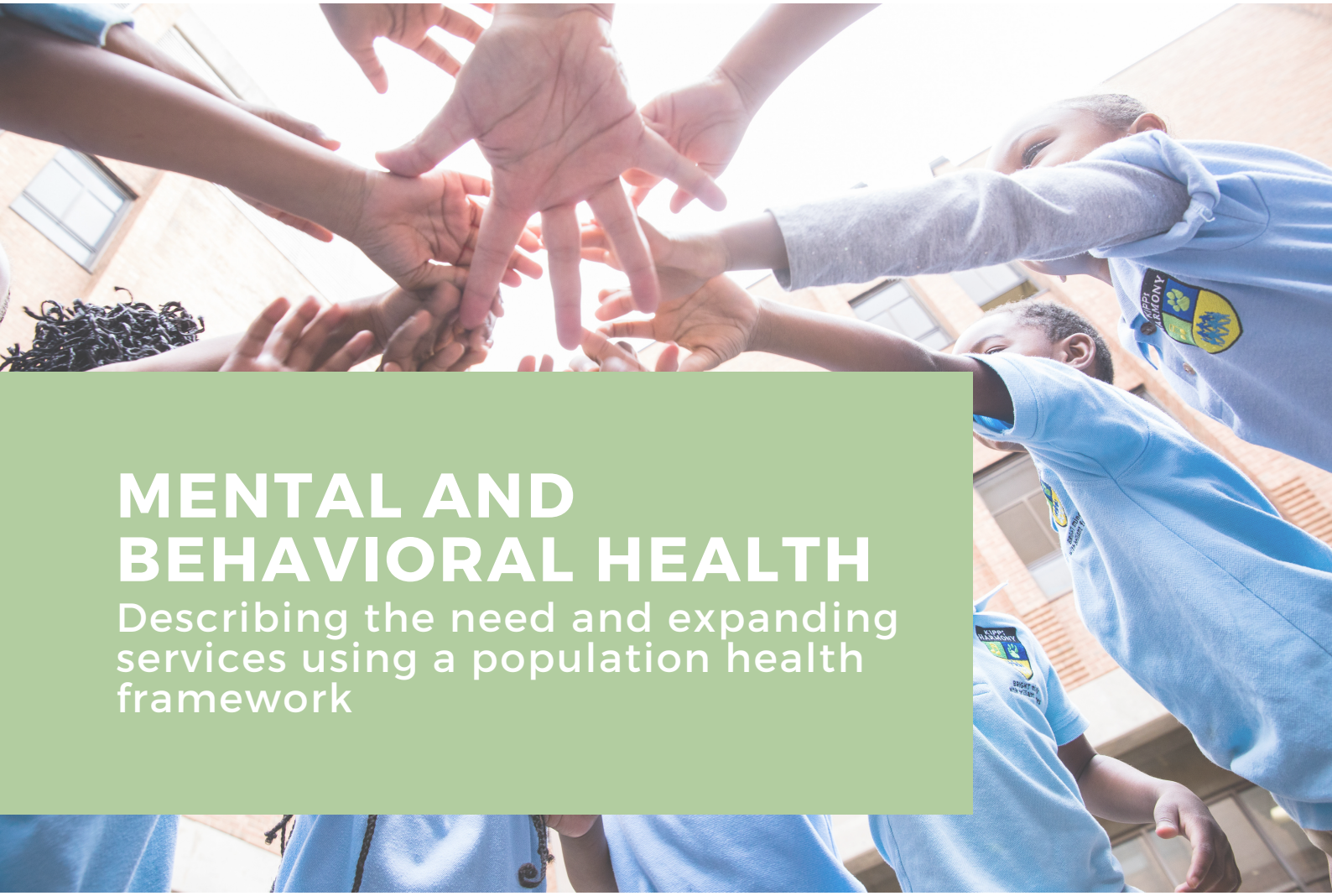

MENTAL AND BEHAVIORAL HEALTH

Describing the need and expanding services using a population health framework

RUTH AND NORMAN RALES
Rales Center for the Integration of Health and Education

JOHNS HOPKINS CHILDREN'S CENTER

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MENTAL AND BEHAVIORAL HEALTH

What did we do?

Mental and behavioral health concerns were identified by school leaders as a key issue affecting KIPP Baltimore students. With the ultimate goal of improving health and educational outcomes for students with mental and behavioral disorders (MBHD), the Rales Health Center (RHC) team partnered with school leaders and school-based mental health clinicians to (1) understand the prevalence of MBHD, (2) identify areas of unmet need for services, and (3) implement programs to address these unmet needs.

Rationale

MBHDs are common, affecting approximately one in seven children and teens in the US [1]. The most common conditions include ADHD (9.4% of children aged 2-17 years) [2], behavior problems (7.4% of children aged 3-17 years), anxiety (7.1% of children aged 3-17 years), and depression (3.2% of children aged 3-17 years) [3]. Up to half of children with a MBHD in the US do not receive treatment [1]. Moreover, children living in poverty are more likely to have a MBHD and less likely to receive care [4]. Undiagnosed and untreated MBHDs are associated with poorer school performance. For example, students with depressive symptoms are more likely to report difficulty concentrating in class and completing homework [5], and students with a mental health condition more likely to be absent [6]. School-based interventions to prevent, identify, and treat MBHDs are associated with improved health, mental health, and academic outcomes [7, 8].

Summary of Implementation and Results

Understanding Prevalence

During Year 1, several approaches were used to understand the baseline prevalence of MBHD at KIPP Baltimore. Wellness surveys conducted through middle school health classes found that at least 12% of students had symptoms of depression in the last 2 weeks and 60% of students had experienced at least one stressful life event (e.g., violence exposure, family separation). Over the course of the project, we refined our approach to defining prevalence of MBHDs including identification of students as having ADHD through school health center services and SBHC records. Using RHC records, the prevalence of ADHD was 7%. Preliminary analysis of Medicaid data revealed that approximately 13% of SBHC enrolled students have a MBHD.

An anonymous survey about student wellness provided additional insight into the prevalence of depressive symptoms and suicidal thoughts in Year 4 (Table 1). While the prevalence at KIPP was similar or slightly lower than Baltimore City students overall, more than a quarter of students were impacted, highlighting the burden of mental health symptoms in this age group.

Table 1: Mental health symptoms, grades 5-8.

	KIPP	Baltimore City	Maryland
Felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities during the past 12 months	25.3%	29.3%	25.5%
Ever seriously thought about killing themselves	29.4%	30.5%	22.9%

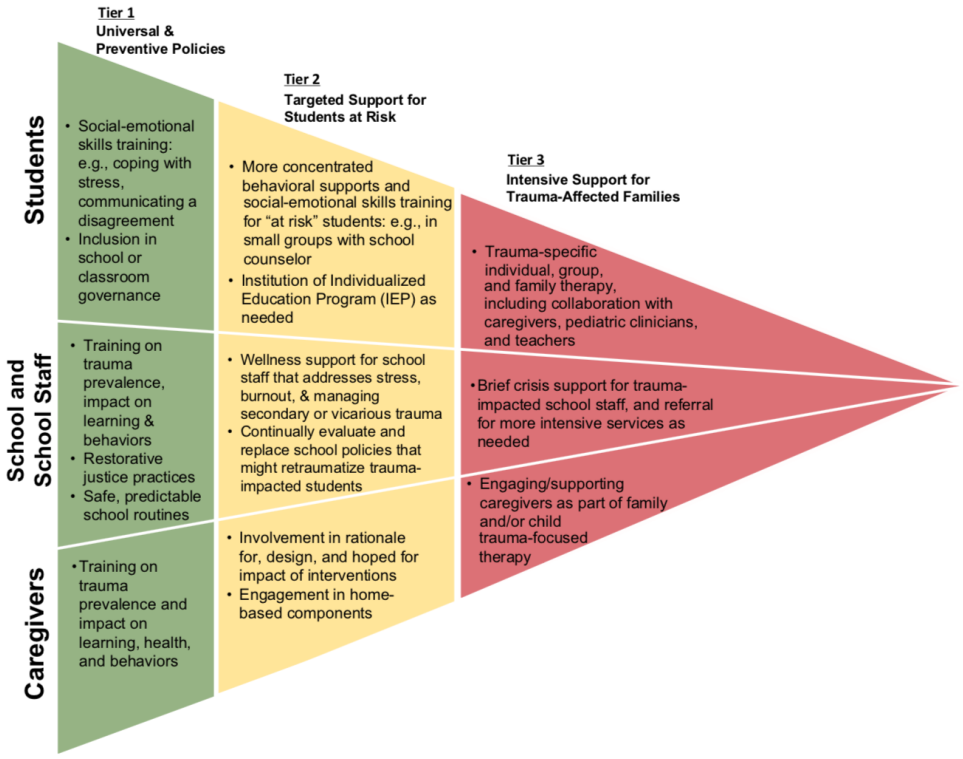
KIPP data are from 2018-2019. Baltimore City and MD are from the MD Youth Risk Behavior Survey/Youth Tobacco Survey (YRBS/YTS) [3].

Identifying Areas of Unmet Service Needs

During Year 1, approximately 100 students across both schools were receiving school-based mental health services, either from a school-district clinician via services provided under an IEP/504 plan, or from school-based partner clinicians as part of the Baltimore City Expanded School Mental Health Program (ESMH). Parents and school staff identified difficulty accessing mental health assessments, medication management, and therapy services on a consistent basis despite these available services.

Coordinating and Expanding Services Using a Population Health Framework

We began by conducting a review of trauma-sensitive/trauma-informed educational practices [8]. This work resulted in the conceptualization of a triple-tiered model of supports for students with varying levels of need (see below). We used this model to guide our program-building efforts.



The Wellness team collaborated with partners at KIPP Baltimore to implement universal preventive programs rooted in a trauma-informed approach to school culture and climate. This work culminated in the implementation of a culturally responsive adaptation of the evidence-based social emotional learning framework Conscious Discipline at both schools (see "Transforming the Social and Emotional Climate and Culture" report for additional information).

The RHC team worked to improve early identification of students with MBHD through professional development for teachers and school staff, adolescent depression screening, and a streamlined referral system to school based mental health clinicians and RHC somatic health providers for evaluation.

- Universal depression screening for 7th graders during Year 3 revealed 21% of students had positive screens.
- Depression screening was conducted at 99% of SBHC well child visits and 77% of acute/follow-up visits for students 12+ years beginning in Year 2.
- The RHC SBHC conducted 96 initial ADHD evaluations between Year 1 and Year 4.
- There was a 50% increase in RHC SBHC referrals to mental health services from Year 2 to Year 4.

The number of students receiving direct school-based mental health services more than tripled from 100 in Year 1 to 324 in Year 4.

Finally, the RHC team developed and implemented intensive disease management services for students with MBHD that included: case management, medication management and administration, and referral to mental health services. To meet the need for high-quality school-based mental health services, we partnered with KIPP Baltimore to identify and transition to a new ESMH provider (Johns Hopkins Bayview School-Based Mental Health Program) that was able to serve more students per clinician full time equivalent (FTE) and provide onsite psychiatry services.

- RHC Family Advocate provided mental health case management and referral services for an average of 38 students/year during Years 2-4.
- There was a 172% increase in RHC SBHC visits for ADHD management from Year 1 to Year 4.
- There was a 44% increase in the number of students receiving daily mental/behavioral health medications through RHC SHS from Year 2 to Year 4.
- Students served per ESMH clinician FTE increased from an average of 19 students/FTE in Years 2 and 3 to an average of 28 students/FTE in Years 3 and 4 under the new ESMH partner – a 47% increase in students served/FTE.

The change to a new mental health provider in Year 4 and disruptions to the school year in Year 5 of the Rales Center implementation mean that the impact of mental health programs on health and educational outcomes remains incomplete. Additional evaluation of MBHD-focused interventions will continue in Years 6 and 7 of the program. For example, we worked closely with the administration at the Johns Hopkins Bayview School-Based Metal Health Program to explore the feasibility and acceptability of delivering telemental health services at KIPP. A systematic review of the literature revealed that while promising, high-quality evidence to support the effectiveness of telemental health services was generally lacking [9]. Now that telemental health services are billable under an emergency waiver from the Centers for Medicare and Medicaid Services (CMS) due to the COVID-19 pandemic, we are conducting interviews with clinicians and participating families to evaluate these services. During Year 5, RHC and KIPP Baltimore leaders partnered to create monthly multidisciplinary team meetings at both schools to support collaborative case management of students and families with complex needs. This has been a successful way to optimize coordination on behalf of students with a variety of needs. Additional data will allow the longer-term impacts of this effort to be evaluated.

Dissemination

- Effectiveness of videoconferencing-based in children and adolescents with mental health conditions: A systematic review. Poster presented at the 2017 National School-Based Health Care Convention in Long Beach, CA.
- Bhushan D, Marshall B, Connor R, Sussman L, Connor K, Johnson S. Trauma-informed schools: Extending the trauma-informed lens from clinic to classroom. Under review.
- Building Healthy Futures in Baltimore: Integrating Health & Education at KIPP Baltimore. Presented at the 2019 Maryland Assembly on School-Based Healthcare Annual Meeting.

Impact

- Increased identification of students with mental health concerns through universal and SBHC-specific screening.
- Increased access to mental and behavioral health services:
  - The number of students receiving direct school-based mental health services more than tripled from 100 in Year 1 to 324 in Year 4.
  - RHC SBHC evaluated 117 students for ADHD and conducted 246 follow-up visits. Visits increased by 172% from Year 1 to Year 4.
- Improved attendance: there was a 50% decrease in chronic absenteeism among students with ADHD between Year 1 and Year 3 among students enrolled at KIPP for all 3 years.

LESSONS LEARNED

- *Increasing capacity to deliver mental health services in schools requires creative partnership between schools, somatic health providers, and mental health providers and should include a systematic approach to identification of students in need of services, a streamlined referral process, and implementation of high-quality service delivery models.*
- *The regulatory landscape for the provision of direct mental health services in schools is complex and funding may be limited.*
- *There is a high level of mental and behavioral health need in this K-8 population. In some instances, students required a higher level of care than could be appropriately provided in school, and there are significant barriers to accessing community-based child psychiatry services.This is particularly true for low-income families with private insurance.*
- *Multi-disciplinary team meetings provide opportunities for increased communication and collaboration in the management of students and families with complex needs.*

"I can't even explain how awesome [the Rales Health Center] is. It's amazing, and I don't know why anyone would ever not want that in their school."

- KIPP Staff Member

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THANK YOU FOR YOUR SUPPORT

To Our Loyal Supporters

We are grateful to all those who have joined us in our mission to create models of school health that help every child to achieve their full health and academic potential. Special thanks to the Norman and Ruth Rales Foundation and our partners at KIPP Baltimore; without them, this work would not be possible.

To learn more, please visit https://ralescenter.hopkinschildrens.org

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