

# New Hampshire's Multi-Tiered System of Supports for Behavioral Health & Wellness

## Summary of Evaluation Outcomes January 2019



# Acknowledgments

We would like to extend our deepest gratitude to all the partners that have sponsored and supported NH's Multi-tiered System of Supports for Behavioral Health and Wellness (MTSS-B) and contributed to the growing dataset that allows us to show evidence for its effectiveness. This includes the foundational guidance of the NH Department of Education's Office of Social and Emotional Wellness, as well as the hard work of our many school district partners. Their efforts implementing MTSS-B have provided a wealth of data from which we have been able to document and understand the effects of MTSS-B implementation. The observed positive impacts of MTSS-B on students are reflective of these educators' innovation, persistence, and unwavering belief in the importance of student social-emotional wellness. Below is a list of all the NH school districts that have contributed data over the timeframe summarized in this report, listed by project.

## 2013-current: LEA School Climate Transformation Grant (US DOE)

SAU 30: Laconia School District

## 2013-2018: Safe Schools/Healthy Students (SAMHSA)

SAU 8: Concord School District

SAU 30: Laconia School District

SAU 54: Rochester School District

## 2014-current: Project AWARE (SAMHSA)

SAU 3: Berlin Public Schools

SAU 7: Colebrook, Pittsburg, Stewartstown Schools

SAU 18: Franklin School District

## 2017-current: Fast Forward 2020/NH System of Care (SAMHSA)

SAU 3: Berlin Public Schools

SAU 6: Claremont and Unity School Districts

SAU 7: Colebrook, Pittsburg, Stewartstown Schools

SAU 18: Franklin School District

SAU 30: Laconia School District

SAU 59: Winnisquam Regional School District

SAU 36: White Mountains Regional School District

## 2017-current: Project GROW (NH DOE)

SAU 35: Bethlehem Elementary School

SAU 8: Concord School District

SAU 90: Hampton School District

SAU 66: Hopkinton Public Schools

SAU 30: Laconia School District

SAU 26: Merrimack School District

# NH's Multi-Tiered System of Supports for Behavioral Health & Wellness

Children's needs for mental health care are largely unmet; between 14 to 20% of children and adolescents (aged 8-15) experience a mental, emotional, or behavioral disorder each year, but only about half of these children receive treatment. Without the appropriate supports, children with mental health disorders are at greater risk of negative outcomes such as dropping out of school, substance use, risky sexual behavior, violence, and more severe mental health difficulties.<sup>1,2</sup> Addressing students' social, emotional, and mental health needs leads to improved student outcomes.<sup>3</sup> As a result, schools are challenged to support the mental health needs of students while promoting academic achievement.

The Multi-Tiered System of Supports for Behavioral Health and Wellness (MTSS-B) model was designed to promote the behavioral health of NH public school students. MTSS-B blends research-based school mental health practices and social-emotional learning with Positive Behavioral Interventions and Supports (PBIS; see <http://www.pbis.org>). PBIS teaches school-wide behavior expectations at the universal level (Tier 1), offers targeted group support for at-risk students (Tier 2), and provides intensive, individual services for the highest-need students (Tier 3).

## NH MTSS-B: Essential Components

- Tier 1 (universal), Tier 2 (targeted), Tier 3 (individualized) supports
- Shared leadership
- Data-based problem solving & decision making
- Layered continuum of supports for all students
- Evidence-based behavioral health assessment and intervention
- Universal screening and progress monitoring

NH's MTSS-B framework adds a central focus on social-emotional learning (SEL). SEL promotes the

healthy development and academic achievement of students.<sup>4</sup> When teachers integrate SEL with academic information, student understanding of the subject matter improves and problem behaviors decrease. SEL programming improves test scores while decreasing emotional distress, disruptive behavior, and substance use.<sup>5</sup> Students who participate in SEL programs fare better than their peers – up to 18 years later – in terms of social, emotional, and mental health.<sup>6</sup>

## Benefits of social-emotional learning

- Increased academic achievement
- Decreased problem behaviors
- Reduced emotional distress
- Decreased substance use
- Impacts are long-term

MTSS-B implementation has been evaluated in nine NH school districts that have been supported by federal grants funds from the Substance Abuse and Mental Health Services Administration (SAMHSA) through the NH Department of Education (NHDOE).

The NHDOE's Bureau of Student Wellness (BSW) was created to support local school districts in addressing dimensions of student wellness. Housed within BSW, the Office of Social and Emotional Wellness (OSEW) serves as the primary driver of the MTSS-B model and provides oversight, guidance, and support to NH districts involved in SEL and behavioral health projects and programs across the state. Under the MTSS-B umbrella, OSEW works with stakeholders toward the promotion of optimal social, emotional, and educational outcomes for children, focusing on areas such as early learning, mental health, trauma-responsive schools, youth and family engagement, and school climate.

# The challenges and rewards of high fidelity MTSS-B implementation

High fidelity MTSS-B implementation is associated with reduced student problem behavior and attrition; enhanced behavioral health, attendance, and academic achievement; and enhanced school climate. Fidelity has to do with intervention integrity – the degree to which a practice is implemented in a way that is faithful to the guiding model. Implementers tend to unwittingly “drift” from an intervention model in the absence of fidelity assessment.<sup>7,8</sup>

High-fidelity implementation of MTSS-B requires considerable investment of resources. It depends on provision of expert training; ongoing coaching; monitoring, evaluation and data-based decision-making; system-level administrative support; and reliable funding and human resource capacity.<sup>9</sup> In NH, the most common barriers to MTSS-B implementation are inadequate administrative support, staff turnover, insufficient MTSS-B coaching, and a lack of systematic collection of fidelity and outcome data.

## High fidelity MTSS-B results in fewer problem behaviors in NH schools

Schools often use office discipline referral (ODR) rates as a leading indicator of school climate and

### MTSS-B Fidelity and Problem Behaviors

Student problem behaviors predict aggression, substance use, defiance, behavior disorders, and delinquency. As schools' fidelity to the MTSS-B model improves, student problem behaviors decrease.

problem behaviors suggestive of student distress. ODRs are linked with student aggression, drug use, defiance, behavior disorders, and delinquency.<sup>10</sup> Out-of-school suspensions resulting from ODRs have been associated with higher risk for high school dropout.<sup>11</sup> Research suggests that MTSS-B is associated with reduced ODR rates, but only when implemented with fidelity.<sup>12</sup> Emerging cost modeling suggests that every \$1.00 invested in high fidelity MTSS-B can result in a fiscal savings of \$104.90.<sup>13</sup>

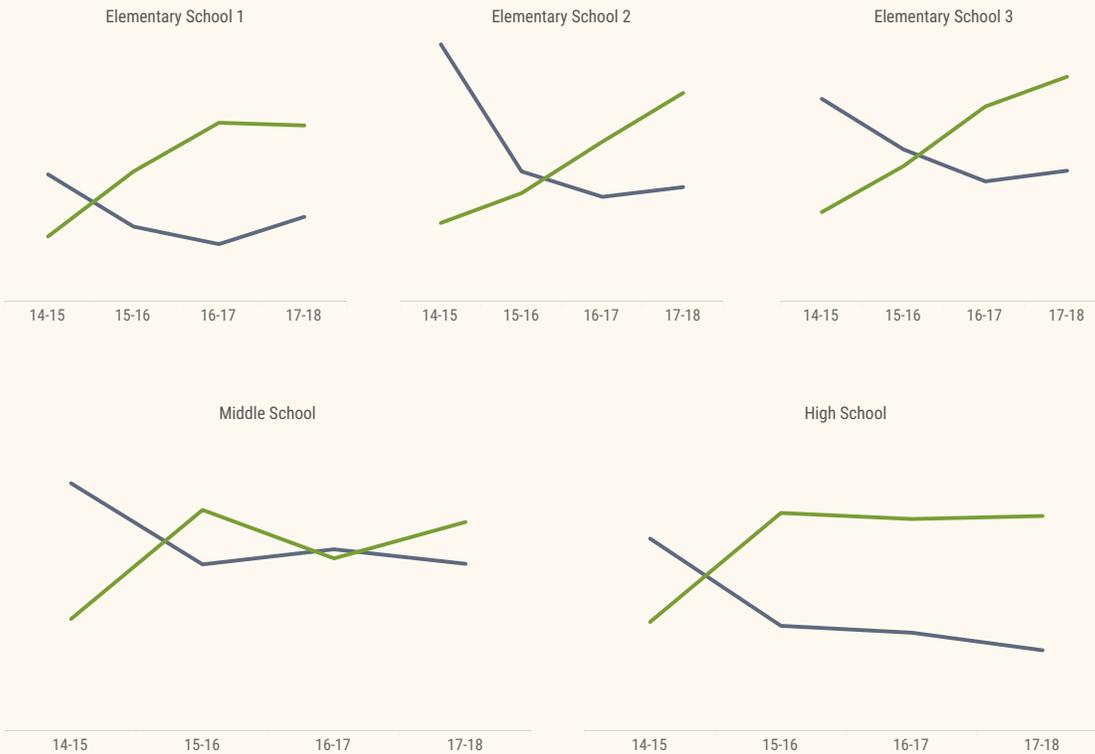
### Benefits of MTSS-B

- Reduced problem behaviors
- Reduced attrition
- Enhanced behavioral health
- Improved attendance
- Enhanced academic achievement
- Fiscal savings

Data from a NH school district where high-fidelity MTSS-B implementation has been a major focus over the past five years provides a striking illustration that is consistent with the scholarly evidence. In the graphic on the next page, the green lines reflect MTSS-B fidelity over time; a score of 70% is considered high fidelity.<sup>14</sup> The blue lines represent the incidence of ODRs over the same time period. In each school, the lines are mirror images; as MTSS-B fidelity increases, ODRs decrease, and vice versa. High-fidelity MTSS-B leverages ODRs and other school outcomes.

As MTSS-B fidelity goes up, problem behaviors (ODRs) go down

Overall MTSS-B Fidelity Score || ODRs per 100 students



This pattern holds in several other NH school districts implementing MTSS-B, albeit to a lesser extent. Few schools show the kind of steady gains in MTSS-B fidelity as those seen in the previous example, largely due to barriers such as administrative and staff turnover. In some schools, MTSS-B fidelity is improving, but tracking of ODRs is initially unreliable. When such schools ultimately adopt a systematic approach to recording ODRs, we often see an initial (artificial) spike in ODR rates that fades as MTSS-B fidelity continues to improve.

Improving ODR tracking in NH should be a priority. This requires consistent, systematic use of a data platform such as the School-wide Information System (SWIS), a confidential, web-based information system published by PBISApps.<sup>15</sup> SWIS is used to track student enrollment and demographic and behavior data, including office discipline referrals and suspensions, to support data-informed decision-making and quality improvement in schools. Cultivating a SWIS “champion” in each school – someone who understands and supports

consistent and accurate use of the system – also improves tracking of ODRs.

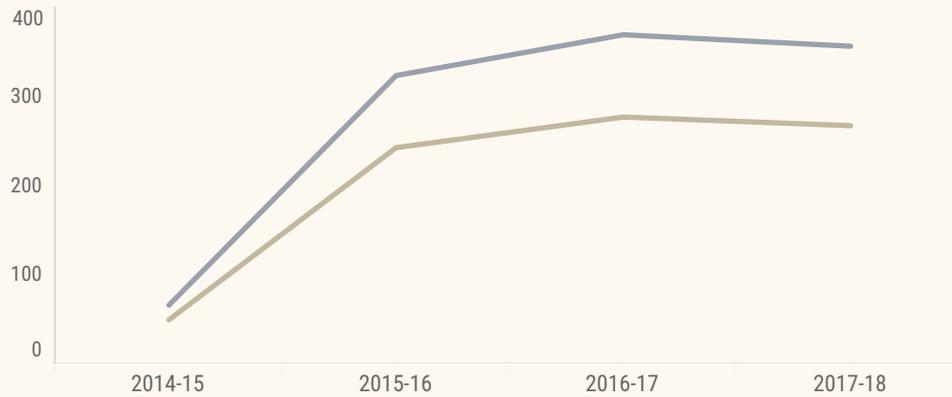
### Increased learning time in the classroom

Reducing the incidence of problem behaviors and ODRs through high-fidelity MTSS-B increases educational and administrative time in schools. All students, including the disruptive student, lose instructional time when problem behaviors interfere in the classroom. Based on established estimates,<sup>16</sup> the chart on the next page shows the total amount of administrator and student instructional time gained through reductions in ODRs per 100 students over time in one NH school district. The charts show that compared to baseline, time savings went up rapidly in the first year of MTSS-B implementation and have been sustained over time.

In total across all schools, this school district has saved about 1.86 days per student per year since implementation of MTSS-B in 2013-2014. Data from other school districts with less robust MTSS-B implementation show similar, if less dramatic, patterns.

*Gains in instructional and administrator time due to fewer problem behaviors persist over time*

**Instructional hours gained per 100 students due to fewer ODRs**  
Administrator | Student

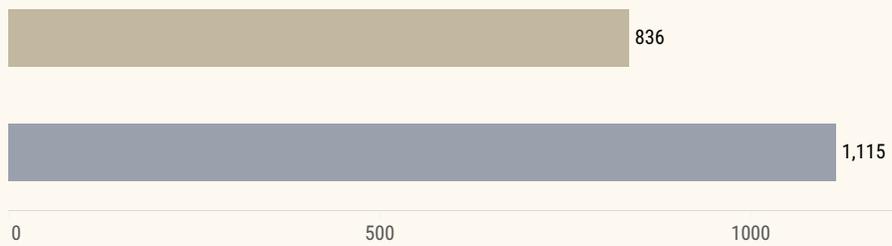


**Student instructional time gained**

Fewer ODRs translates into increased instructional time in the classroom for students. One school district has saved about 1.86 school days per student each year since 2013-2014.

*Massive savings of student instructional and administrator time since MTSS-B implementation*

**Total number of instructional hours gained per 100 students due to fewer ODRs**  
Administrator | Student



# Increasing access to mental health services and supports

Far too few children with behavioral health conditions get the help they need. Unmet social emotional needs place children at risk for a host of negative outcomes (e.g., poor attendance and performance in school, severe mental illness). The school dropout rate for students with severe emotional and behavioral needs is approximately twice that of other students.<sup>17</sup>

NH's MTSS-B emphasizes school-based universal promotion, prevention, and early-intervention services to support student mental health and well-being. School mental health programs overcome logistical barriers to care and decrease help-seeking stigma, which results in dramatic improvements in access to care.<sup>18</sup> In fact, 70 to 80% of children and adolescents who receive mental health services do so in schools.<sup>19</sup>

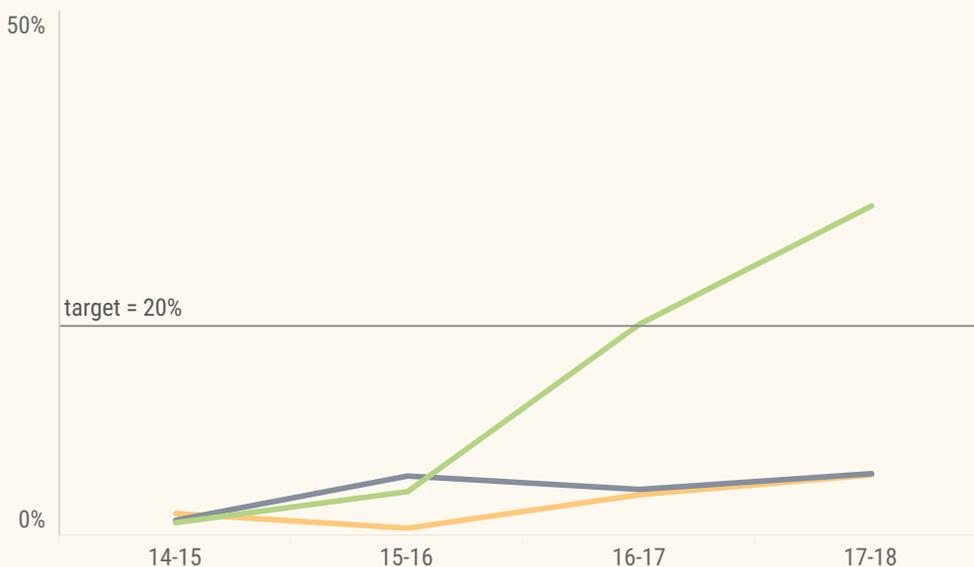
NH MTSS-B encourages two complementary strategies to improve mental health access. An "internal" strategy involves expanding school-based mental health services, including district-employed social workers and development of Tier 2 (targeted intervention) groups in schools. It is most appropriate for students with relatively mild to moderate behavioral health conditions. This strategy can dramatically improve school-based mental health access rates, as seen with District 2 (in green) in the figure below, which has emphasized internal hiring of school social workers.

### Improving mental health services for students

"Internal" strategies boost school-based mental health services through placement of district-employed clinicians

*District-employed staff dramatically boosts access to school-based mental health services*

District 1 || District 2 || District 3



The other "external" strategy is to increase mental health access through facilitated referrals to community-based mental health providers. Community-based mental health services are most appropriate for students requiring longer-term and/or more intensive forms of treatment than can

be provided in the school setting. Unfortunately, passive referrals (distributing brochures, lists/phone numbers of providers) from schools to community-based mental health often fail; only about 50% of those referred schedule an appointment, with attendance at the first appointment even lower, at

30 to 47%. Active, facilitated referrals (e.g., staff completing forms with families, making calls or appointments, assisting with transportation, helping families understand and communicate the reason for referral) are much more successful. One study observed double-digit improvements in referral success rates when schools followed-up with families and providers after a referral.<sup>20,21,22</sup>

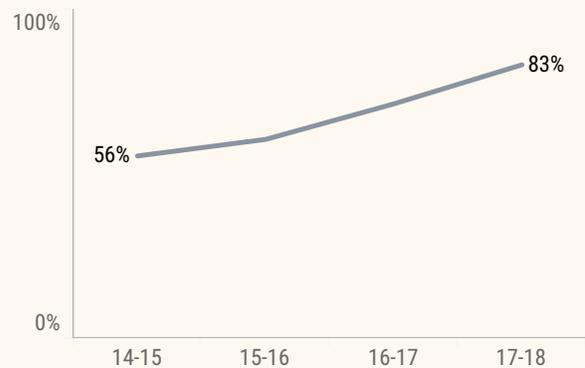
One NH MTSS-B school district, highlighted in the figure to the right, has invested heavily in developing – and tracking – active referrals to their local Community Mental Health Center. As a result, their referral success rate – and ultimately, student access to mental health services – has greatly increased.

#### **Facilitated referrals link students & families to community mental health**

Facilitated referral pathways, in which schools actively help remove barriers to services, increase the success rate of referrals to community mental health providers

#### *Facilitated referrals improve access to community mental health services*

Percent of referrals resulting in at least one mental health service



Ultimately, the internal and external strategies should be used in complementary fashion to meet the full range of student behavioral health needs. Beyond access, we need to ensure that the mental health services students receive – whether at school or in the community – are high quality. High quality services require training, administrative support, ongoing coaching/supervision, and performance monitoring.

# NH innovation: Integrating Wraparound in schools for the highest-need students

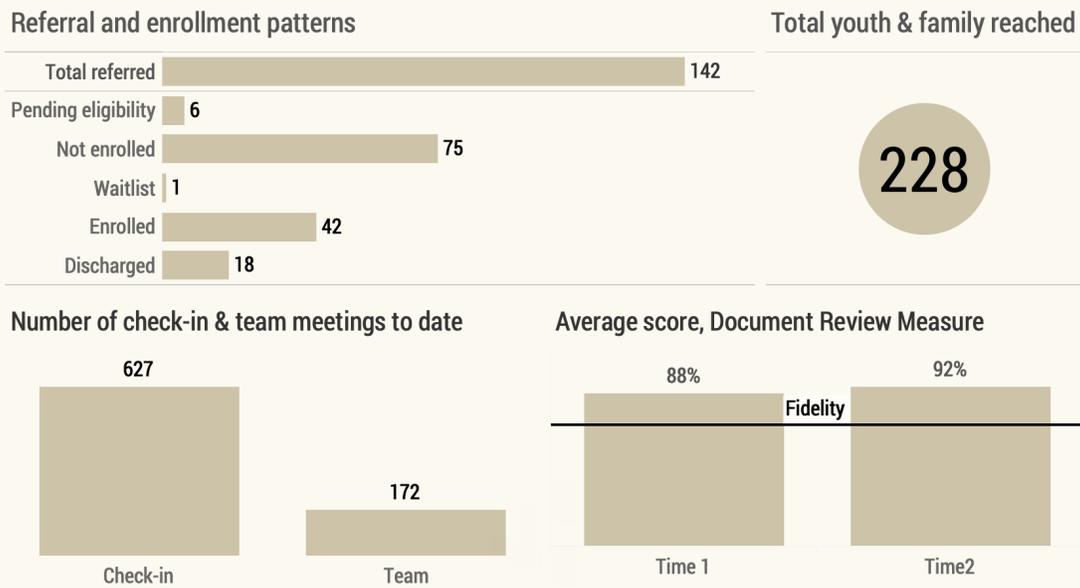
For students with serious behavioral health needs, traditional individualized Tier 3 services are sometimes not enough. These students and their families do not benefit from multiple types of services and have experienced or are at risk for out-of-district and/or out-of-home placement in residential or psychiatric hospital settings. Most come from impoverished, chaotic, and/or traumatic backgrounds. These families typically find it quite difficult to navigate NH's complex service system, and disconnection between their various service providers often results in misaligned care and unmet youth and family behavioral health needs.

Seven NH school districts are currently integrating NH's Wraparound model within the MTSS-B framework. To our knowledge, NH is only the second state to experiment with delivering school-based Wraparound. Wraparound is a youth-guided and family-driven care planning and coordination process, through which youth and their families develop a support team and develop a plan of care to meet their self-identified

needs and goals. The process is facilitated by a Coordinator with expertise in family- and youth-driven practice, cultural and linguistic competence, and community inclusion and participation. When implemented with fidelity, Wraparound keeps children and youth in their homes and home communities and achieves positive outcomes for the most vulnerable families.<sup>23,24</sup>

Wraparound can be successfully implemented in NH schools, as shown in the figure below. Since September 2017, 142 youth have been referred to and 60 (43%) enrolled in school-based Wraparound (top left), touching the lives of 228 youth and family members (top right). Youth and their families have engaged in almost 800 Wraparound meetings (bottom left), with demonstrated fidelity to the NH model (as measured by document review, bottom right). Youth and family outcomes look promising as well, although we need more time and data to have confidence in our Wraparound outcome estimates.

*NH schools engaging large numbers of youth and family members in high fidelity Wraparound*



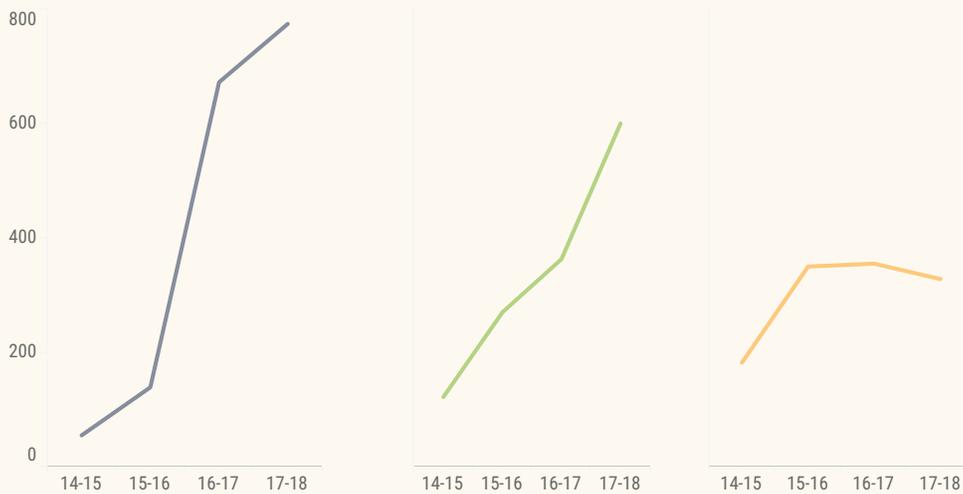
# Engaging families in school-home partnerships

The NH MTSS-B framework emphasizes linking schools to families and communities. Family involvement in their children's education results in better academic achievement, improved behavior and social skills, and increased graduation rates.

Community members also serve as role models and supports for students.<sup>25</sup> Many school districts have greatly increased their outreach to families over the course of MTSS-B implementation, as highlighted in the figure below.

*Family engagement outreach increases dramatically with MTSS-B implementation*

District 1 || District 2 || District 3



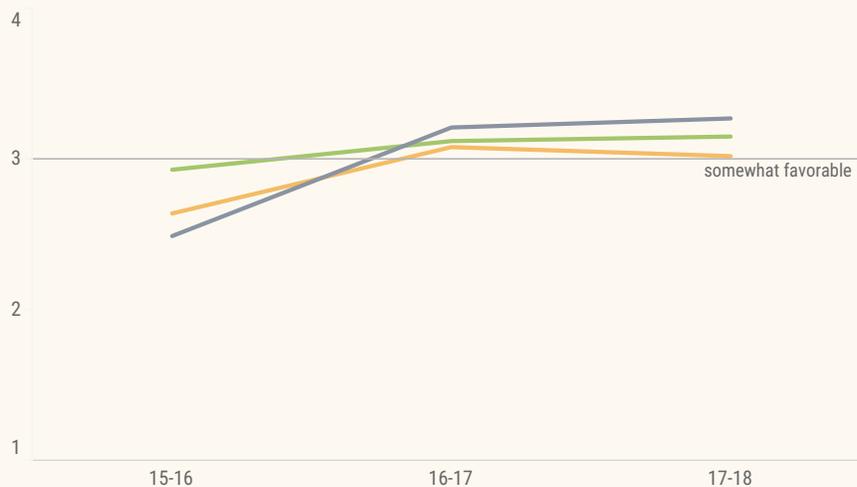
This increased outreach appears to be paying off. Over the same time period, self-reported family

involvement in school has improved in these same districts, as shown in the figure below.

*Family involvement with school improves with increased outreach to families*

District 1 || District 2 || District 3

Target = score of 3 or higher



The next step is to move beyond providing (and measuring) additional family outreach activities to a more strategic and evidence-informed approach to family engagement. Family engagement efforts and measurement will be even more effective – and cohesive and efficient – if guided by an evidence-informed framework. Fortunately, OSEW recently adopted the Dual Capacity-Building Framework,<sup>26</sup> a set of research-based guidelines for developing

effective family engagement and home-school partnership strategies and practices also endorsed by the U.S. Department of Education. We recently developed a tool to measure both fidelity and outcomes of dual-capacity family engagement practices in schools. The tool will be piloted with existing MTSS-B school districts in Spring 2019 before disseminating it more broadly to other NH school districts implementing MTSS-B.

# Prevention of risk behaviors

MTSS-B seeks to prevent substance use and other risky behaviors. At the state level, OSEW has developed infrastructure and tools and opened up new prevention opportunities with Regional Public Health Networks. MTSS-B schools implement evidence-based interventions that target established risk and protector factors. Some districts are implementing Project SUCCESS, a promising student assistance program developed to support healthy living and undermine substance misuse among students. Districts have also contracted with Licensed Alcohol and Drug Counselors to provide treatment for student substance misuse.

Data from the most recent Youth Risk Behavior Surveillance System (YRBSS) survey in 2017 indicate that illicit use of most substances is trending down.

For example, the percentage of high school students reporting past 30-day alcohol has decreased both nationally and in NH, with an average drop of about 3% every two years since 2007.<sup>27</sup> Data from NH MTSS-B districts closely mirrors the national trend. Reduced substance use is clearly welcome news, though it is not clear what forces are contributing to this trend. Districts might increase their coordination and collaboration with community entities such as Regional Public Health Networks, local prevention coalitions, and public safety organizations to magnify the reach and impact of their efforts in this area.

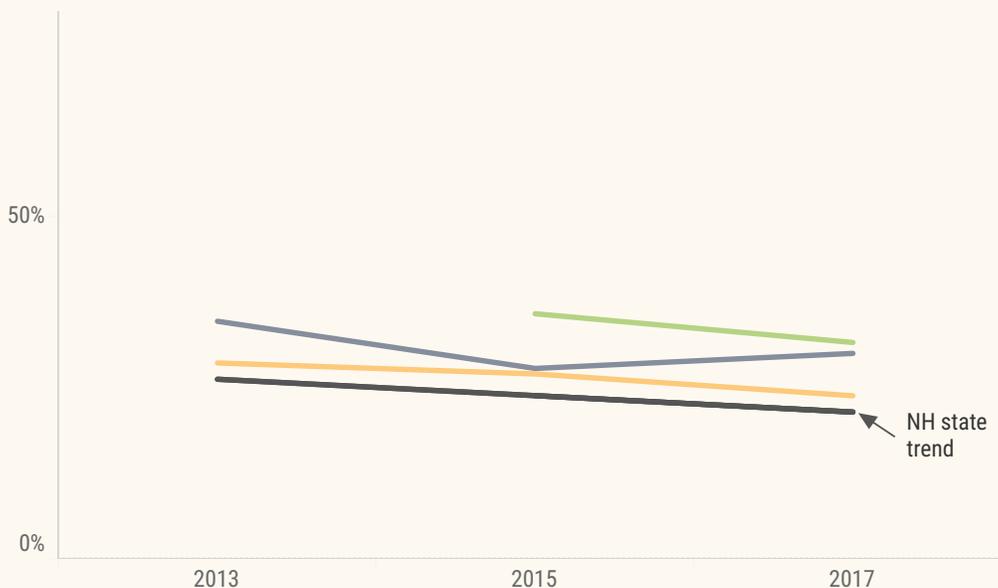
## Student substance use trending down

Local MTSS-B school substance use rates parallel the NH state downward trend.

*Past 30-day alcohol use among selected NH MTSS-B school districts tracks NH state trend*

District 1 || District 2 || District 3 || NH State

Percent of students who reported consuming/using alcohol in the past 30 days (GPRA 4)  
Target = at or below NH state trend



# Addressing the impact of childhood trauma and adverse experiences

Adverse and traumatic childhood experiences are widespread. More than 1 in 5 adults report a history of 3 or more adverse childhood experiences (ACES). Nearly half of children under 17 in the U.S. experience at least one ACE; 22.6% experience two or more. Children in NH parallel national trends, with 33% with one or two ACEs and 12% with three or more.<sup>28</sup>

As the number of ACEs increases, so do negative outcomes such as academic underachievement, depression, substance misuse, disability, unemployment, and physical maladies.<sup>29</sup> Chronic, frequent, and/or strong adversity evokes prolonged hyperactivation of the stress response system, triggering a cascade of developmental failures that increases the risk of serious health and mental health problems.

Trauma suppresses the academic and social development of children.<sup>30</sup> Children who have experienced toxic stress show up at school hypervigilant to perceived threats and can respond with aggression, disengagement, dissociation, and other disruptive behavior as a means of self-protection.

## Trauma-responsive schools effort inspires holistic approach to teaching

“We’ve known for a long time that kids are not available to learn when they are carrying stress and worry associated with all of the ACEs that they’ve experienced. This learning community has validated and reminded us all that we must meet the emotional needs of our students and provide a safe space for them to unload their stresses, seek guidance from trusted adults, and be able to focus on their education once they are available to do so.”

As such, schools are a prime setting in which to support children’s self-regulatory capacity – and in doing so, also support teachers who are at risk of burnout, compassion fatigue, and secondary traumatization. Educators and school communities can foster attuned, caring, and

supportive relationships that offer students and staff paths to resilience and increased availability for learning.

Many NH school districts have been working to implement trauma-responsive practices to promote social and emotional safety for students. This includes helping school staff to understand the impacts of and neuroscience behind trauma and address student needs that underlie distressed behaviors, providing access to comprehensive, evidence-based mental health supports and services, and improving school climate as part of the overarching MTSS-B framework. Through a Learning Community effort known as Project GROW, OSEW has been providing expert consultation and technical assistance to districts in trauma-responsive practices at all levels: district-wide, systems change; school-level adoption of new practices and procedures; classroom-level instructional and student support techniques, and individual teacher and specialist professional development.

We have developed a set of fidelity benchmarks, the Trauma-Responsive School (TRS) Fidelity Tool, for school districts to self-assess their progress adopting a trauma-responsive framework. Participating districts have conducted a baseline assessment using the TRS Fidelity Tool and will reassess annually to determine areas of continued development. In addition to measuring fidelity, we are supporting school districts in measuring outcome indicators relevant to their trauma-responsive work. For students who are directly targeted by in-school trauma-responsive supports, school districts can track specific indicators of student distress (e.g., office discipline referrals, suspensions, attendance, nurse visits, etc.).

The words of school administrators and teachers participating in Project GROW’s Learning Community speak to the impact the collaborative has had on their understanding of how to work with students in distress, and subsequently, better

support student's social emotional and academic learning. As the figure below shows, the vast majority of participants in Project GROW have reported trauma-responsive practice change in their schools since the start of the collaborative. The

work has clearly felt transformative for the majority of participants and as evaluation data is gathered over time, we hope to soon demonstrate the positive impact of this approach on students.

### Project GROW inspires practice change

Percentage of Learning Community endorsing at least some GROW-inspired practice change



### Trauma-responsive schools inspires practice change

"I have changed my practices as an administrator relative to: 1) crisis response; 2) discipline; 3) supporting staff around parallel process and secondary trauma; 4) influence on district system of care work; 5) working with classroom teachers to help redesign classrooms to be more trauma sensitive – e.g., quiet places, morning meetings, check-ins by teachers, etc.; 6) providing students with more attunement opportunities and unconditional positive regard when they are struggling; 7) parallel process with families and more professional development opportunities for families in the area of mental health and social and emotional learning."

## MTSS-B: The take home

NH's MTSS-B incorporates foundational, evidence-based practices with newer, innovative frameworks such as trauma-responsive school practices and high-fidelity Wraparound in the service of student wellness and optimal learning. Local data from participating districts, against a backdrop of scholarly evidence, suggest that those NH schools implementing MTSS-B with fidelity achieve high-leverage educational and social emotional learning outcomes. When MTSS-B is implemented well, indicators of student distress (i.e., problem behaviors) decrease. This has important implications for prevention of potential downstream problems such as substance misuse,

violent behavior, mental illness, attendance and discipline problems, and ultimately, school failure.

It takes considerable resource and effort to implement the MTSS-B framework with fidelity. Building the human capacity necessary for full adoption of the model within a school, and even more so across an entire district or state, is crucial. A guiding, evidence-based state-level model, on-the-ground training and staffing, administrative buy-in and support, data-based decision-making, and access to ongoing, expert coaching are essential components of the effort. Where these ingredients are in place, students are better positioned to succeed.

# References

- <sup>1</sup> University of Maryland School of Medicine. (n.d.) The Impact of School Mental Health: Educational, Social, Emotional, and Behavioral Outcomes. Retrieved from <http://csmh.umaryland.edu/media/SOM/Microsites/CSMH/docs/CSMH-SMH-Impact-Summary-July-2013-.pdf>
- <sup>2</sup> Lehr, C. A., Johnson, D. R., Bremer, C. D., Cosio, A., & Thompson, M. (2004). Increasing Rates of School Completion: Moving from Policy and Research to Practice. A Manual for Policymakers, Administrators, and Educators. Essential Tools. National Center on Secondary Education and Transition, University of Minnesota (NCSET).
- <sup>3</sup> Bazelon Center for Mental Health Law, Fact Sheet #1 Why states and communities should implement school-wide positive behavior support integrated with mental health care [www.bazelon.org](http://www.bazelon.org)
- <sup>4</sup> Payton, J. W., Graczyk, P., Wardlaw, D., Bloodworth, M., Tompsett, C., & Weissberg, R. (2000). Social and emotional learning: A framework for promoting mental health and reducing risk behavior in children and youth. *Journal of School Health*, 70, 179–185.
- <sup>5</sup> Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development*, 82(1): 405–432.
- <sup>6</sup> The collaborative for academic, social, and emotional learning: [www.casel.org](http://www.casel.org)
- <sup>7</sup> Bruns, E. J., Weathers, E. S., Suter, J. C., Hensley, S., Pullmann, M. D., & Sather, A. (2014). Psychometrics, reliability, and validity of a Wraparound Team Observation Measure. *Journal of Child and Family Studies*, 1–13. doi:10.1007/s10826-014-9908-5
- <sup>8</sup> Schoenwald, S. K., Garland, A. F., Chapman, J. E., Frazier, S. L., Sheidow, A. J., & Southam-Gerow, M. A. (2011). Toward the effective and efficient measurement of implementation fidelity. *Administration and Policy in Mental Health and Mental Health Services Research*, 38(1), 32–43. doi:10.1007/s10488-010-0321-0
- <sup>9</sup> Fixsen, D.L., Naoom, S.F., Blase, K.A., & Wallace, F. (2007). Implementation: The missing link between research and practice. *APSAC Advisor Excerpt*, 19(1–2), 4–11.
- <sup>10</sup> Horner, R. H., Sugai, G., Smolkowski, K., Eber, L., Nakasato, J., Todd, A. W., & Esperanza, J. (2009). A randomized, wait-list controlled effectiveness trial assessing School-Wide Positive Behavior Support in elementary schools. *Journal of Positive Behavior Interventions*, 11(3), 133–144. <https://doi.org/10.1177/1098300709332067>
- <sup>11</sup> Swain-Bradway, J., Lindstrom Johnson, S., Bradshaw, C., and McIntosh, K. (2017). What are the economic costs of implementing SWBIS in comparison to the benefits from reducing suspensions? Retrieved from [www.pbis.org](http://www.pbis.org) on November 22, 2017.
- <sup>12</sup> Simonsen, B., Eber, L., Black, A. C., Sugai, G., Lewandowski, H., Sims, B., & Myers, D. (2012). Illinois statewide positive behavioral interventions and supports: Evolution and impact on student outcomes across years. *Journal of Positive Behavior Interventions*, 14(1), 5–16.
- <sup>13</sup> Swain-Bradway, Lindstrom Johnson, Bradshaw, & McIntosh, (2017).
- <sup>14</sup> Algozzine, B., Barrett, S., Eber, L., George, H., Horner, R., Lewis, T., Putnam, B., Swain-Bradway, J., McIntosh, K., & Sugai, G. (2014). School-wide PBIS Tiered Fidelity Inventory. OSEP Technical Assistance Center on Positive Behavioral Interventions and Supports.
- <sup>15</sup> <https://www.pbisapps.org/Pages/Default.aspx>
- <sup>16</sup> Barrett, S. & Scott, T. (2006). Evaluating time saved as an index of cost effectiveness in PBIS schools. Retrieved from <https://www.pbis.org/common/cms/files/Newsletter/Volume3%20Issue4.pdf>
- <sup>17</sup> Lehr, C. A., Johnson, D. R., Bremer, C. D., Cosio, A., & Thompson, M. (2004). Increasing Rates of School Completion: Moving from Policy and Research to Practice. A Manual for Policymakers, Administrators, and Educators. Essential Tools. National Center on Secondary Education and Transition, University of Minnesota (NCSET).
- <sup>18</sup> Bringewatt, E., & Gershoff, E. (2010). Falling through the cracks: Gaps and barriers in the mental health system for America's disadvantaged children. *Child Youth Services Review*, 32, 1291–1299.
- <sup>19</sup> Rones, M., & Hoagwood, K. (2000). School-based mental health services: A research review. *Clinical child and family psychology review*, 3(4), 223–241.
- <sup>20</sup> Kessler, R. (2012). Mental Health Care Treatment Initiation When Mental Health Services are Incorporated into Primary Care Practice. *Journal of the American Board of Family Medicine*, 25(2), 255–259. doi:10.3122/jabfm.2012.02.100125
- <sup>21</sup> The National Center on Health. (n.d.). Facilitating a Referral for Mental Health Services for Children and Their Families Within Early Head Start and Head Start (EHS/HS). Retrieved September 20, 2017, from <https://eclkc.ohs.acf.hhs.gov/sites/default/files/pdf/facilitating-mental-health-referral-508.pdf>
- <sup>22</sup> Bazelon Center for Mental Health Law. (n.d.). Fact Sheet on School Mental Health Services. Retrieved from <http://somvweb.som.umaryland.edu/Fileshare/SchoolMentalHealth/Resources/Fam/SMH%20Services-%20Bazelon.pdf>

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<sup>23</sup> Suter, J. C., & Bruns, E. J. (2009). Effectiveness of the Wraparound Process for Children with Emotional and Behavioral Disorders: A Meta-Analysis. *Clinical Child and Family Psychology Review*, 12(4), 336–351. <https://doi.org/10.1007/s10567-009-0059-y>

<sup>24</sup> Stroul, Beth. "Return on Investment in Systems of Care for Children with Behavioral Health Challenges: A Look at Wraparound." *The TA Telescope*: Vol. 1, Issue 2, Winter 2015.

<sup>25</sup> National Resource Center for Mental Health Promotion and Youth Violence Prevention. (1999). *SS/HS Framework*. Retrieved September 20, 2017 from <http://www.healthysafechildren.org/sshs-framework>

<sup>26</sup> Mapp, K. L., & Kuttner, P. J. (2013). *Partners in education: A dual capacity-building framework for family-school partnerships*. Washington, DC: U.S. Department of Education, SEDL. Retrieved from <http://www2.ed.gov/documents/familycommunity/partners-education.pdf>

<sup>27</sup> Centers for Disease Control and Prevention (CDC). 1991–2015 High School Youth Risk Behavior Survey Data. Available at <https://www.cdc.gov/healthyyouth/data/yrbs/results.htm>. Accessed on October 14, 2017.

<sup>28</sup> Moore, K., Sacks, V., Bandy, T., & Murphey, D. *Child Trends Factsheet: Adverse Childhood Experiences and the Well-Being of Adolescents*. (July 2014).

<sup>29</sup> [https://www.cdc.gov/violenceprevention/acestudy/ace\\_brfss.html](https://www.cdc.gov/violenceprevention/acestudy/ace_brfss.html)

<sup>30</sup> Felitti, V. J. et. al. (1998). Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study. *American Journal of Preventative Medicine*, 14(4), pp 245–258.