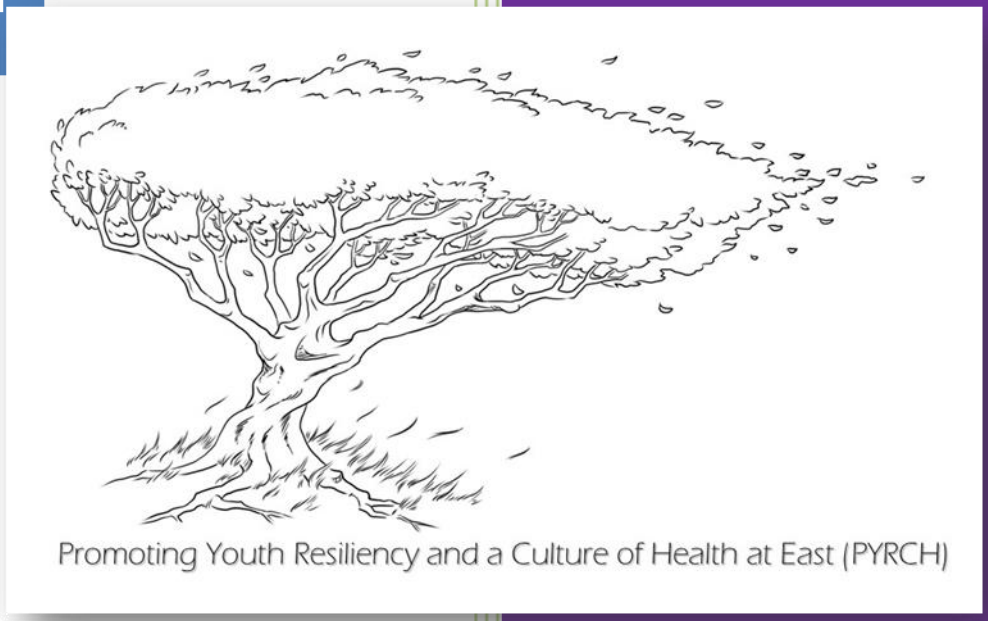
# 2018

# PROMOTING YOUTH RESILIENCE AND A CULTURE OF HEALTH AT EAST




**Addendum to GRHF / Interim Narrative Report**

July 2018

The PYRCH project is a collaborative effort between University of Rochester Clinicians and East Lower and Upper school Faculty and Administration. The three year project is being supported through funding from the Greater Rochester Health Foundation and the University of Rochester. The project has three primary goals:

- Increase youths' emotional resiliency by utilizing in-school group therapy for students with multiple adverse childhood experiences.
- Increase screening for sexually transmitted infections by utilizing a universal screening protocol.
- Increase consumption of a nutritious breakfast for lower school scholars by initiating a Breakfast-in-the-classroom program.

As of the end of the 2017-2018 school year, the PYRCH project had met or exceeded outcome goals in all project domains. The following report explores those outcomes and the processes used to achieve improvements for scholars and staff at East.

**Activity / Goal 1:** Group therapy for East students with adverse childhood experiences and teacher training re: trauma-informed approaches—to improve student resiliency & outcomes.

**BACKGROUND**

It is well established that children's physiological functioning can be altered by chronic or severe adverse childhood experiences (ACEs), which include conditions associated with extreme poverty: maltreatment, family dysfunction, and environmental trauma.

In the short-term, ACEs damage children's developing immunologic, neurologic, emotional, and cognitive systems. Long-term effects in adulthood are severe: adults with multiple ACEs have higher rates of alcohol and substance abuse, depression, lung cancer, ischemic heart disease, suicide attempts, and early death. In adolescents with multiple ACEs, negative health behaviors and poor health outcomes have been shown.

*"ACEs damage children's developing immunologic, neurologic, emotional, and cognitive systems."*

Specifically, youth who grow up with a prevalence of ACEs are more likely to be sexually active at a younger age, have multiple sexual partners, have an increased likelihood for teenage pregnancy, and are more likely to have sexually transmitted diseases.

### ACE Sample Questions

Did you often feel that … You didn't have enough to eat, had to wear dirty clothes, and had no one to protect you? or Your parents were too drunk or high to take care of you or take you to the doctor if you needed it?

Did a parent or other adult in the household often … Swear at you, insult you, put you down, or humiliate you? or Act in a way that made you afraid that you might be physically hurt?

**ASSESSMENTS**

Students in grades 6-8 completed resiliency screening (Child and Youth Resilience Measure- Short Form) at the beginning and end of the 2017-18 school year to identify overall changes in youth resiliency. At the beginning of the school year, students also completed adverse childhood experiences (ACEs) screening to identify risk. Using the ACE-Q, students identified the presence of 10 ACEs in their lives which include 5 types of maltreatment (physical, sexual, and verbal abuse and emotional and physical neglect), 5 types of family dysfunction (criminal behavior in the home, parental separation, substance abuse or mental illness, and domestic violence), and other traumatic experiences (poverty, neighborhood violence and peer violence). Those at highest risk (reporting 3 or more ACEs) met with the project social worker to discuss interest in our small group mindfulness-based cognitive behavior therapy (MB-CBT) using a modified adolescent dialectical behavior therapy curriculum. Data was collected on the number of students who were eligible, participated, and completed the 20 week curriculum. Students who participated in MB-CBT completed extended resiliency (Child and Youth Resilience Measure-Full Form) and mindfulness assessments (Child and Adolescent Mindfulness Measure) at the beginning, middle, and end of the 20 week program.

**RESULTS**

**East Students Number of ACEs**

| | **2016-2017 Grades 6 & 7** | **2017-2018 Grades 6 - 8** |
|---|---|---|
| **# of Adverse Childhood Experiences (ACE)** | **N (%) with ACE Total N = 158** | **N (%) with ACE Total N = 227** |
| **0** | **N=28 (18%)** | **N=31 (12%)** |
| **1 or more** | **N=52 (33%)** | **N=46 (20%)** |
| **2 or more** | **N=25 (16%)** | **N=44 (19%)** |
| **3 or more** | **N=13 (8%)** | **N=33 (15%)** |
| **4 or more** | **N=40 (25%)** | **N=74 (33%)** |

**East Students Types of ACEs**

| | 2016-2017 Grades 6 & 7 | 2017-2018 Grades 6 - 8 |
|---|---|---|
| **Adverse Childhood Experience (ACE)** | **N (%) with ACE type Total N =158** | **N (%) with ACE type Total N =227** |
| **Verbal abuse** | **28%** | **29%** |
| **Physical abuse** | **20%** | **28%** |
| **Sexual abuse** | **1%** | **6%** |
| **Physical neglect (unstable food/housing)** | **10%** | **6%** |
| **Emotional neglect (felt unloved/unsafe)** | **16%** | **26%** |
| **Family interpersonal violence** | **15%** | **18%** |
| **Household substance abuse** | **18%** | **31%** |
| **Family mental illness** | **14%** | **19%** |
| **Criminal behavior in home** | **33%** | **45%** |
| **Parental separation** | **62%** | **67%** |

# ASSESSMENT HIGHLIGHTS

- **Almost all 7-8th grade scholars have at least one ACE**

- **About half of 7-8th grade scholars have multiple ACEs**

**RESILIENCY GROUPS**

Scholars at highest risk (reporting 3 or more ACEs) met with the project social worker to discuss interest in our small group mindfulness-based cognitive behavior therapy using a modified adolescent dialectical behavior therapy curriculum. Project staff collected data regarding number of students who were eligible, participated, and completed the 20 week curriculum. Students who participated in MB-CBT completed extended resiliency (Child and Youth Resilience Measure-Full Form) and mindfulness assessments (Child and Adolescent Mindfulness Measure) at the beginning, middle, and end of the 20 week program.

In the first year of the program (2016-2017 school year), treatment was targeted at 6-7th grade scholars only. We made many cultural and "trauma-informed adaptations" to the intervention over the first year of treatment implementation, and found students required additional time to process the trauma they have or continued to experience. Because of this, students completed about half of the content in this current school year. We also found that 6th graders had difficulty understanding the cognitive-based components and demonstrated less attention and tolerance for these hour long "talk therapy" sessions. As a result, for this school year our small group therapy was provided to 7th and 8th grade students. With this, students received half the treatment in 7th grade, and complete the second half in 8th grade.

**RESILIENCY GROUP RESULTS**

A total of 140 students were eligible to attend small group treatment. All students agreed to attend; 36 students were withdrawn from the group at some point in treatment for various reasons, including: conflict with alternate class times, leaving the school or district, and inappropriateness for the group setting.

**Sample Resiliency Statements**

I have people I look up to.

Getting an education is important to me.

I feel I belong at my school.

My family stands by me during difficult times.

I am treated fairly in my community.

I have opportunities to develop useful life skills.

In total, we provided 24 separate groups that ran throughout the school year. As each group met on a different day of the revolving schedule, the total number of sessions each group was provided varied depending on where holidays and exams fell. The total number of sessions provided ranged from 14 to 20, with an average of 18. Overall student attendance at groups was high. Including those who withdrew, on average, students completed 80% of sessions. The average student attended 18 group sessions.

> "It provided a space to learn about my own background and be able to hear others share their background, I could give advice."(Male, 8th grade)

Of those students who completed treatment, we found changes in their individual level resilience measured from the beginning of the year to the end. These effects match our findings from the previous year, where we also found that, when comparing their resilience to that of other students in 6th and 7th grade (those with lower ACE scores), students attending treatment had lower overall resiliency at the beginning of the school year, but by the end of the school year these differences no longer existed. Thus, not only did students attending group treatment improve in their individual resiliency, they improved enough to function at similar levels to their lower risk peers.

> "(Trauma group) helps because we're the same age and if we can relate in our struggles we can be stronger in our community, we give and get advice." (Female, 8th grade)

**FOCUS GROUPS**

At the end of year one, we met with two groups of students attending treatment to obtain perspectives on whether this treatment has been effective and why. At the end of this school year, we met with an additional four groups and found very similar results. These students felt very strongly that the treatment has helped them, and indicated having a safe place to discuss their feelings and identify with others who have similar experiences were key. Regarding the specific skills learned in group, students told us:

"Validating; I would understand (family members) situations and that I could make their life easier depending on how I react to them. Our situation changed and we don't argue as much." (Male, 7th grade)

"I learned how to keep myself under control; take deep breaths." (Female, 7th grade)

"Breathing, I had a test and I was nervous but it calmed me down and I got a good grade."(Female, 7th grade)

"Built more confidence; it's ok to be myself. Just being around others (who have experienced trauma) gave me confidence." (Male, 8th grade)

Reflecting on suggestions from the first year, some students suggested that their teachers should have group to learn to "clear their thoughts, take deep breaths, and stay calm" (female, 7th grade).
Given this information, and feedback we received from teachers that first year, we implemented an intensive support group for teachers, as a way to address vicarious trauma and build teachers ability to serve as a resource for these high risk students. These mindfulness-based groups provided similar content to what students learned as a resiliency building strategy. In total, 8 teachers enrolled for support and 6 completed groups. These teachers appreciated the pilot groups, and we will continue to provide in the third year of our program, enrolling teachers in multiple groups throughout the school year.

*"What was the most useful skill or skills you learned in group this year and why?"*

"Mindfulness, think before you act. Thinking about the outcome is hard to do because in the moment you want to leap." (Male, 8th grade)

**Activity / Goal 2:**

Universal chlamydia screening in the East School-Based Health Center—to improve screening & treatment rates

**BACKGROUND**

Teens are at high risk for STIs, including chlamydia, with increased sexual activity. Nationally, chlamydia is the most frequently reported infectious disease and adolescents have the highest prevalence for this STI of any other age group. These risks are exacerbated when teens lack access to medical care. Many teens do not receive these screenings in their Primary Care Offices due to confidentiality concerns.

**UNIVERSAL SCREENING PROTOCOL**

Starting September 2016, all students, ages 13 and older, were asked to submit a urine sample or vaginal swab for possible testing for sexually transmitted infections (STIs), including chlamydia, at visits to the SBHC, regardless of chief complaint. As per routine, students were asked about their sexual history by the SBHC provider during the course of their visits and self-reported sexual activity was documented in the patient's electronic medical record. Students with multiple visits were rescreened every 2-3 months or whenever they presented with symptoms of a possible STI. Additionally, 37 students were asked to complete a two question, post-visit questionnaire to evaluate patient acceptability of this universal STI screening protocol. Data on the number of students who were seen in the health center, completed a screening form, and the results of screening and treatment, were de-identified and entered into the project database (Redcap)for quality assurance.

"Communication and trust are critical. When young people are assured that health care providers will respect their right to confidentiality, they are more likely to seek reproductive and sexual health care."

**REFERENCE CARD: MINORS' RIGHTS TO CONFIDENTIAL REPRODUCTIVE AND SEXUAL HEALTH CARE IN NEW YORK (2013)** NYCLU

**RESULTS**

The table below illustrates the numbers of patients reporting sexual activity and the percent receiving STI screening and treatment for positive results. Data is presented for our baseline year, the 2015-2016 school year, as well as results for year 1 and year 2 of our intervention.

The protocol for universal STI screening for all patients 13 years of age and older has improved screening rates from a baseline of 20% of sexually active patients to the current rate of 81%. The rate of positive chlamydia infections is 10% with 100% of those infections being treated by the School-Based Health Center.

| STI Data Name | 2015-2016- prior to universal screening | 2016-2017- Year 1 | 2017-2018- Year 2 |
|---|---|---|---|
| Total enrolled in SBHC | 1250 | 1127 | 912 |
| Total reporting sexual activity | 574 | 568 | 419 |
| Total screened for STIs | 136 | 459 | 413 |
| Unique # screened | 112 (20% of sexually active) | 383 (67% of sexually active) | 340 (81% of sexually active) |
| Total testing positive for STI | 8 (7%) | 38 (10%) | 34 (10%) |
| Total treated in SBHC | 8 (100%) | 38 (100%) | 34 (100%) |

Patient surveys to measure acceptance of the universal screening procedure have been conducted each year. Patients reported high acceptance of the universal screening procedure (94%) and 86% reported they did not feel pressured to provide a urine sample for testing.

**Activity / Goal 3:**

Implementation of a classroom-based First Class Breakfast Program—to improve participation in the School Breakfast Program / assure healthy breakfast for more students

**BACKGROUND**

Poor nutrition and food insecurity associated with conditions of poverty inhibit learning and development**.** The literature attests to the critical importance of a high-quality breakfast to children's ability to participate and to learn, as well as to their performance on tests, and their likelihood of attending school and meeting behavior standards. Low income children with hunger are more likely to have repeated a grade, received special education services, or received mental health counseling, than low-income children who do not experience hunger. Those who eat a meal before school do better on math exercises get higher scores on standardized tests, and have better attendance, punctuality, and behavior. Studies have shown that they have improved concentration, alertness, comprehension, memory and learning. Moreover, students who increase their consumption of school breakfasts show improvements in depression, anxiety and hyperactivity.

**METHODS**

At the start of the 2016-2017 school year scholars in the Lower School participated in a First Class Breakfast (FCB) program. Food was delivered to the academic wing via Cambros and scholars were able to pick up their breakfast in the hallway and proceed with it to their first period class. We worked closely with the First Class Breakfast team to optimize program operations. The First Class Breakfast team consists of the Rochester City School Food Service Directors and Dietitian as well as the East lower

*"How do you feel about being asked to submit a urine sample for STI testing?"*

*" I don't mind because I know it's just a regular part of my healthcare."*

school principal, East food service manager and grant dietitians.

New breakfast programs continue to evolve and in the 2017-2018 school year, a new "Grab and Go" breakfast program was offered to high school students who arrived late to school. We noted a simultaneous increase in the appeal of the "Grab and Go" breakfast and slight decrease in FCB participation rates. We wanted to determine which breakfast program would best meet the needs of the students in the lower school and administered a survey to determine preferences. The Breakfast Program survey results indicated that the majority of the students (55%) preferred to maintain more hot

items in the breakfast menu even at the expense of being offered an alternate item. A significant portion (31%) of the students did indicate they would like an alternate choice at breakfast even with more cold items on the menu. Based on the survey, the team decided that as of the start of the 2018/2019 school year, the lower school will change from a First Class Breakfast program to a Grab and Go program. Both the lower and upper school will have an improved menu with streamlined menu planning and delivery methods.

In addition to evaluating the current breakfast program, we continued to focus on menu development and marketing strategies throughout the year. This was accomplished by adding three new items to the menu and decreasing the less popular menu items. In regards to marketing efforts, we had several promotional events, a variety of social media platforms, as well as parent engagement through hosting family breakfasts.

**RESULTS – Breakfast Participation Rates**

| **Participation Rates** | 2015-2016 | 2016-2017 | 2017-2018 |
|---|---|---|---|
| First Marking Period = | Na | 64% | 53% |
| Second Marking Period = | Na | 69% | 62% |
| Third Marking Period = | Na | 65% | 62% |
| Fourth Marking Period = | Na | 67% | 63% |
| **Average for the year =** | **30%** | **66%** | **60%** |

***We anticipate an increase in participation rate with the new Grab and Go breakfast program due to the increase in the variety and options in the menu. We will continue to make recommendations in menu development based on the feedback from all of the surveys at East and observations from other successful school districts. We will continue to meet monthly with the team to continue to evaluate the menu, delivery process and marketing efforts of the new breakfast program.***

**FUTURE PLANNING**

**Resilience**

We plan to implement addition refined MB-CBT curriculum to meet the high needs of these scholars. This will include conducting short term groups with 6th graders to prepare them for the group environment and introduce basic mindfulness skills, focus on trauma education and the first half of the MB-CBT curriculum in 7th grade, then completing the MB-CBT curriculum in 8th grade with a focus on transition to high school and generalization of skills learned.

**Reproductive health**

Our procedure and protocol are well tested and function smoothly with current staffing levels. The process has also been acceptable to students with rare complaints or concerns. We plan to work on additional social media campaigns to promote healthy relationships. We have begun collaboration with the Health Teachers at East to align social media messages to student health curriculum whenever possible.

**First Class Breakfast**

We will continue to evaluate and make recommendations to improve the menu, delivery process and marketing efforts of the new Grab and Go breakfast program. We will work with the food service department and lower school principal on the sustainability of the new breakfast program. We also would like to work more with students and teachers to develop nutrition projects that will support the importance of a healthy breakfast and marketing efforts of the breakfast program.