Measuring The Impact Of Systems Change:

Connecting Data On Service Providers To Student Outcomes

Annual Conference on Advancing School Mental Health
New Orleans, LA  |  November, 2015

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We will discuss.....

• Overview of Boston Public Schools
• Comprehensive Behavioral Health Model
• Partnership with UMass Boston
• Time Sampling
• Workshop Evaluations
Boston Public Schools

• Diverse, urban district with more than 120 schools
  – 84 elementary
  – 18 middle/junior high
  – 34 secondary - 3 exam schools and 1 performing arts school

• Staffing across BPS
  – Over 8,000 professional staff
  – 54 school psychologists, 6 pupil adjustment counselors, 10 social workers, 3 behavior specialists
BPS Student Demographics

- Hispanic: 43
- African American: 33.7
- White: 12.6
- Asian: 8.3
- Native American: 0.3
- Native Hawaiian/Pacific Islander: 0.1
- Multi-Race, Non-Hispanic: 1.9
Behavioral Health in Boston

- 1 in 5 children in Boston have experienced 2 or more adverse childhood experiences → mental health issues
  - 6% of Boston children diagnosed with ADD or ADHD
  - 4% of Boston children diagnosed with anxiety issues
  - 2.4% of Boston children diagnosed with Depression

- Academic success is negatively affected by behavioral health issues
  - Truancy
  - Low performance
  - Dropouts
Need for CBHM

• More than 75% of youth with mental health issues do not receive services

• In 2012 mental health services were rated as the highest need in 66% of schools in the BPS district

• Comprehensive Behavioral Health Model (CBHM) developed in collaboration with Boston Children’s Hospital and UMass Boston
About CBHM
CBHM: Students Served

<table>
<thead>
<tr>
<th>School Year</th>
<th>Students Served</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012-13</td>
<td>5771</td>
</tr>
<tr>
<td>2013-14</td>
<td>9590</td>
</tr>
<tr>
<td>2014-15</td>
<td>15564</td>
</tr>
<tr>
<td>2015-16</td>
<td>20060</td>
</tr>
</tbody>
</table>
Cohort 1: Decrease in Problem Behaviors

CBHM STUDENT Outcomes

BIMAS Average T-Score

Conduct
Negative Affect
Cognitive/Attention

50th Percentile

2012 2013 2014
Cohort 1: Increase in Positive Behaviors

CBHM STUDENT Outcomes

50th Percentile
Cohort 1:
Increase in Academic Outcomes

CBHM STUDENT Outcomes
District-University Partnership

• Support the effective implementation of evidence-based practices
  – Training of current staff with professional development
  – Build capacity to identify and address student needs
  – Cross walk between NASP training standards and CBHM activities
District-University Partnership

- Mutually beneficial relationship
  - Advance training of students of multiple programs
  - In collaboration with Massachusetts School Psychologists Trainers Group (MA-SPT)
  - Building capacity for services at schools
  - Build leadership skills of both practitioners and students
Training

• Student Training of Specialist Level
  – Full domains of practice
  – Be involved in school-level change
  – Working with all students in a building

• Student Training of Doctoral Level
  – Be involved in district-level change
  – Supervision/mentoring experiences
  – Leadership opportunities
  – Expanded roles and learning for supervisors – aligning work with NASP Practice Model
Research Team

• Research and evaluation skills
  – Create research team with Children’s Hospital
  – Develop a logic model
  – Presentation and publication opportunities
  – Program evaluations to enhance service delivery
About CBHM

**BPS Comprehensive Behavioral Health Model**

**Mission:** Ensuring that all students have a safe and supportive school where they can be successful

<table>
<thead>
<tr>
<th>If we do this...</th>
<th>We will see this...</th>
<th>To achieve this...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Universal screening and positive skill instruction</td>
<td>Improved academic performance</td>
<td>Academic and social competence</td>
</tr>
<tr>
<td>Access to targeted supports and services</td>
<td>Increased positive behaviors</td>
<td></td>
</tr>
<tr>
<td>Schools</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integrated academic and socio-emotional learning</td>
<td>Improved school climate and student engagement</td>
<td>Safe and supportive learning environments</td>
</tr>
<tr>
<td>Professional development on evidence-based interventions</td>
<td>Increased skills to address students’ needs</td>
<td></td>
</tr>
<tr>
<td>District</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data management and accountability</td>
<td>Increased capacity to provide services</td>
<td>High-quality, equitable behavioral health services</td>
</tr>
<tr>
<td>Partnerships with families and community agencies</td>
<td>Improved access to and coordination of services</td>
<td></td>
</tr>
</tbody>
</table>

**Essential Components**
- Collaboration with and support for families
- Aligned district initiatives and policies
- Data-based decision making
- Appreciation for diversity
- Consultation and collaboration
- School and district leadership
- Student-centered
- Differentiated instruction

_Guided by Massachusetts Department of Elementary and Secondary Education’s Behavioral Health Framework_

_Theory of Change:_ Integrating behavioral health services into schools will create safe and supportive learning environments that optimize academic outcomes for all students.
DATA DATA DATA

**Students**
- Grades
- Behavioral Health
- Attendance
- Academic Testing
- Discipline Records

**Schools**
- School Climate Survey
- Attendance Records
- Implementation Fidelity

**Staff / Practitioners**
- Monthly Activity Reports
- Time Sampling
- Workshop Evaluations
Time Sampling

• Are school psychologists in CBHM schools spending their days differently than school psychologists in non CBHM schools?

• Time Sampling Form
  – Documents activities during school day
  – Captures one week
  – Categories organized by Tiers
Time Sampling (2013-2014)

Tier 1 = Tier 1 & Consultation
Tier 2 = Tier 2 & FBA
Tier 3 = Assessment, IEP, Case
Other = Supervision, Crisis, Other

Sample in December, 2013
- 40 School Psychologists
- 18/20 CBHM schools
- 76 non-CBHM schools
# Time Sampling Categories

<table>
<thead>
<tr>
<th>Tier</th>
<th>Code</th>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PD</td>
<td>Professional Development</td>
<td>Participation in and presentation of Professional development activities in relation to your job/role.</td>
</tr>
<tr>
<td></td>
<td>Consult</td>
<td>Consultation and Training</td>
<td>Consultation with parents, teachers, outside agencies and providers, etc. Include any training provided as part of the consultation.</td>
</tr>
<tr>
<td></td>
<td>Meetings</td>
<td>System/Administrative level Meetings</td>
<td>Meetings that are focused at the system, organizational or administrative level. Include grade level and other such meetings.</td>
</tr>
<tr>
<td>2</td>
<td>FBA/BIP</td>
<td>FBA/Behavior Intervention</td>
<td>FBA/ Behavior intervention related time, including observation.</td>
</tr>
<tr>
<td></td>
<td>INT</td>
<td>Non-IEP Counseling and Interventions</td>
<td>Activities related to group counseling and intervention.</td>
</tr>
<tr>
<td></td>
<td>Meetings</td>
<td>Problem Solving Meetings</td>
<td>The broad range of student specific or student focused meetings. Include meetings that are focused on a specific or targeted group of students.</td>
</tr>
<tr>
<td>3</td>
<td>Assessment</td>
<td>Assessment</td>
<td>All Special Education assessment related activity (including: Score, Interpret, Write, File Review, etc.)</td>
</tr>
<tr>
<td></td>
<td>Counseling</td>
<td>IEP Counseling</td>
<td>Activities related to IEP based counseling and intervention.</td>
</tr>
<tr>
<td></td>
<td>Consult</td>
<td>IEP Consultation</td>
<td>Activities related to IEP based consultation</td>
</tr>
<tr>
<td></td>
<td>Meetings</td>
<td>IEP Meeting</td>
<td>Meetings regarding IEP/504 determinations, including OR, RE, UR</td>
</tr>
</tbody>
</table>
| Other | Collaboration | Community Engagement & Service Integration | Meetings that are focused on work with and collaboration with other agencies and providers. These tend not to be student specific. 

*Note: All categories are specific and detailed, ensuring comprehensive tracking of time spent on various activities.*
Time Sampling 2014-2015

• Sampled in June, 2015
  – 44 School Psychologists
  – Sampled by activity (13 in total), organized by Tier
  – Analyzed by activity and Tier

• Limitations/Considerations
  – 1 day removed from data collection (CBHM showcase)
  – Days at multiple schools - can’t determine activity per location - 19 Staff surveys eliminated
  – Not anonymous - tied to professional by name and building
Time Sampling 2014-2015

Percent of Activity Type for ALL Schools

- % Tier 1: 6.6%
- % Tier 2: 18.5%
- % Tier 3: 69.1%
- % Other: 6.6%
Time Sampling 2014-2015

Percent of each activity for All Schools

- Consult: 41.8%
- Meetings: 12.6%
- FBA/BIP: 13.2%
- INT: 10%
- Meetings: 12.6%
- Assessment: 10%
- Counseling: 10%
- Consult: 10%
- Collaboration: 10%
- Supervision: 10%
- Other
Workshop Evaluation

Presentation Topics

• CBHM Overview
• Data Based Decision Making
• Classroom Management
• Problem Solving and Universal Screening
• School-Wide PBIS
• Universal Screening Tutorial
• Universal Screening Results and Data
• Universal Screening Data & Progress Monitoring

2014-2015 Year

• Review and ratings for workshop content and presenter
  • Anonymous responding

• Limitations
  • Changes in survey items
  • Buy-in for online completion option
Workshop Evaluation

Participant Information

• 205 total surveys collected

• 12+ trainers/speakers

• 9 trainings in the sample

• Participant info:
  – Teachers
  – Behavioral Health Staff (BHS)
Workshop Evaluation Questions

- This workshop topic was relevant to my work
- This workshop contributed to my understanding of the topic
- The workshop introduced new strategies that I can use in my work
- I feel confident in my ability to apply the information presented in this workshop
- The workshop leader presented the information clearly and effectively
- I would like to receive additional training on this topic
- My overall rating of this workshop
Workshop Evaluation

Percent of Points Earned on CBHM Workshop Evaluations for School Based CBHM PD
(SY 14-15 | Teacher Ratings)

81%
Future Directions

- Bridge between Research and Practice
- Evaluation Plan
- Implementation Guides
Questions?

• Comments
• Suggestions
• Complaints
• Encouragements
Contact and Information

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