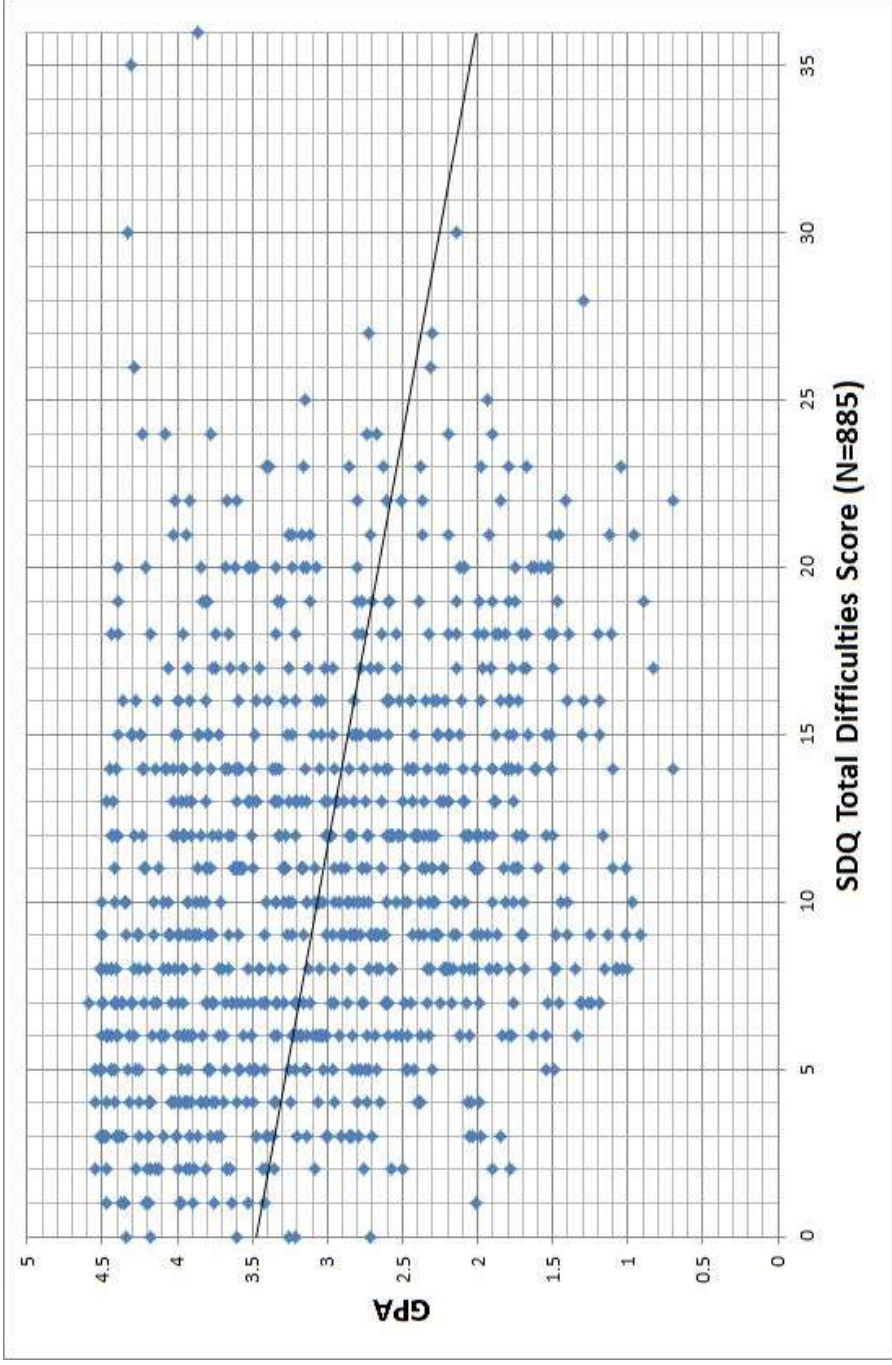
RCADS (17-18)	Student Population	%	Total % Elevated Scores (At-Risk + Clinical)
Total Sample	2155	100.00	
Grade 5	552	25.62	
No Concern	469	84.97	
At-Risk	30	<b>5.43</b>	15.03
Clinical Concern	53	<b>9.60</b>	
Grade 6	530	24.59	
No Concern	448	84.53	
At-Risk	22	<b>4.15</b>	15.47
Clinical Concern	60	<b>11.32</b>	
Grade 7	523	24.27	
No Concern	462	88.34	
At-Risk	15	<b>2.87</b>	11.66
Clinical Concern	46	<b>8.79</b>	
Grade 8	550	25.52	
No Concern	488	88.73	
At-Risk	18	<b>3.27</b>	11.27
Clinical Concern	44	<b>8.00</b>	
			Grades 5-8 AVG = 13.36

**13.36 percent of students in grades 5-8 scored in the moderate to severe ranges for internalizing issues (depression, anxiety, etc.)**  
*Methuen Public Schools (2018)*

# Screening: Connecting Psychosocial Functioning to Academic Outcomes

- Students who scored in the **moderate to severe range for depression are absent 47% more often** than the average.
- **GPA is consistently lower** for high school students who scored in the moderate to severe range on one or more measures.
- This is particularly concerning because of those students screened, **16-18.5 percent of students scored in the moderate to severe range for depression or anxiety.**
- This is not a small-scale issue isolated to a select population.



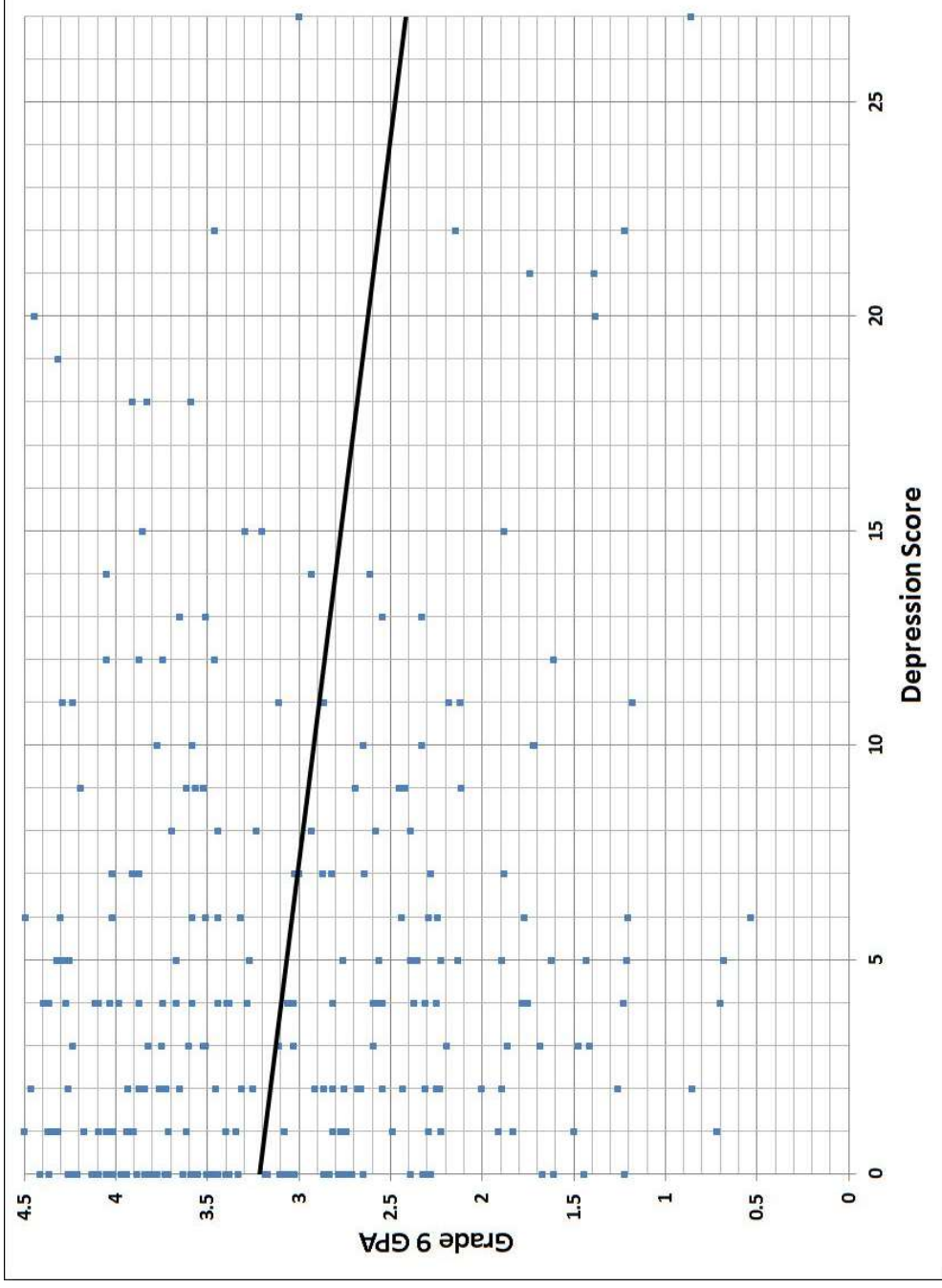


- Students whose scores on the SDQ were in the *Very High* and *High* range had a **GPA that was, on average, 13 percent lower than all other students.**
- Students were also **absent 45 percent more often** if they scored in the *Very High* or *High* range on the SDQ.

## Grade 9 GPA and

### Depression

- Grade 9 students who scored in the severe range for depression had an average GPA of 2.18
- All other grade 9 students had an average GPA of 3.11



# Progress Monitoring and System Evaluation

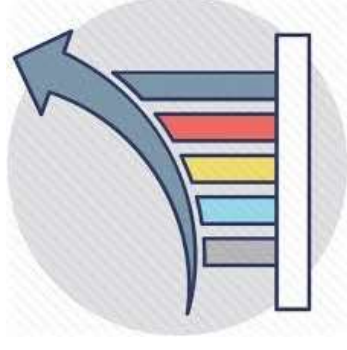
In addition to being used to identify students who may require services, psychosocial data is also used to:

- Gauge the efficacy of mental health services and supports
- Monitor the progress of individual students receiving services
- Accountability measure for service providers



# The Importance of Progress Monitoring

- Gauge the efficacy of the therapeutic approach - Determine what is working and what is not
- Adjustment to practice - Change the treatment / intervention plan if the student is not responding to the therapeutic approach
- Improves:
  - Student engagement in services
  - Quality of services
  - Consistency of therapy sessions
  - SMH staff self-assessment



# Measure Twice, Cut Once...



What specific problem am I hoping to help the student with?

Does my therapeutic approach / intervention match the needs of the student?

If the student is making progress, what will change?

What tools exist to measure this change?

How often should I measure this change?

Are there multiple changes that I can measure?

How will this data inform my practice?



# What Are We Measuring?

- Symptom presentation
- Emotional regulation
- Specific behaviors
- Engagement
- Self-concept
- Overall functioning

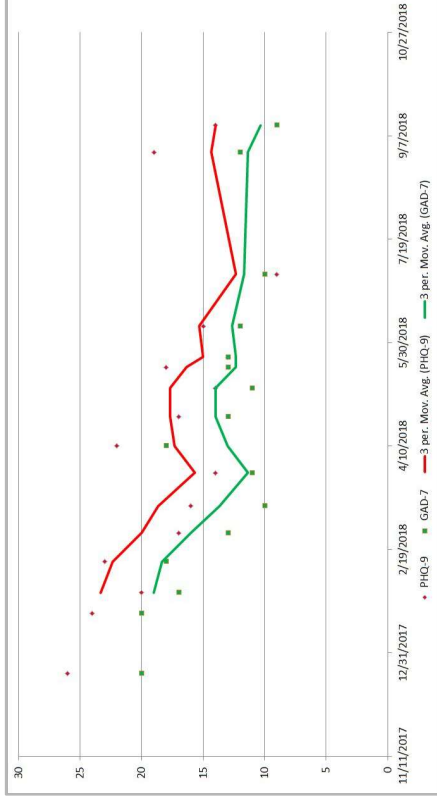


**Consider multiple measures of progress to gain a more complete picture of the impact of the intervention.**

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# Emotional Regulation

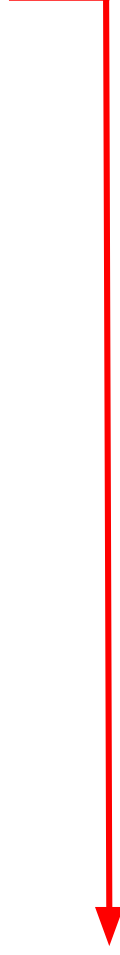
Decrease in symptom presentation



Over time



As we fade services

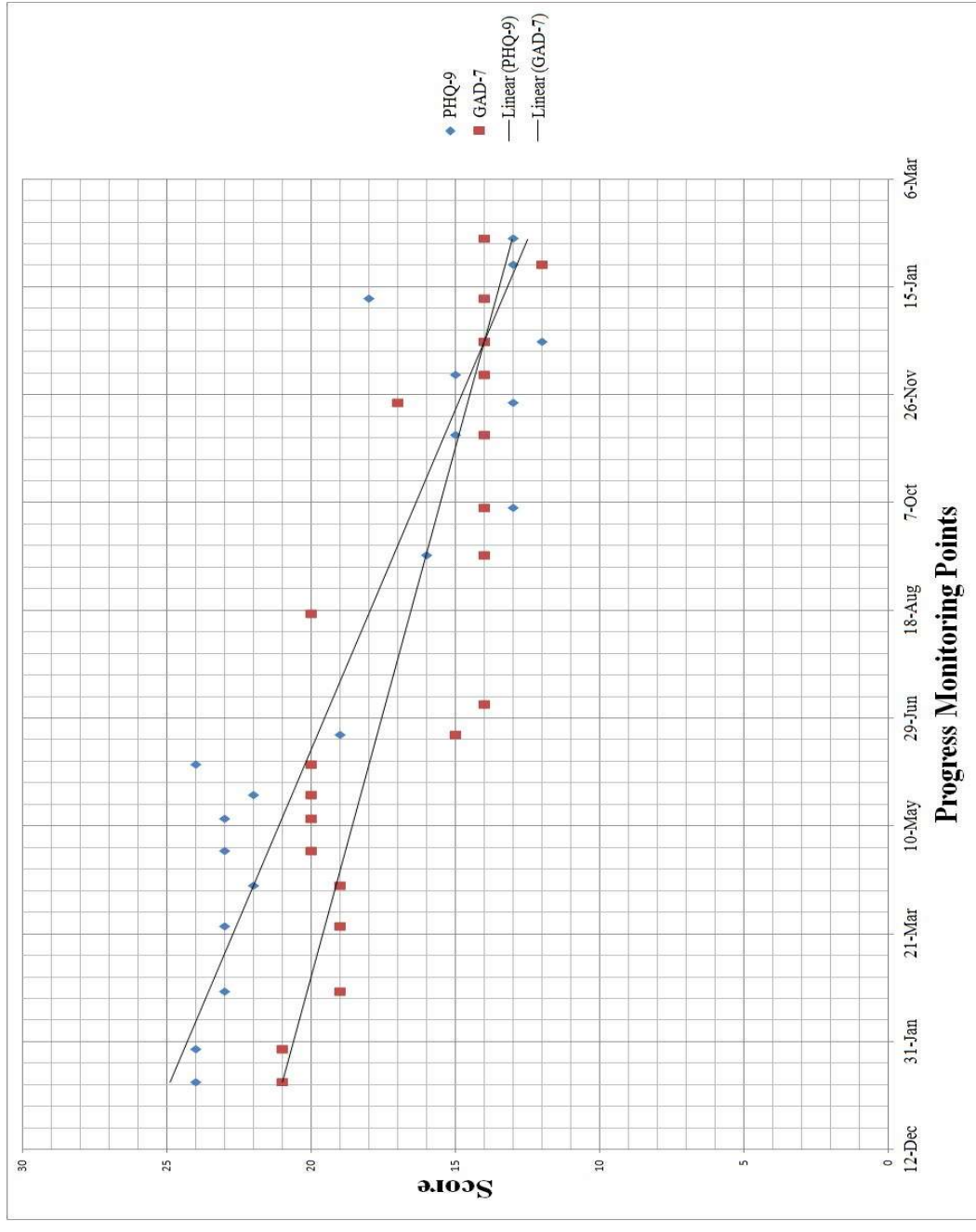


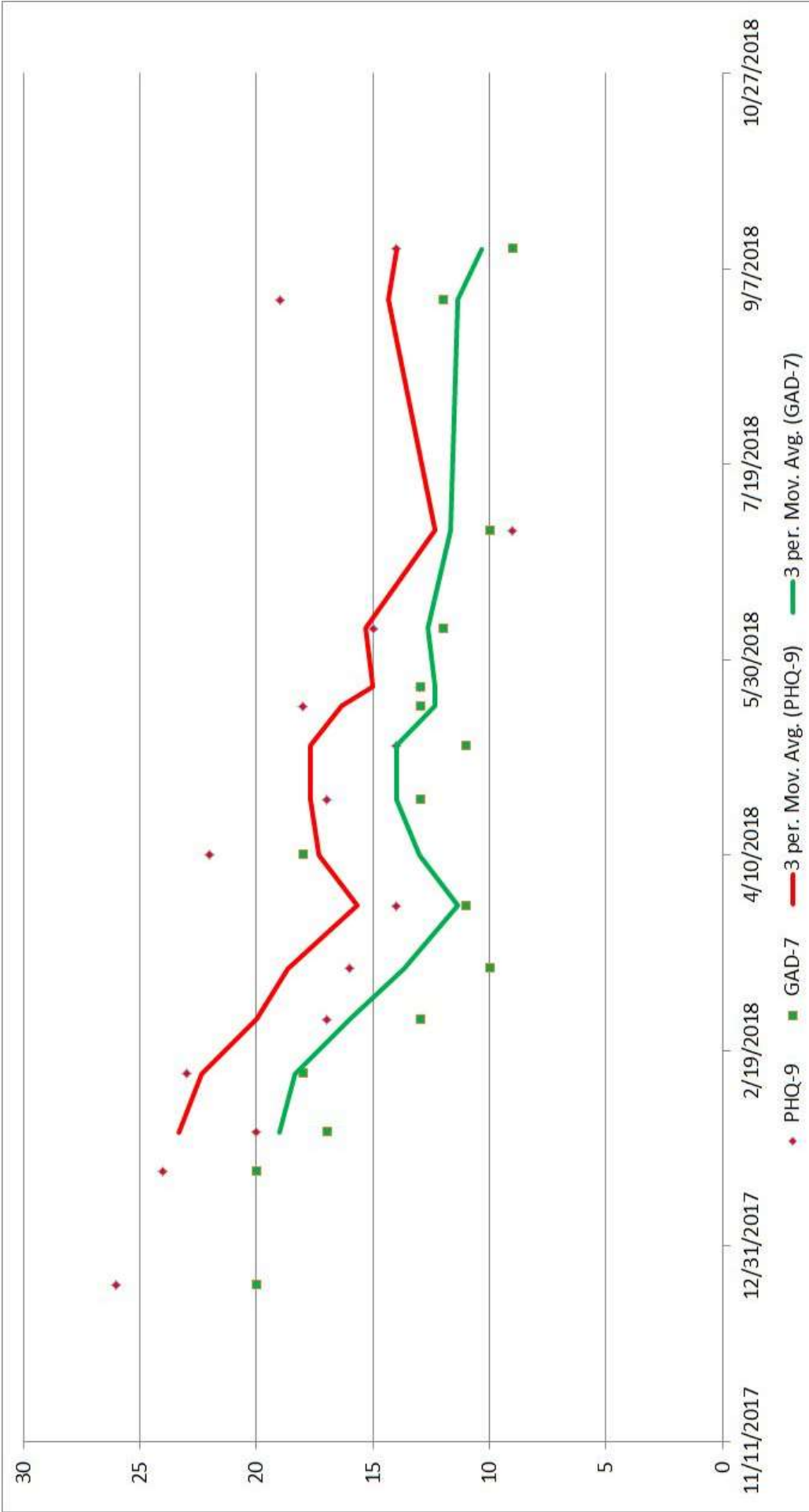
# Methods for Conducting Progress Monitoring

- Embedding progress monitoring into individual and group therapy sessions
- Leveraging observations from parents and staff
- Collecting wide-scale baseline data using universal mental health screening

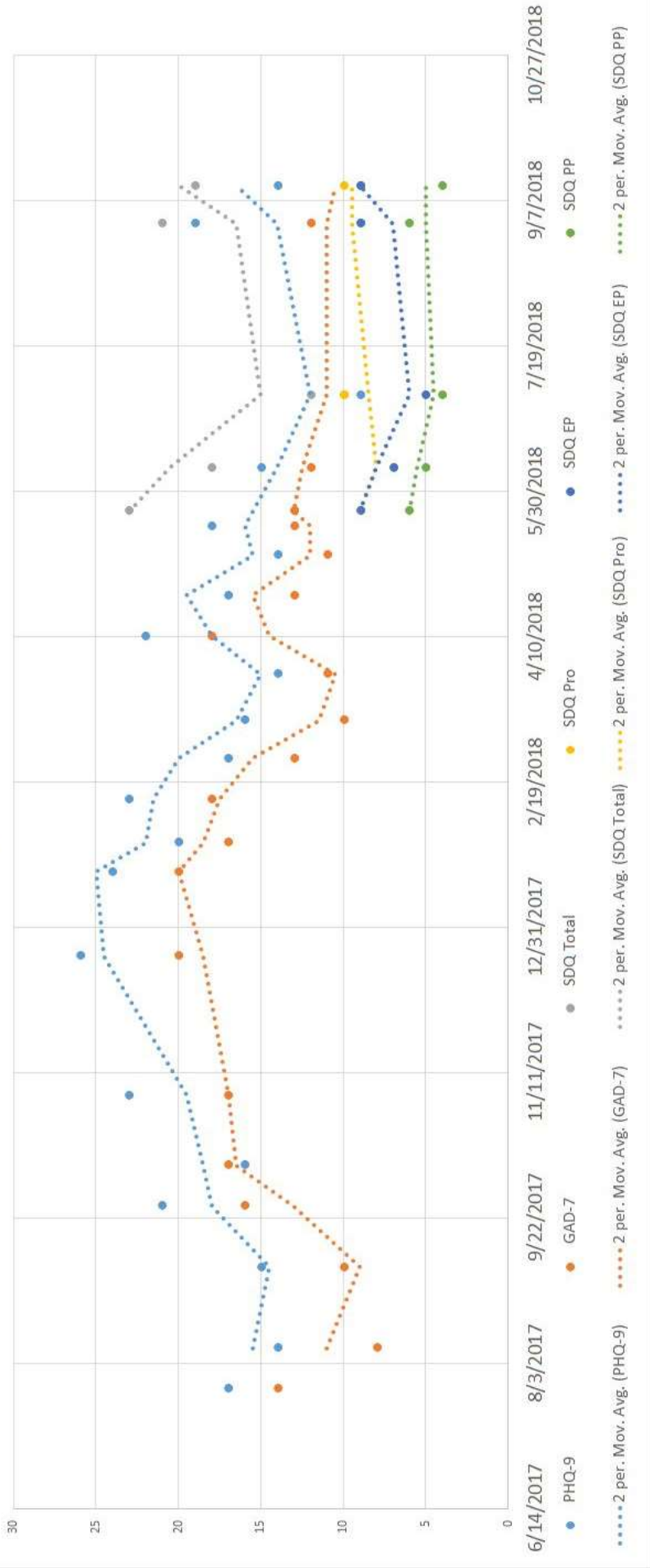


- Individual student run charts are used for students receiving Tier III services.
- Use of psychosocial, academic, and behavioral data is encouraged to improve our understanding of the impact of mental health services on academic outcomes.
- This method of data collection represents a shift away from a reliance on strictly qualitative measures of the effectiveness of mental health services and supports.



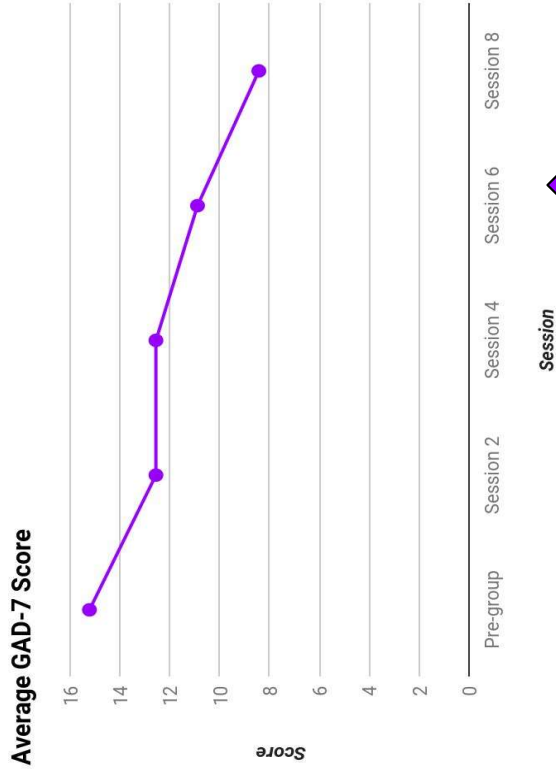


Sample Progress Monitoring Chart

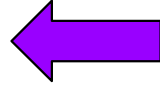


- Progress monitoring intervals of two weeks (GAD-7, PHQ-9, and SDQ subscales)
- Graphical history of the student's response to treatment

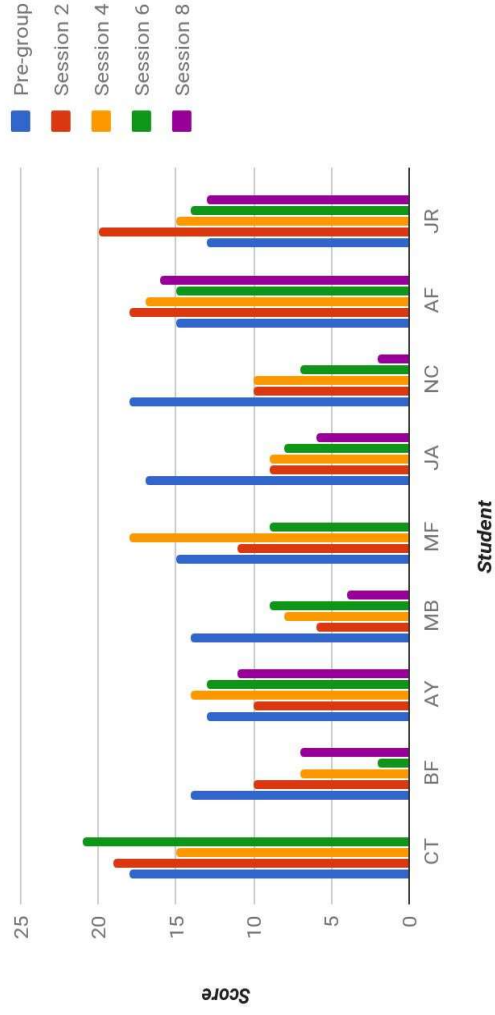
# Post-Group Data/Group Evaluation



Average GAD-7 score pre-group: 15.22  
 Average GAD-7 score post-group: 8.42

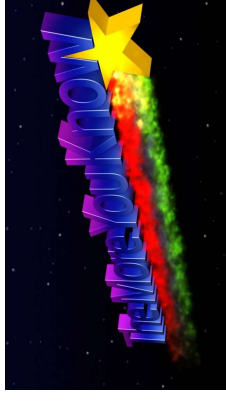


Students' GAD-7 Scores By Session



Indicates -7 point average decrease on the GAD-7 (mild anxiety)

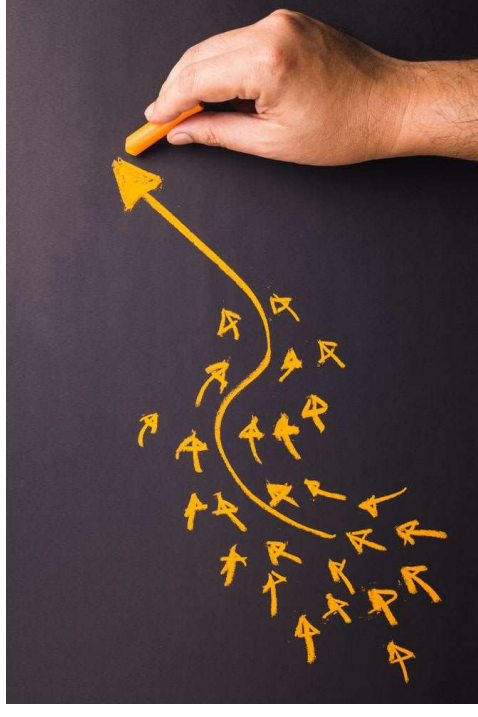
# Progress Monitoring: Addtl. Considerations

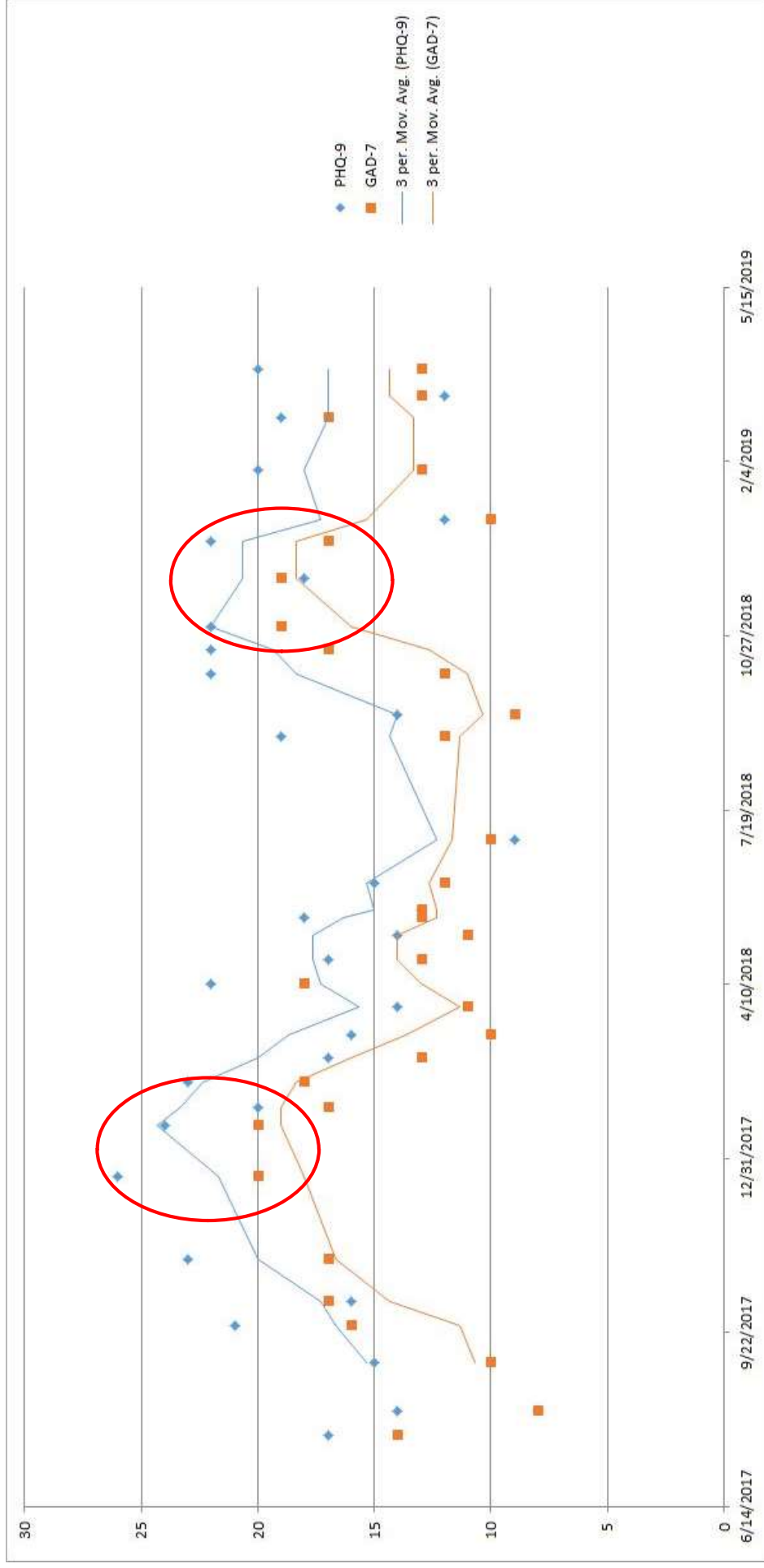


- **Consent** - Securing consent prior to engaging in progress monitoring is essential.
  - **Frequency** - The more data you have, the better able you will be to identify trends and guide decision-making. Check each tool for how they are normed and administer with fidelity at least every two weeks.
  - **Staff readiness** - PD will be important to ensure staff understand how to use progress monitoring tools, how to interpret the data, and when and how to use the data to inform adjustments to practice.
  - **Developmental level** - Young children may not be able to access progress monitoring tools readily. Teach- and parent-reported measures may serve as an alternative to direct ratings.
  - **Reliability** - Use your clinical judgment. A student's responses may only be as reliable as their desire to be honest and open. Vet the data through clinical observation to gain a comprehensive picture of the student.
-

## Case Study 1 - Identifying Trends

- Longstanding history of outpatient therapy and several hospitalizations for SI
- Diagnosed with ASD, GAD, and MDD
- Treatment included weekly CBT sessions, daily CBT thought record review and cognitive restructuring activities, and wraparound care coordination
- Events associated with previous hospitalization and trauma consistently emerged as themes that drove session content





Single data points may drive session content, but multiple data points are critical to understanding trends.

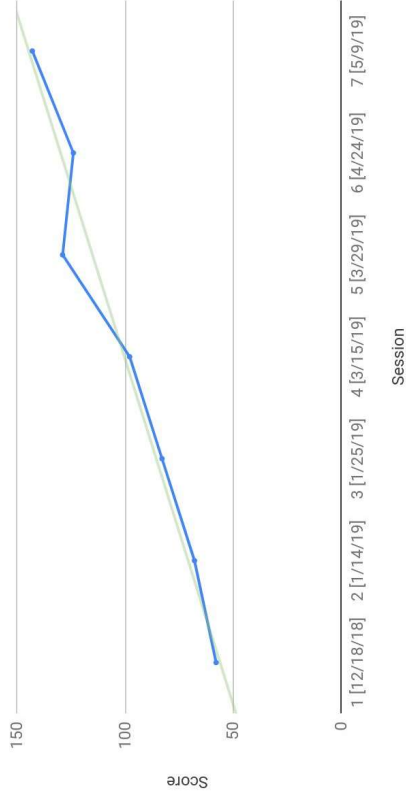
# Case Study 2 - Using Multiple Measures

- Student referred to Bridge Program following psychiatric hospitalization
- Presented with depression, low self-esteem, and low motivation
- Treatment included weekly CBT sessions, daily DBT skill building exercises, and wraparound care coordination
- Student successfully transitioned back to full day schedule following 15 weeks of treatment

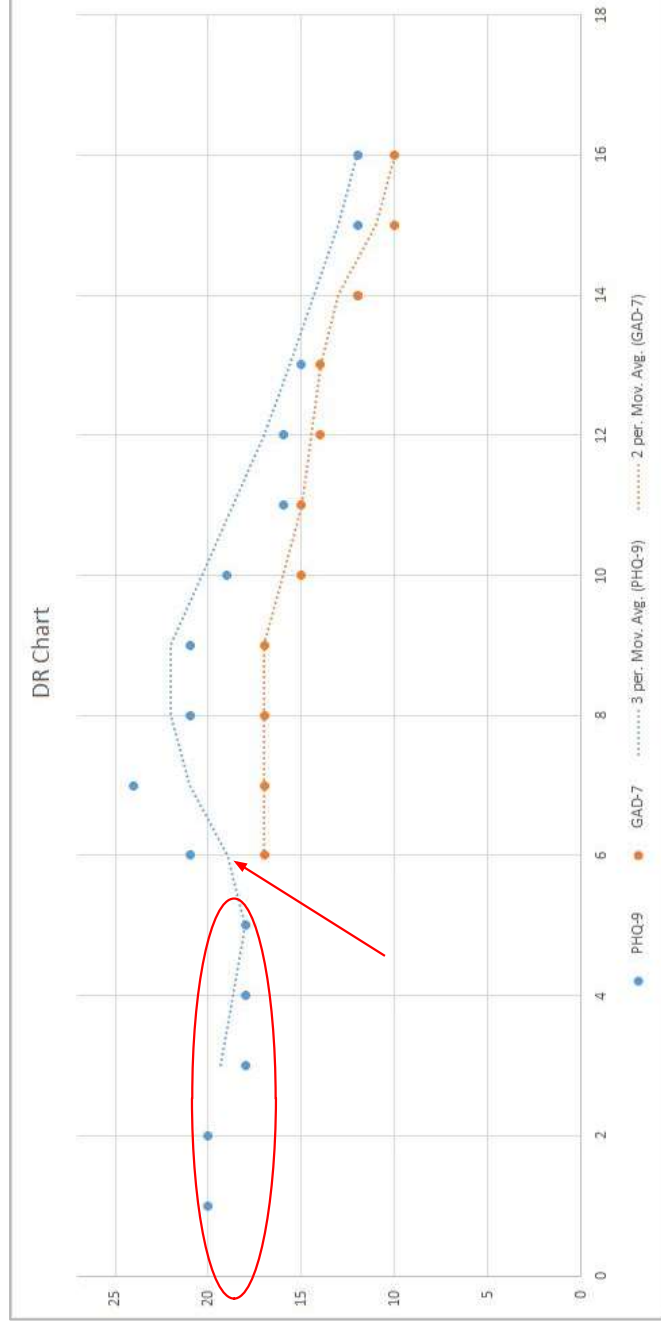
XXXXX Patient Health Questionnaire-9 (PHQ-9; Depression) Data



XXXXX Behavioral Activation for Depression Scale-Long Form (BADS-LF) Data



# Case Study 3 - Informing Adjustments to Practice

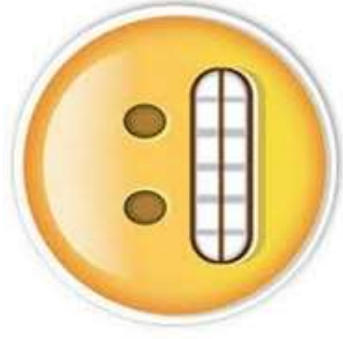


- Monitoring adjustments to practice
- Understanding the relationship between presenting concerns
- Supporting self-reflective practice



# IEP Service Delivery

**How evidence-based are the therapeutic services offered through the IEPs in your district?**





# Progress Monitoring and IEPs

- **Current Performance Level** - Baseline psychosocial data to drive the design of the measurable annual goal
  - **Measurable Annual Goal** - Based on a reduction of symptom presentation over time (emotional regulation)
  - **Benchmarks** - Percent changes in symptom presentation as opposed to milestones in the therapeutic process
  - **Service Delivery Grid** - Services drafted that are sensitive to changes in the student's presentation
  - **Adjustments to practice and termination** - Planned for at the outset of treatment
-



**What data do we typically use to evaluate  
the effectiveness of SMH staff?**



# Intervention/Treatment Planning - Tier III

**Intervention plans have been implemented for approximately 5% of the student population since the 16-17 school year. Intervention plans consist of:**

- Documentation of the presenting problem
- An articulated treatment plan using evidence-based services and supports to directly address the presenting problem
- A data collection plan that outline the frequency of data collection and the type of data to be collected related to the presenting problem

**Use of intervention plans has supported:**

- Measurement of individual student growth after the start of services
- Assessment of the efficacy of implemented services and supports
- Self-reflection and adjustment to practice
- Accountability for individual staff members and the larger CSMHS



# Intervention / Treatment Planning - Tier III

ID PRESENTING PROBLEM



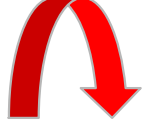
BASELINE DATA COLLECTION



IMPLEMENTATION OF EBP



PROGRESS MONITORING



ADJUSTMENT TO PRACTICE

PROGRESS MONITORING



ADJUSTMENT TO PRACTICE

TERMINATION OF EBP

OUTCOME DATA COLLECTION



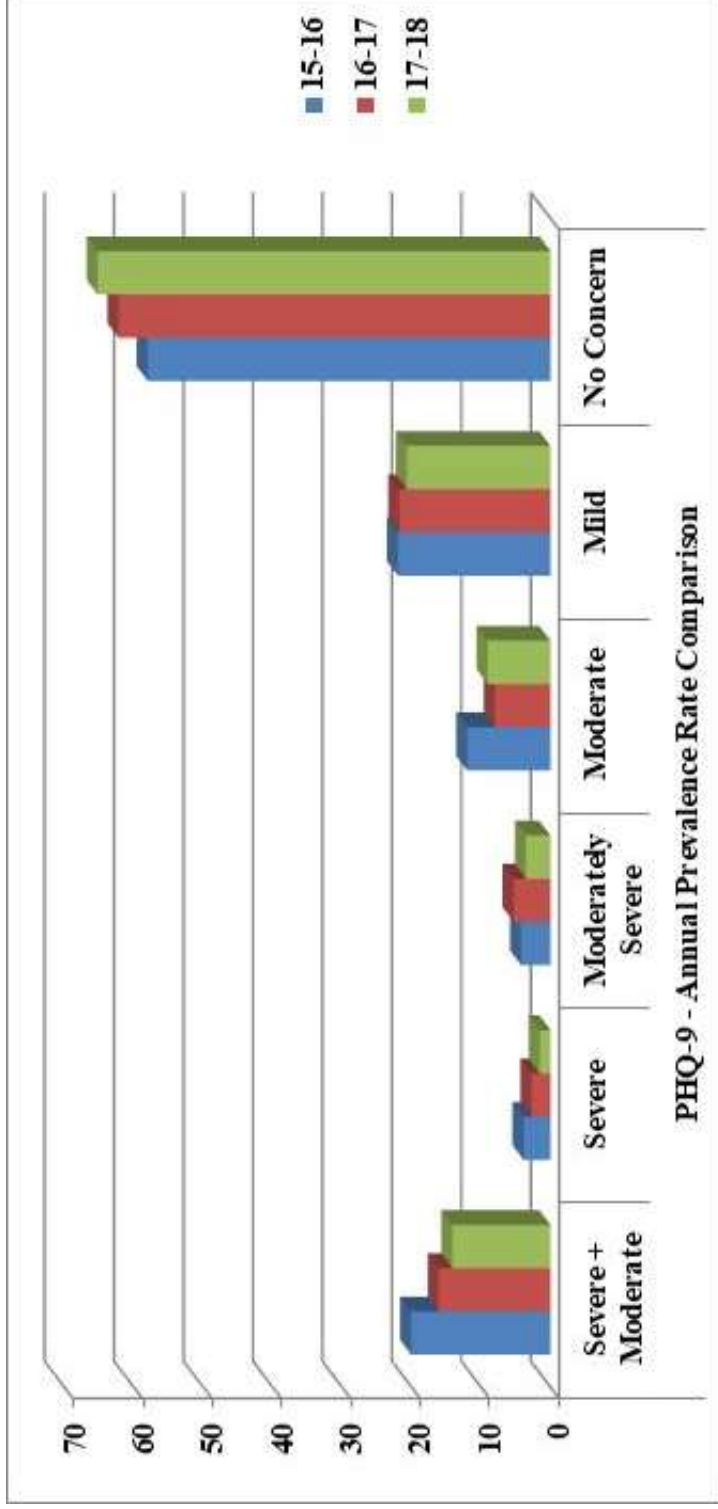
# Tier III Mental Health Services and Supports

Academic, behavioral, and social emotional data were collected throughout the year to monitor students' progress relevant to the intervention plans created.

Of the students tracked:

- **Academic Outcomes:**
    - 87% of students improved or maintained their level of academic performance
    - 54% of students improved their level of academic performance
  - **Social Emotional Outcomes:**
    - 92% of students improved or maintained from a social emotional standpoint
    - 77% of students improved from a social emotional standpoint
  - **Behavioral Outcomes:**
    - 89% of students improved or maintained behaviorally
    - 67% of students improved behaviorally
-

# 3-Year Depression Screening Comparison Data

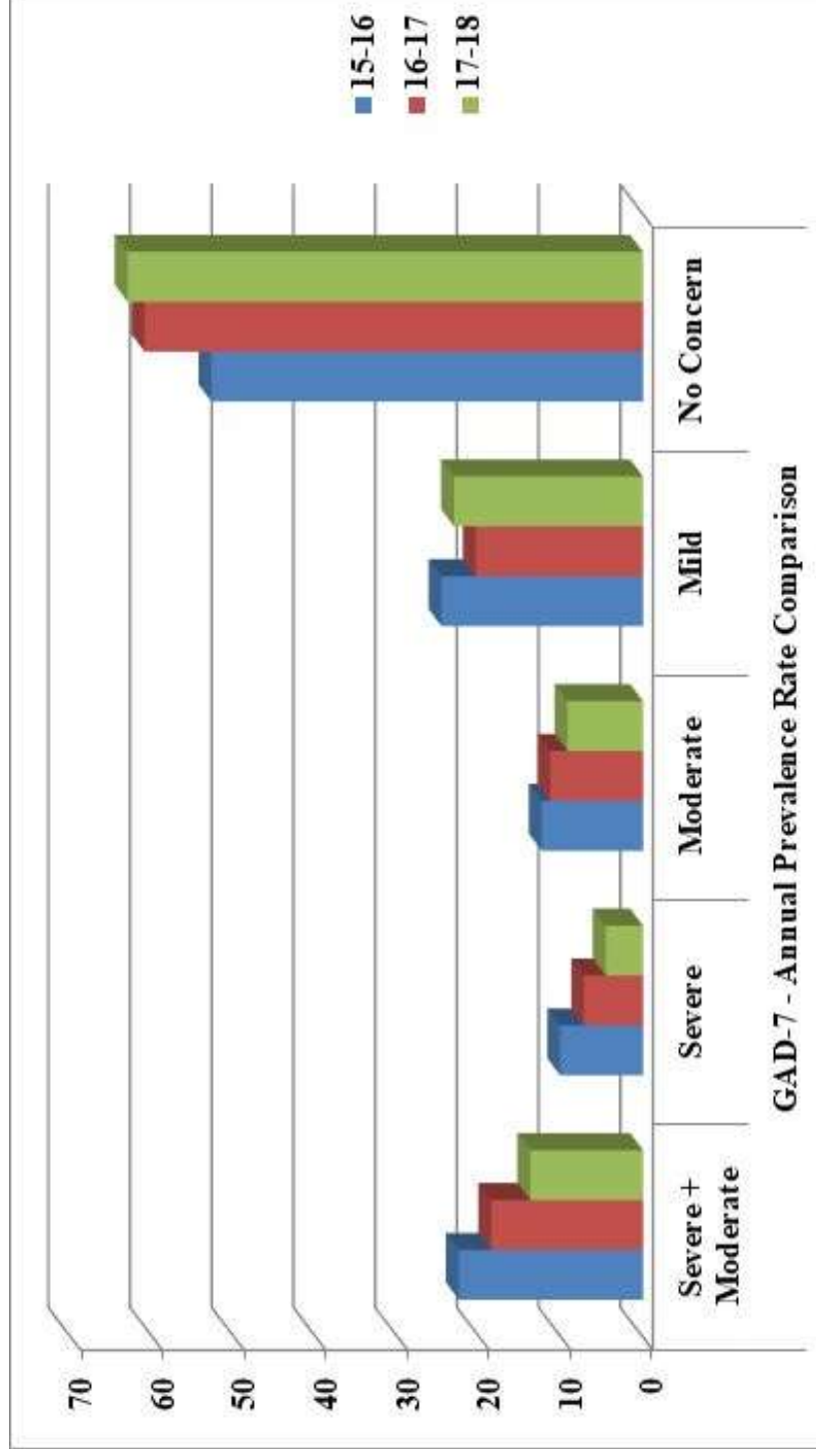


**16.7 percent of students** score in the moderate to severe range for depression, on average

**5.95% decrease in students scoring in the moderate to severe ranges** for depression between the 15-16 and 17-18 school years.

**7.22% increase in students scoring in the "No Concern" range** for depression between the 15-16 and 17-18 school years.

# 3-Year Anxiety Screening Comparison Data

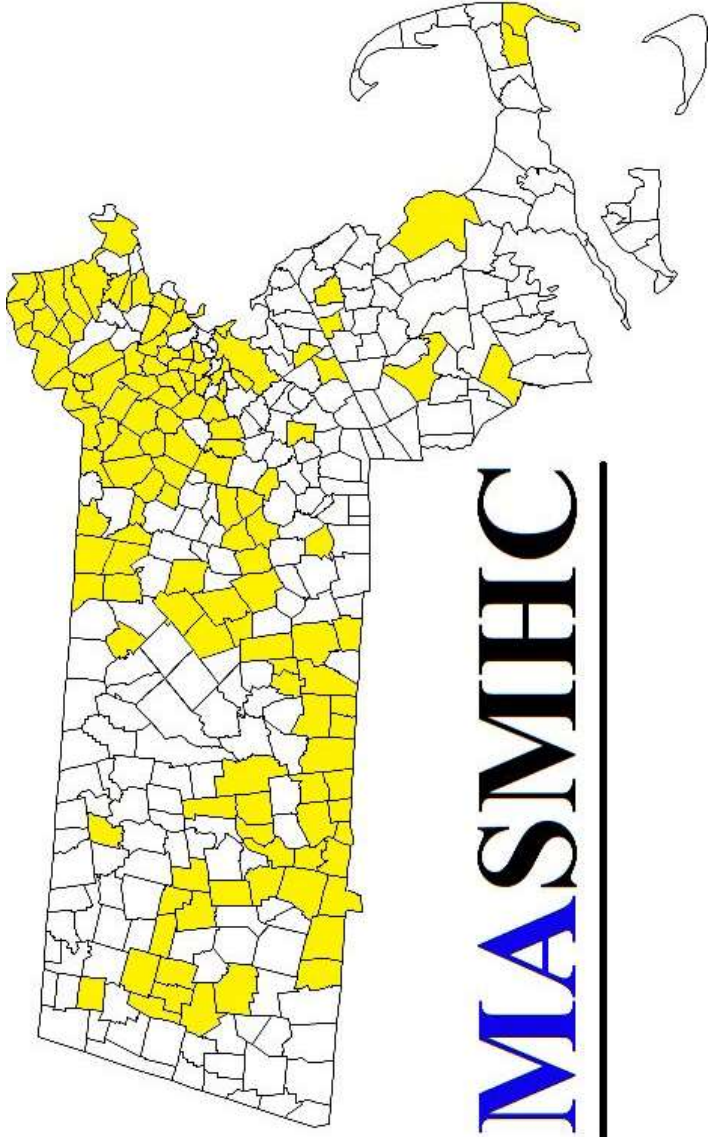


**18.3 percent of students** score in the moderate to severe range for generalized anxiety, on average

**8.73% decrease in students scoring in the moderate to severe ranges for anxiety** between the 15-16 and 17-18 school years.

**10.27% increase in students scoring in the "No Concern" range for anxiety** between the 15-16 and 17-18 school years.

# Massachusetts School Mental Health Consortium



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# QUESTIONS?

