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

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PK-12 Services

Methuen Public Schools
Screening: One Piece of a Much Larger Puzzle

Methuen has been involved in work to improve the quality and sustainability of school mental health services through a partnership with the University of Maryland’s Center for School Mental Health (CSMH).

- CSMH Quality and Sustainability Collaborative for Improvement and Innovation Network (CoIIN)
- Establishing a Comprehensive School Mental Health System (CSMHS)
- National Performance Measures for School Mental Health
- The SHAPE System
- School Mental Health Improvement and Innovation Task Force
CSMHS Quality and Sustainability Collaborative Improvement and Innovation Network (CoIIN) & SMH Task Force

- Grant funded partnership with the University of Maryland’s Center for School Mental Health (CSMH)
- Methuen was 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 CoIIN goals (PDSA cycles)
- School Mental Health Improvement and Innovation Task Force
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
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
School Mental Health National Performance Measures

Quality Performance Measures
- Universal Screening
- Teaming
- Data-driven Decision Making
- Needs Assessment and Resource Mapping
- Evidence-based Services and Supports
- Evidence-based Implementation

Sustainability Performance Measures
- Funding and Resources
- Resource Utilization
- System Quality
- System Marketing and Promotion
- Documenting and Reporting of Impact
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
District Mental Health Staff Readiness

- Defining and promoting a consistent view of mental health staff
- Provision of professional development that directly relates to mental health services and supports
- Representation from all schools on district-wide teams to promote the fidelity of implementation
- Increased collaboration and consultation regarding the implementation of new practices and policies
- Focusing on the collection of data to assess the effectiveness of interventions and the impact of mental health staff on students’ academic and psychosocial progress
Mental Health Initiative Structure

- **Methuen CSMHS CoIIN Team** is responsible for:
  - Planning and assessing the progress of the mental health initiative
  - Selecting, testing, and analyzing data related to new practices/policies
  - Communicating and collaborating with the University of Maryland CSMH team
  - Submitting PDSA cycles and monthly run charts to the University of Maryland CSMH team
  - Attending required trainings

- **Mental Health Initiative Committee** is responsible for:
  - Monitoring the district-wide implementation of practices as they are brought to scale
  - Assisting in identifying test sites to pilot new practices
  - Collecting and reporting out data related to the implementation of new practices/policies
  - Assisting in the identification and resolution of site-specific problems related to implementation
The Evolving Role of School Mental Health Staff

- The traditional role of guidance staff has lived on in schools and fueled a misconception that lives on in the general public.
- Training programs have been preparing school counselors and school psychologists to administer a full range of mental health services for many years, however this is not generally thought to be the case.
- Nationally, most school districts have maintained a traditional view of guidance counseling.
- The situation is made more complex by the fact that large disparities exist in the training among professionals in the field.
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 Measures for Scaled-up Screening

- 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
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?
# Securing & Maintaining the Psychosocial Database

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<td>Feeling bad about yourself or that you are a failure or have let yourself or your family down?</td>
<td>Trouble concentrating on things, such as reading the newspaper or watching television</td>
<td>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</td>
<td>Thoughts that you would be better off dead, or of hurting yourself in some way</td>
<td>Total</td>
<td>If you checked off any problems, how difficult have those problems made it for you to do your work, take care of things at home, or get along with other people?</td>
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<td>Very difficult</td>
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<td>21</td>
<td>Very difficult</td>
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<td>2</td>
<td>2</td>
<td>20</td>
<td>Very difficult</td>
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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
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)
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
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)
Screening for Anxiety (January 2016)

- GAD-7 administered electronically
- 840 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)
Screening for Depression (April 2016)

- PHQ-9 administered electronically
- 853 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)
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
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)
2016-2017: Screening by Area of Concern

<table>
<thead>
<tr>
<th>Grade</th>
<th>Anxiety</th>
<th>Depression</th>
<th>Substance Use</th>
<th>Global Scale</th>
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<tbody>
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<td>3</td>
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<td>12</td>
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</table>
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
### Screening for Depression - PHQ-9 (Nov. 2016)

<table>
<thead>
<tr>
<th>PHQ-9 (Nov. 2016)</th>
<th>Student Population</th>
<th>%</th>
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<tbody>
<tr>
<td>Sample</td>
<td>1135</td>
<td>100.00%</td>
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<tr>
<td>No Concern</td>
<td>706</td>
<td>62.20%</td>
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<tr>
<td>Mild</td>
<td>247</td>
<td>21.76%</td>
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<tr>
<td>Low-Moderate</td>
<td>91</td>
<td>8.02%</td>
</tr>
<tr>
<td>High-Moderate</td>
<td>60</td>
<td>5.29%</td>
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<tr>
<td>Severe</td>
<td>31</td>
<td>2.73%</td>
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Approximately 16% of students reported moderate to severe symptoms of depression.
### Screening for Anxiety - GAD-7 (Jan. 2017)

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<tr>
<th>GAD-7 (Jan. 2017)</th>
<th>Student Population</th>
<th>%</th>
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</thead>
<tbody>
<tr>
<td>Sample</td>
<td>943</td>
<td>100.00%</td>
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<tr>
<td>No Concern</td>
<td>575</td>
<td>60.98%</td>
</tr>
<tr>
<td>Mild Anxiety</td>
<td>193</td>
<td>20.47%</td>
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<tr>
<td>Moderate Anxiety</td>
<td>107</td>
<td>11.35%</td>
</tr>
<tr>
<td>Severe Anxiety</td>
<td>68</td>
<td>7.21%</td>
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</table>

Approximately 18.5% of students reported moderate to severe symptoms of anxiety.
<table>
<thead>
<tr>
<th>RCADS</th>
<th>Student Population</th>
<th>%</th>
<th>Total Elevated Scores (At-Risk + Clinical)</th>
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</thead>
<tbody>
<tr>
<td>Total Sample</td>
<td>2125</td>
<td>100.00%</td>
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<td><strong>Grade 5</strong></td>
<td></td>
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<tr>
<td>No Concern</td>
<td>407</td>
<td>85.86%</td>
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<tr>
<td>At-Risk</td>
<td>21</td>
<td>4.43%</td>
<td></td>
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<tr>
<td>Clinical Concern</td>
<td>46</td>
<td>9.70%</td>
<td><strong>14.14%</strong></td>
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<td><strong>Grade 6</strong></td>
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<td>No Concern</td>
<td>453</td>
<td>86.95%</td>
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<tr>
<td>At-Risk</td>
<td>23</td>
<td>4.41%</td>
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<td>Clinical Concern</td>
<td>45</td>
<td>8.64%</td>
<td><strong>13.05%</strong></td>
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<td><strong>Grade 7</strong></td>
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<td>At-Risk</td>
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<td>Clinical Concern</td>
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<td>8.23%</td>
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<td>4.83%</td>
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<td>Clinical Concern</td>
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<td>8.77%</td>
<td><strong>13.60%</strong></td>
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<td><strong>Grades 5-8 AVG</strong></td>
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<td><strong>13.04%</strong></td>
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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
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

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

Consider the following:

What has typically been used to evaluate the effectiveness of school mental health staff’s interventions?
Intervention Planning and Progress Monitoring

Intervention plans will be implemented for approximately 5% of the student population in 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
- 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.
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
2-Year Depression Screening Comparison Data

PHQ-9 - 15-16 and 16-17 Comparison Chart

- Severe + Moderate
- Severe
- Moderately Severe
- Moderate
- Mild
- No Concern
2-Year Anxiety Screening Comparison Data

GAD-7 - 15-16 and 16-17 Comparison Chart

- Severe + Moderate
- Severe
- Moderate
- Mild
- No Concern

Comparison between 15-16 and 16-17 age groups.
QUESTIONS?