Evaluation as a Tool for Improving Student Outcomes and Sustainability

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Objectives:

• be familiar with the findings from Georgetown University’s evaluation of the Baltimore Expanded School Mental Health (ESMH) program.

• discuss lessons learned in the implementation of the BESMH program including engagement of partners in the evaluation process.

• will be able to discuss the role of evaluation in informing policy and practice decisions and examples of how evaluation data can inform for sustainability
Agenda

• Findings from the BESMH Evaluation will be presented
• Implications of findings from the BESMH will be shared and discussed.
• Evaluation processes and engagement strategies will be presented and explored.
• Lessons learned will be highlighted with a focus on practical and “portable” strategies that can be implemented across settings.
• The role of evaluation in informing cross-system planning and policy implementation will be presented
• Commentary and discussion on implications for school mental health policy in communities and states
Overview BESMH

• Baltimore ESMH a recognized leader for more than 20 years on both local and national levels.

• ESMH services complement and supplement the services provided by BCPS staff (social workers, psychologists, and guidance counselors)

• Currently, prevention, early identification and treatment services provided in approximately 100 schools (approximately half of the schools in Baltimore City) through efforts of four (4) lead provider agencies joined by two (2) partnering agencies.
Overview of BESMH

- Intended to address barriers to learning, to enable students to make better use of educational programs in their schools, and to provide an alternative to mental health services within structure of Special Ed. System

- Funding: Braided funding from Baltimore City Public Schools (BCPS), Baltimore Mental Health Systems, Inc., Baltimore Substance Abuse Systems, Inc., and the Family League of Baltimore, Inc. (FLBC)
Expanded School Mental Health

- **ESMH** – reaches beyond traditional therapeutic approaches to working with youth and recognizes the need for a well-coordinated and collaborative strategy.

- **ESMH** – emphasizes prevention programming, positive youth development programming, comprehensive medical/wellness programming, classroom- and school-wide health-promotion and climate-enhancement initiatives.
ESMH Model

- Partnerships with community mental health agencies and professionals that provide the full continuum of prevention, early identification and treatment services
- Students enrolled in general education programs
- Staffing levels are 0.5 FTE or 1.0 FTE
- Standards: Category 1 through Category 4 delineates Model activities
ESMH New Strategy (FY 12)

• Procure ESMH and Early Childhood Mental Health (ECMH) services jointly by geographic region to promote continuity of care among children as they transition from Head Start Centers to City Schools

• Stronger Head Start Centers – Schools – Family - Community relationships
ESMH New Strategy (FY 12)

• Improve quality of service delivery by ESMH and ECMH clinicians

• Make optimal use of available grant funds by maximizing reimbursement of treatment services through the fee-for-service Public Mental Health (PMHS)
ESMH New Strategy (FY 12)

• Regional approach – in order to promote community-specific partnerships resulting in positive outcomes for children, adolescents and families

• Baltimore City – divided into four (4) regions with Oliver Street as the North/South boundary and Charles as the East/West boundary
ESMH in Baltimore City

• **Past** (SY ’88 - ’89): 4 school/2 provider agencies

• **Present** (SY ’11 – SY‘12): 100 schools/4 lead provider agencies

• **Future**: Every school
ESMH Model Standards

• **Category 1**: School-wide Supportive Activities – 20% clinician’s time

• **Category 2**: Treatment Activities/Services – 50% clinician’s time

• **Category 3**: Group Prevention Activities – 20% clinician’s time

• **Category 4**: Clinician Professional Development – 10% clinician’s time
Continuum of ESMH Services

Category 1: School-Wide Supportive Activities = 20%

- School staff/teacher consultations
- Participation on school teams/committees
- In-services presentations to school staff
- Attendance at school functions
- Participation in school-wide crisis response
- Participation in school-wide behavior management strategy
Continuum of ESMH Services

Category 2: Treatment Services = 50%

Appropriate students engaged in treatment services with parental consent

- Screening/assessment/evaluation/treatment planning
- Treatment Services
- Crisis Response
- Family contacts
- Teacher consultation
- Clinical documentation
- Reimbursement activities (billing Fee-For-Service)
Continuum of ESMH Services

Category 3: Group Prevention Activities = 20%

- Small student group prevention activities
- Classroom-wide prevention activities
- School-wide prevention activities/assemblies
- Parent/family focused group prevention activities
- Documentation/Record of group prevention activities
Continuum of ESMH Services

Category 4: Professional Development = 10%

• Mental Health Clinicians

• School staff (Administrators, Teachers, Auxiliary/support, and Related Services)

• After-school staff

• Parent/family members
# ESMH Expectations in Baltimore City

## Full-Time Equivalent (1.0)
- School staff consultations 120
- School team/committee meetings 9
- In-service presentations 3
- Parent/family activities 2
- Group prevention activities 60
- Treatment services 20 hours/week

## Half-Time Equivalent (0.5)
- School staff consultations 60
- School team/committee meetings 5
- In-service presentations 2
- Parent/family activities 1
- Group prevention activities 30
- Treatment services 10 hours/week
Collaborative Partnerships

What is collaboration?

*Collaboration is a process of participation through which groups and organizations work together to achieve desired results.*

**Partners:** BCPS, Baltimore Substance Abuse Systems, Inc., Baltimore City Health Department, BMHS, Local Management Board (FLBC): After-School and Community Schools, Maryland State Department of Education: “Race to the Top”, Federally Qualified Health Centers (FQHCs)
Erste Schritte im Dialogfeld Textwerkzeug

Dies sollen Ihre ersten Schritte bei geöffnetem Dialogfeld sein. Tippen Sie Ihre Worte ein (oder laden Sie die Worte aus einem Textdatei ein). Beginnen Sie mit dem Befehl **Strg + V** in das Texteingabefeld. Wählen Sie eine Schrift-Art aus.

Tippen Sie eine Schrift-Größe ein, bei der die Details regeln Sie später.
Components of Effective Collaboration

- Interdependence
- Newly created activities
- Flexibility
- Collective Ownership of Goals
- Reflection of the process
Developing Collaborative Partnerships

• Advancing a shared agenda
  o Learn and better understand each others system
  o Build the system together
  o Transparency and trust
  o Direct and open communication
  o Commitment to not shifting cost

• How do I help you meet your organizational goals?
  o How do you do business? Do you understand how my organization does business?
  o What are opportunities and barriers?
  o Identify shared goals and needs
Advancing a Shared Agenda “Themes”

- Crafting a common language
- Beginning with the End in Mind: Navigating a Sustainability Plan
- Goal(s) selected as collectively agreed upon by all key stakeholders
Collaborative Tool Exercise

Index - Collaborative Assessment Tool

Moving Towards Growth and Enhanced Quality

Goal 1: Implementation of a web-based interactive program for enhanced data collection and reporting across the ESMH network.

Goal 2: Facilitation of training opportunities for clinicians to enhance service delivery.
Moving Towards Growth and Enhanced Quality

Four Purposes of Evaluation:

1. Assessment of merit and worth
2. Program and organizational improvement
3. Oversight and compliance
4. Knowledge development
Evaluation of BESMH

• **Purpose:** Assess the impact of a comprehensive ESMH

Demand for academic accountability heightens the need for studies examining the specific impact of ESMH

- Test assumptions that ESMH is beneficial in terms of academic outcomes
- Inform ongoing evaluation and sustainability efforts.
Challenges and Approaches: Developing the Plan

A participatory approach to evaluation development and implementation

• Key Informant Input
  – Focus Groups (*administrators, program directors, clinicians/providers, caregivers, youth*)
  – Consultation (*advisory committee, monthly program directors meetings, leaders in the field*)
  – School system partners (*DREAA, Student Support Services, leaders*)

• Goals
  – Identifying important barriers and challenges
  – Identifying the appropriate and relevant outcomes
  – Incorporating content expertise in understanding ESMH in Baltimore
  – How to use the evaluation findings to improve the ESMH program and for advocacy.
Challenges and Approaches: Examining Outcomes at Individual Level

Risk of connecting private school and ESMH data

Solution: Employed the “zipper” for linking separate confidential data sets that contain personal identifying information while preserving anonymity.

- Safe analyst to link and process data who is not part of either the research team, the agency with overall administrative oversight over the ESMH program or the school system.
- Providers send service use data set with ID numbers sent to the “safe analyst,” who has no access to student names.
- School system sends demographic and academic/school functioning with ID numbers to safe analyst.
- Safe analyst uses ID numbers to merge the two data sets then encrypts ID numbers
Challenges and Approaches: Capturing Spectrum of ESMH Services

Service logs were not capturing the range of promotion, prevention and treatment work carried out by clinicians.

- **Solution:** Electronic data collection
  - Developed in a participatory process
    - Individual: For each date of contact, the type(s) of services and, at the end of each month, the focus of treatment and the type of the interventions.
    - Group: attendance in prevention and treatment groups.
    - Universal: four types of prevention activities.
  - Training: direct contact, manual and web-based (http://gucchd.georgetown.edu/75393.html)
Extent and Type of Services

- Baltimore ESMH Clinicians touch an enormous number of students, caregivers and school staff, extending the range of clinical service that could not happen in more traditional settings.
  - Clinicians had direct contact with more 6254 students - 1/5th of students attending the 106 schools that support ESMH
  - A large part of the clinicians work involves indirect, collateral services
  - The number of individual services per student dropped over grades.
  - Over half the students received only one to five individual services over the course of the year.
Percentage of Student by Contact Group and Grade

Grade

Pre-K
K
1
2
3
4
5
6
7
8
9
10
11
12

Percentage of Students

NoE-NoE
NoE-E
E-E
Percentage of Service Types

- **Individual Session**
- **Crisis Intervention**
- **Family Counseling**
- **Medication Consultation**
- **Intake**
- **School Staff Contact**
- **Caregiver Contact**
- **Brief Contact**
- **Observation**
- **Other Contact**

The diagram shows the percentage of service types with a focus on direct and indirect services. Direct services include Individual Session, Crisis Intervention, Family Counseling, Medication Consultation, and Intake. Indirect services include School Staff Contact, Caregiver Contact, Brief Contact, Observation, and Other Contact.
Percent of Direct and Indirect Services

![Bar Chart]

- **Quarters 12**:
  - Direct: 45%
  - Indirect: 55%

- **Quarters 34**:
  - Direct: 50%
  - Indirect: 50%
Mean Number of Individual Services by Grade
Number of Students Receiving Different Numbers of Individual Services

Over half the students received only one to five individual services over the course of the year.
Service Focus

- Clinician focus on issues that disrupt a student’s engagement with school – Change with grade
- Clinician’s for the most part use approaches with an evidence base
- Family/caregiver engagement is challenging
Percentage of Students Assigned a Focus Code

- Substance Use/Abuse
- Developmental Disabilities
- Trauma
- Bullying
- Mood Disorder
- Grief
- Family Issues
- Depression
- Anxiety
- Peer Issues
- Anger Management
- ADHD
- Disruptive Behavior

Females vs. Males
Percentage of Students Assigned a Focus Code by Grade

- Disruptive Behavior
- ADHD
- Depression
Percentage of Intervention Types Coded

Cognitive Behavior Therapy
Supportive Therapy
Behavior Therapy
Social Skills
Play Therapy
Interpersonal Therapy
Medication
Expressive
Family therapy
Modeling
Relaxation
Parent Training
Challenges and Approaches: Outcome Measurement Framework

Disagreement over the importance of different types of outcome measures.

- **Challenge:** Devising an outcome measurement framework that satisfies different stakeholders without overburdening clinicians
- **Solution:** Stepwise process. Integrate data needs and system pressures of different stakeholders.
  - Use available data records, outcome measurements already in place,
  - Stakeholders recognized the imperative of demonstrating effectiveness in the school setting with selected mediating/moderating contextual variables.
  - Integrate more clinical outcome monitoring in future
  - **Theme:** the importance of looking at school outcomes (e.g., academic success, promotion, absences and suspensions) to ensure sustainability
Challenges and Approaches: Comparison Groups

As is often the case with on-going, community-based program, a full-fledged experimental (random-assignment) is not a practical, feasible or ethical.

• Challenge: Quasi-experimental strategies to support causal influences of ESMH.

• Approaches:
  – Contact
  – Propensity score analysis
  – Dosage
Contact Analysis

- Total = 83,460
- Receiving ESMH services in schools with an ESMH clinician (E-E) = 6,543
- **Not** receiving direct ESMH services in schools with an ESMH clinician = 42,821
- **Not** receiving direct ESMH services in schools without an ESMH clinician (NoE-NoE) = 34,096
Attendance

• Contact Groups
  - 1-3rd grade
    - Overall increase in attendance
    - Change in attendance slightly less in EE group
  - 4-9th grade
    - Slight decrease in attendance
    - Significant reduction in attendance during transition years (6th and 9th grade) but increase in other four years.
    - Increase in those 4 years greater for EE group
  - 10-12th grade
    - Slight overall reduction, more in EE and E-NoE group
Attendance

• Comparison Group
  - 2-3rd grade
    - Slight decrease in attendance
    - Increase in ESMH group decrease in Comparison group
  - 4-8th grade
    - No overall change, drop in 6 and 7th grade, increase in other grades
    - Increase in ESMH group decrease in Comparison group (NS)
    - Greater increase for ESMH group for 5th and 8th grade
  - 10-12th grade
    - Slight overall reduction, more in EE and E-NoE group
Change in Attendance from 2007-08 to 2008-09 by Number of Individual Services

Dosage Group (Number of Individual Sessions)
Percent of Students Improving on Math Benchmarks

![Graphs showing percent of students improving in Math and English by grade level.](image-url)
Percent of Students Improving in Benchmarks

GRADE

ESMH
Comparison
Expanded School Behavioral Health Initiative (ESBHI)

• Targeted mental health and substance abuse prevention services to 6th graders at-risk of drop-out enrolled in 37 identified schools served by Baltimore Expanded School Mental Health (ESMH)

• ESBHI Components
  – *Why Try* Program hands-on curriculum that teaches social and emotional skills designed to improve outcomes in truancy, violence and substance and academics.
  – 10 weekly small-group sessions, collateral contact with ESMH counselors (individual treatment, prevention activities)

• Funded by Baltimore Substance Abuse System using federal prevention funds.
ESBHI Evaluation

- Goal: to determine whether ESBHI had a positive impact on student academic and school performance
- Conducted within the structure of the overall evaluation of ESMH services carried out during the 2008-09 school year
- 553 students in ESBHI Why-Try groups were tracked by ESMH clinicians as part of a comprehensive, service use collection protocol.
- Service use data was merged with measures of school and academic performance, provided by the Division of Research, Evaluation, Assessment and (DREAA) of the BCPSS.
Comparison Group Formation

• Dosage
  – Students differed in the number of Group Sessions attended.

<table>
<thead>
<tr>
<th>Subgroup</th>
<th>Range of Sessions</th>
<th>Number of Students</th>
<th>Percent of ESBHI Students</th>
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</thead>
<tbody>
<tr>
<td>GS-Lo</td>
<td>1-5</td>
<td>87</td>
<td>18.6</td>
</tr>
<tr>
<td>GS-Mid</td>
<td>6-10</td>
<td>224</td>
<td>47.7</td>
</tr>
<tr>
<td>GS-Hi</td>
<td>11-15</td>
<td>178</td>
<td>33.7</td>
</tr>
</tbody>
</table>
Math Benchmark Comparisons

![Bar graph showing percent of students showing increases in benchmarks for Comparison and ESBHI 6th Grade Cohort. N=53 for Comparison and N=77 for ESBHI.]
Percent of Students in Sub-cohorts Showing Improvement in Math Benchmarks

Percent of Students

ESBHI Sub-cohort

GS=Groups Sessions
### Change in MSA Scores From 2008 to 2009

**MATH**

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<thead>
<tr>
<th></th>
<th>Comparison</th>
<th>ESBHI</th>
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<tbody>
<tr>
<td>Males</td>
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<tr>
<td>Females</td>
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**READING**

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<tr>
<th></th>
<th>Comparison</th>
<th>ESBHI</th>
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Percent of Students Showing Proficient and Advanced MSA Proficiency Levels

**Reading**

- **Comparison**
- **ESBHI**

**Math**

- Comparison
- ESBHI

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Change in MSA Standard Scores

![Graph showing change in standard scores for Math and Reading across GS-Lo, GS-Mid, and GS-Hi subcohorts.](image-url)
Effects on Attendance

- No difference between matched groups
- More positive change in attendance with greater ESBHI involvement
Evaluation Contributions to Sustaining ESMH

- Building evaluation and research model – participatory process
- Building infrastructure for ongoing evaluation and research
  - Service Trends
    - Impact on programming decisions
    - Impact on financial models
    - Training
  - Leveraging other initiatives.
- Utilizing evaluation data to make the case for ESMH program
- Case for Ancillary and Supportive Services
  - Teacher Consultation
  - Care Coordination
  - Family contacts
- Case for School-related Benefits
  - Improvement in academic measures
  - Positive effects on school attendance
School Mental Health Evaluation: A Tool for System Change

• Translating Evaluation Findings
• Mobilizing the tools of public health
• Engaging Cross sector partnerships
• Engaging policy-makers and partners in implementing “healthy policies” for children’s mental and behavioral health and beyond
Translating Evaluation Findings

• How can we communicate the results of our BESMH Evaluation to multiple sectors within the community and key policymakers?

• How can we translate the findings more quickly and efficiently to inform policy and practice?

• How can we translate findings and connect them to other outcomes, whether those are physical, mental, or social or economic etc.

• How can we “follow the data” across systems i.e. “what goes in to mental health may show up in another part of the system” such as savings in juvenile justice or education or other?
Translating Evaluation Findings

- What infrastructure and supports do we need?
- How can the conceptual framework for a public health approach help organize this work?
- How can we engage multiple partners towards a shared agenda values school mental health as a key strategy for improving outcomes for children.
Mobilizing the Tools of Public Health

- Population focus
- Emphasis on creating supportive environments and building skills
- Balanced focus between children’s mental health problems and positive mental health
- Cross-system and cross-sector collaboration
- Local Adaptation

To Download Full Monograph or Expanded Executive Summary: http://gucchdtacenter.georgetown.edu/public_health.html
A Conceptual Framework for a Public Health Approach to Children’s Mental Health

Assessing
Gathering and Analyzing Data to Drive Decisions

Ensuring
Quality, Access, and Sustainability

Intervening

5 Guiding Principles
- Population focus
- Cross-system and cross-sector collaboration
- Balanced focus between children’s mental health problems and positive mental health

V A L U E S

Does Not Consider Identified Problem
Considers Identified Problem

Does Not Consider Identified Problem
Considers Identified Problem

Optimize (and Measure) Positive Health
Reduce (and Measure) Health Problems

Optimize (and Measure) Positive Health
Reduce (and Measure) Health Problems

Promoting Health
Re-claiming Health
Preventing Problems
Treating Problems

INTERVENTION ACROSS POLICY, ENVIRONMENTAL CHANGE, PROGRAMS, SERVICES, EDUCATION, SOCIAL MARKETING

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What Do We All Want for Children and Families?

• In school, at home, at work and out of trouble
• Sense of belonging and connectedness
• Feeling valued in the community
• Contribute in a positive way back to the community
• Mentally and physically healthy
• Safe, engaged in productive activity
Clear windows of opportunity are available to prevent mental, emotional, and behavioral (MEB) health disorders and related problems before they occur (O’Connell, 2005).

Behavioral Health is Essential to Overall Health

Prevention Works!

Treatment is Effective!

People Recover!
Social Determinants of Mental Health

those elements of social structure most closely shown to affect health and illness—include at a minimum:

<table>
<thead>
<tr>
<th>INCOME INEQUALITY</th>
<th>NEIGHBORHOOD CONDITIONS</th>
<th>SOCIAL EXCLUSION</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOOD SECURITY</td>
<td>EMPLOYMENT OPPORTUNITY</td>
<td>POLITICAL MARGINALIZATION</td>
</tr>
<tr>
<td>HOUSING QUALITY</td>
<td>DISCRIMINATION</td>
<td>PHYSICAL ISOLATION</td>
</tr>
<tr>
<td>SOCIAL STATUS</td>
<td>CULTURAL NORMS</td>
<td>PUBLIC SERVICE SYSTEMS</td>
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The Adler School’s Institute on Social Exclusion
Evaluation: a tool for connecting the dots

- Improved Mental/Behavioral Health
- Improved Education Outcomes
- Benefits to Community as a Whole
- Benefits to Multiple Sectors/Systems
ESMH Evaluation and Healthy Policies & Practices

- Connect data from the local evaluation to other key findings

- Data shows that prioritizing children’s mental/behavioral health helps to foster the ability of children to do well in school, go on to college, and engage in their communities in positive ways reducing crime, unemployment, and social and economic costs.

- Then act to align policies and practices across systems and sectors
Communicating Evaluation Findings and the Implications

- BESMH improves student mental health and
- BESMH improves educational outcomes
- Students who graduate from high school are healthier, live longer and are more engaged citizens
- BESMH serves as a protective and health enhancing factor for students- and the school community.
- BESMH is an efficient and effective use of scarce resources
Messages Worth Repeating….

• Scientific rigor with quasi-experimental designs: yes we can!
• Dosage matters (not just with meds but with interventions)
• Including academic outcomes in evaluation: yes we must!
• Defining SMH: Don’t you know what I mean?
• The “Hidden Factor”: unmeasured intervention components
• Participatory research: easy to want, hard to do, worth it
• Translation of research: our foreign language
Issues to Consider as We Move Forward

• SMH as a public health approach: sensible but not a snug fit
• The value of SMH: one part MH, one part SCHOOL, one part OTHER
• Documenting population benefits of SMH means we all have to stretch new muscles
• Looking at individual change AND school, neighborhood, home, and community change
• Paradigm shift: the need to sing from the same song book
QUESTIONS AND COMMENTS