Bringing Tele-Behavioral Health to Illinois Schools

Illinois Telehealth Initiative

Final Evaluation Report

to the Otho S.A. Sprague Memorial Institute

Introduction

The Bringing Tele-Behavioral Health to Illinois Schools (TBH) is a project organized by the Illinois Telehealth Initiative (ITI), a program of Partnership for a Connected Illinois (PCI), with the aim of establishing demonstrations in TBH in five school-based clinics in Chicago Public Schools in partnership with Erie Family Services and Rush University Medical Center who operate Chicago school clinics. The grant period for this project was from June 2017 to December 31, 2018.

How do we know we are successful?

The overarching outcome of the TBH project is to expand TBH to schools throughout Illinois. For the June 2017 to December 2018 iteration cycle, the overall project outcome was for 5 school-based health center sites to have operational TBH programs.

To better measure success, this overall outcome is broken into the following four measurable goals:

1. Increasing Access to Care
2. Decreasing Cost of Care
3. Coordinating Care Across Settings
4. Preventing Escalation of Behavioral Health Issues/Concerns

Data Sources

Data throughout this report was analyzed from that reported by Rush Medical Center (dashboards, student surveys, and story accounts) and Erie Family Services (data reports, surveys, and story accounts). For demographics, data from cps.edu was used to flush out additional context of the individual schools served.

Demographics

Rush Medical Center and Erie Family Services have each been partners in operating school-based health clinics (SBHCs) in 5 Chicago Public Schools (4 high schools and 1 middle school). Specifically, Rush operates clinics in Orr Academy High School, Simpson Academy High School for Young Women, and Crane Medical Preparatory High School, and Erie Family Services operates clinics in Johnson Elementary School and Clemente High School. All of these schools have a predominate black or Hispanic student body that is 80% or more low income.

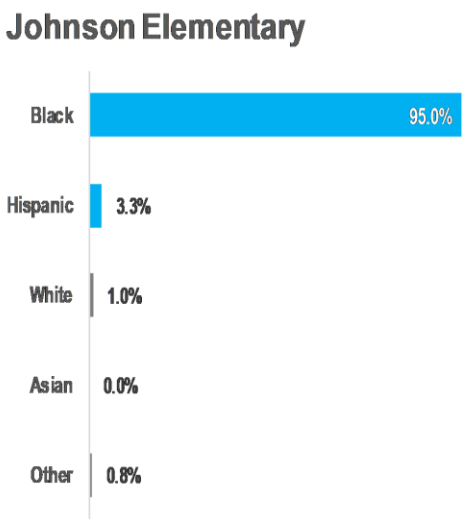
School	Partner	Grades Served	Student Body Size
Crane HS	Rush Medical Center	9th to 12th	386 students
Orr HS	Rush Medical Center	9th to 12th	229 students
Simpson HS	Rush Medical Center	6th to 12th	40 students
Clemente HS	Erie Family Services	9th to 12th	666 students
Johnson Elementary	Erie Family Services	Pre-K to 8th	398 students

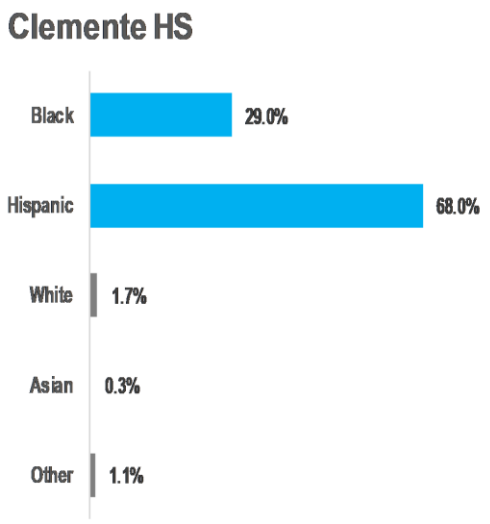
To provide better perspective, the following pages present additional individual school profile data from www.cps.edu. Also, overall project demographic data from both Erie Family Services and Rush Medical Center have been provided for ages served, insurance,

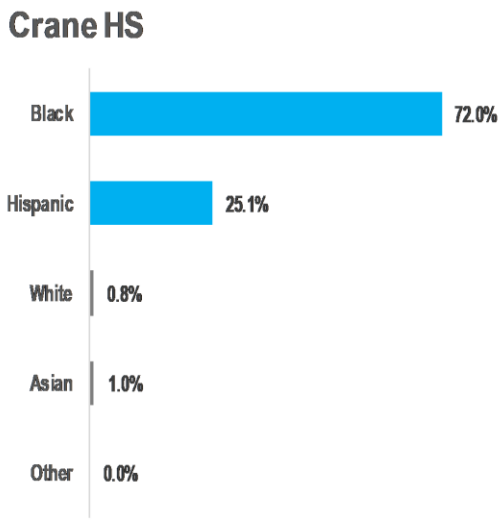
Racial Demographics

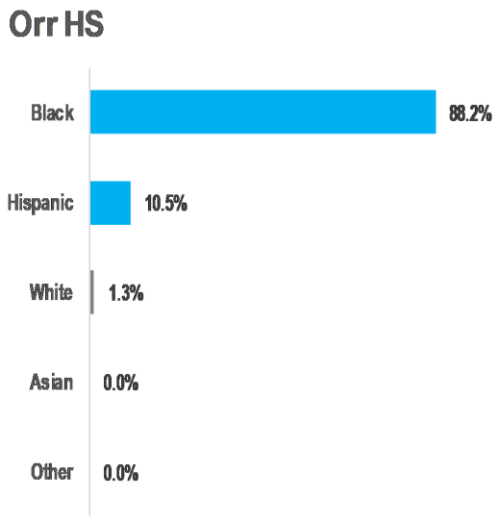
The schools in the TBH project are located in the west-side of Chicago and the individual school demographics reflect the location served.

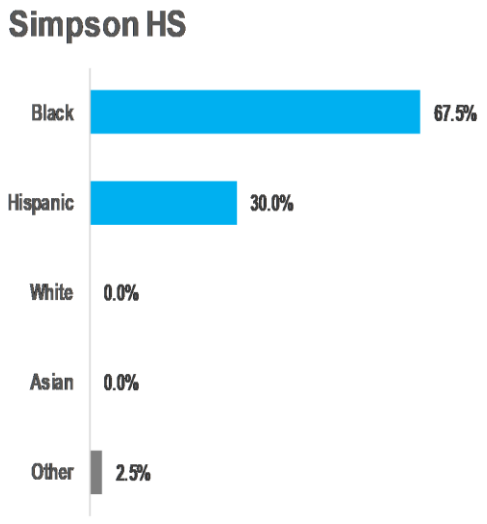
All SBHC schools have a student body predominately comprised of either Black or Hispanic students.





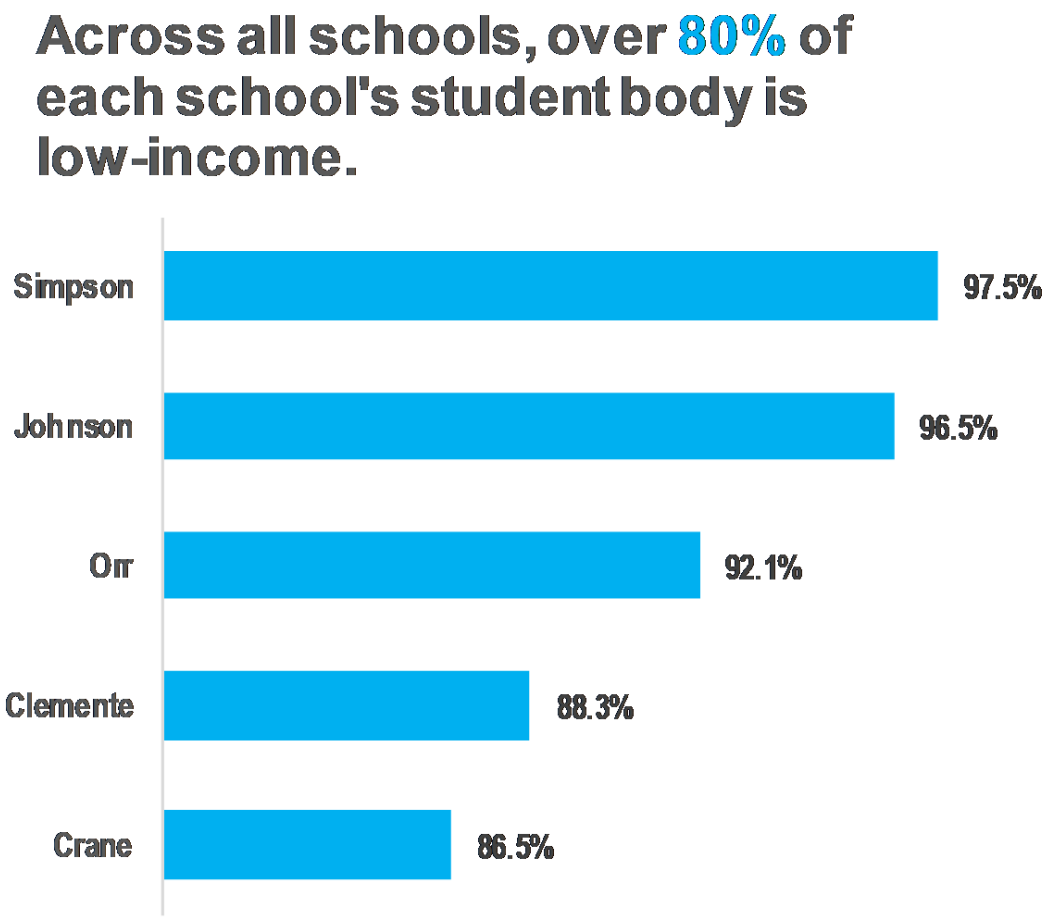






Low Income Student Body

The high percentage of low income students is an indicator for need of services such as tele-health.

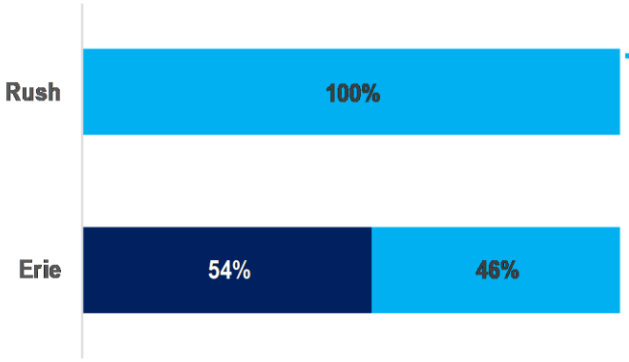


With TBH in these schools, these students have increased opportunity to access services implemented in the Rush and Erie SBHCs. This is elaborated further in the Goal 1 section on the report, which is on increasing access to care.

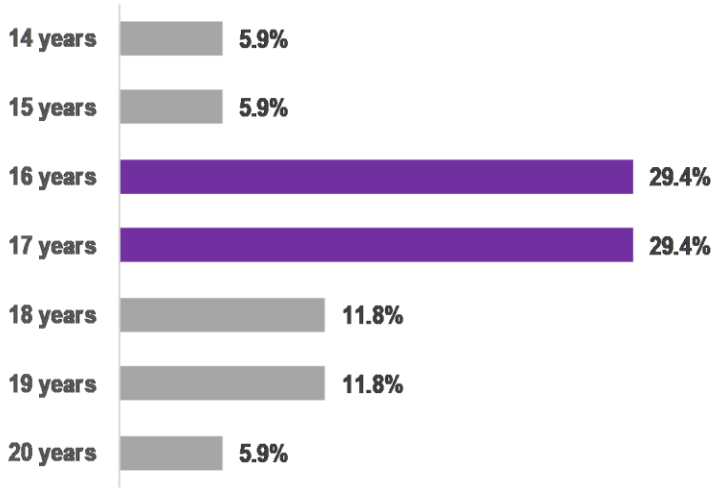
Overall TBH Project Demographics

Over the grant period, Rush Medical Center served **17 students** and Erie Family Services served **38 students** in their school-based clinics.

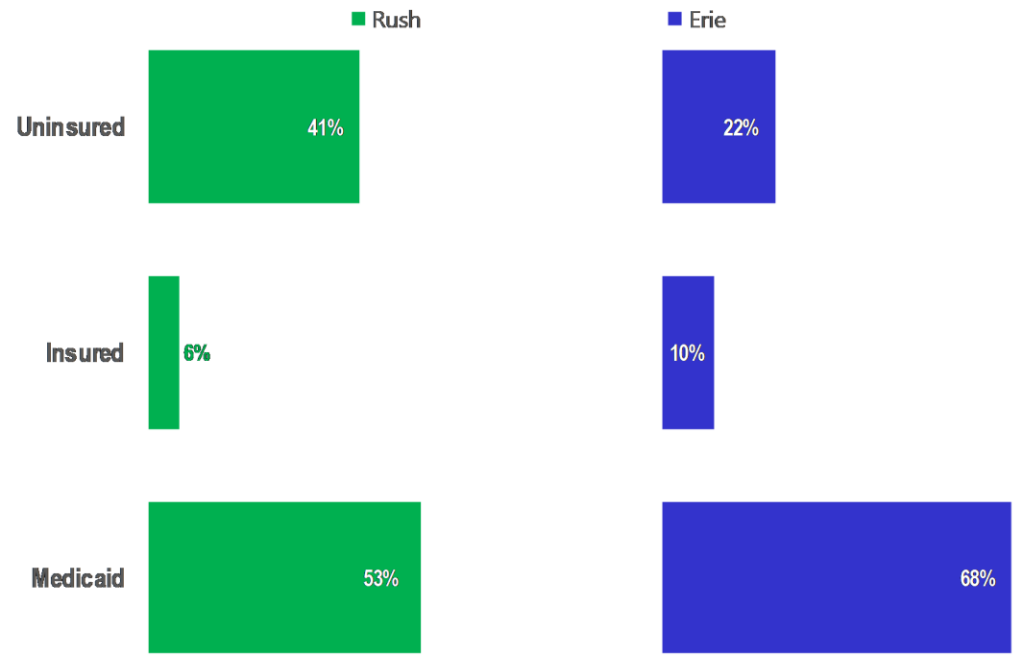
100% of students Rush Medical Center served were older than 12, while Erie Family services served fewer students aged older than 12 (46%) than those 12 and younger (54%).



58.8% of the students in Rush SBHC's were either 16 or 17 years old.



Over 50% of the students served by Rush and Erie are insured under Medicaid.



Project Outcome

The overall project outcome was for 5 school-based health center sites to have operational TBH programs.

Post-implementation of the project from June 2017 to December 2018, **all 5 school-based health center sites have operational TBH programs.** Of these 5 sites, 3 sites are being run by Rush University Medical Center, and 2 sites are being run by Erie Family Services.

Overall Project Context

Initially, there were challenges in getting the TBH project set-up within the schools—mainly with technology and staffing—, but in the end, the TBH project ended up being successfully implemented within all 5 Chicago Public Schools, as well as in expanding the program beyond those initial schools. Particularly at the Erie sites of Johnson Elementary and Clemente High School, had a slow start because of significant start-up costs for education and equipment, as well as a change in psychiatric staff at Erie Family Services. Since Rush Medical Center is affiliated with a large hospital system, they had the needed support for both technology and staff. This allowed them to quickly get the technology set-up and running in Crane, Simpson, and Orr High Schools. With an external funding source, the Rush partnership has evolved into the hiring of personnel at the school-based clinics, which has led to an increase in face-to-face encounters and a decrease in the need for tele-health services. Rush Medical Center is now doing outreach to other surrounding schools for the implementation of telebehavioral health at those schools without clinics. Similarly, Erie Family Services has also been successful in expanding the project beyond the initial two school sites by starting telehealth services at Laura Ward Elementary School.

Potential Evolved Model Looking Forward

The natural expansion of the current implementation model means the TBH model likely has also evolved. According to PCI, moving forward, the potential new, evolved model is expected to involve:

1. Expanding telebehavioral health to all school-based clinics
2. Outreach to schools without school based clinics.
2. Partnering with a children's hospital like Lurie for providing telehealth to schools without clinics

This new model brings the project closer to reaching the overarching outcome of expanding TBH to schools throughout Illinois.

Four TBH Project Goals

To better measure success, the project outcome of 5 SBHCs having operational TBH programs is broken into the following four measurable goals:

1. **Increasing Access to Care**
2. **Decreasing Cost of Care**
3. **Coordinating Care Across Settings**
4. **Preventing Escalation of Behavioral Health Issues/Concerns**

With the SBHCs being in schools where over 80% of the student body is low income, particularly increasing access to care and decreasing cost of care is crucial to this population. Having a clinic within the school allows students to get diagnosed and receive services they would not otherwise receive. The following section breaks down each of the goals into further metrics (quantitative and qualitative) on how both Erie Family Services and Rush Medical Center have been successful in meeting each of the four goals.

Goal 1: Increasing Access to Care

The 55 students who received services during this grant period (38 students – Erie; 17 students – Rush) would have otherwise not had access to the care they received.

Metric 1: Removing transportation barriers

Since all the clinics were within a school-based setting, all 55 students were able to receive services without needing to travel to an external health care facility outside of their school. Using telehealth services eliminated the average distance they would otherwise need to travel to access the same services.

Metric 2: Providing services children will otherwise not be able to access

All 55 students received services they would not otherwise access. Through the two Erie school-based clinics, 38 students received care through 85 total visits. On average, each student visited the clinic twice. Through the Rush school-based clinics, 17 students received care through 30 total visits. On average, each student had an average of 1.76 TBH visits. Further, the insurance or lack of insurance of students served by the TBH project showcase that these students would not otherwise be able to access these services. Particularly students insured by Medicaid (53% Rush; 68% Erie) and uninsured (41% Rush; 22% Erie) would not readily have access to these services. Combined, this pertains to at least **94% of the students served by Rush and 90% of the students receiving Erie services.**

Qualitative Success Story: Erie Family Services

A 12 year old male who was originally diagnosed with ADHD but having difficulty in school with being emotional, anxious, hyper and impulsive. After being placed on a stimulant for ADHD, he became more emotional and would cry whenever redirected. His anxiety was much worse. After meeting with the Psych NP via telepsychiatry, it was determined that his anxiety and underlining depression needed to be treated first and once stabilized Erie providers would then revisit medication to help him focus. After being placed on an antidepressant, 70% of the anxiety and the crying spells have almost completed disappeared. Last session, the provider discussed a different stimulant to address his ability to focus; he actually seems happier and is excited to have something to help with focus. He is able to see his progress in dealing with peers and ability to remain calmer. He is scheduled to return so that once he has begun the medication, we can see how he is doing. ***His guardian is happy with the results and the convenience of being able to bring him to his telepsychiatry appointments and easily walk him across the cul-de-sac to school without having to go far from home.***

Goal 2: Decreasing Cost of Care

Metric 1: Decreasing costs to families (transportation, missed work, etc.)

Savings in transportation costs

For both **Rush** and **Erie**, if students needed to receive services off-site and in-person, the student would likely have to travel by bus/train to and from their school/home to the psych referral site. The following outlines savings in transportation cost:

Rush

30 TBH visits × **$5.00** Per round trip = Savings of **$150**

Erie

85 TBH visits × **$5.00** Per round trip = Savings of **$425**

Total Savings of **$575** in transportation

Savings in cost for family member to take off work

For both **Rush** and **Erie**, if students needed to receive services off-site and in-person, there is potential cost with a family member needing to take off work (3 to 4 hours) to accompany the student. In using the current Chicago minimum wage of $12.00 per hour, the following is what the decrease in cost would be for a family member taking off 4 hours off work for 1 TBH visit.

1 TBH visit × **4** work hours taken off × **$12** minimum wage per hour = At least **$48** of potential wage losses saved per visit

Goal 2: Decreasing Cost of Care (cont.)

Metric 2: Improving efficacy of service delivery via telemedicine

55 students at Rush and Erie SBHCs were able to have efficient service delivery for telehealth services. Through telemedicine, service delivery to students via school-based clinics has improved in efficacy of visiting a provider more than once, wait time for seeing a provider, and time from referral to first appointment.

98% **of surveyed Rush SBHC students reported agreeing or strongly agreeing that they didn't have to wait too long to be seen by a provider.**

Also, during this reporting period,

	Rush	Erie
Average # of telemedicine visits	1.76	2
Average time from referral to 1st appointment	Less than 2 weeks	3 to 5 days

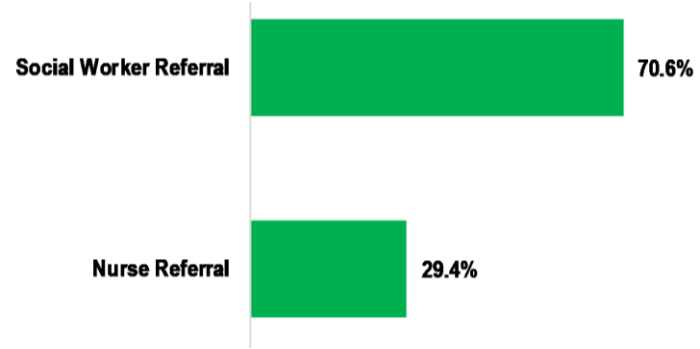
With Erie's SBHCs serving 38 students and Rush's SBHCs serving 17 students, both the average number of telehealth visits and average time from referral to 1st appointment further reiterate the efficacy of service delivery via telemedicine.

Goal 3: Coordinating Care Across Settings

Metric 1: Establishing strong referral process

100% of Erie SBHC students were referred to telehealth services by internal Erie providers (a psychiatric nurse practitioner and a behavioral health therapist).

Most (around 70%) of the students at Rush's clinics were referred to telehealth services by a Social Worker.



The two qualitative stories below further showcase how Rush and Erie services met this metric:

Qualitative Success Story: Erie Family Services

John, an Erie patient and a high school student, was experiencing difficulty in high school, and his school was unable to support him with testing by a CPS Psychiatrist. His parents were worried about him, and they brought him in to see his Pediatrician at Erie. ***Knowing that there was a Psychiatry Telehealth program at Erie, his Pediatrician was able to place him on the Psychiatry Telehealth schedule, and John was seen by Erie's Psychiatric NP within 3 days.*** John is now on medication and his situation has stabilized. He continues to follow up with his pediatrician and with an Erie Behavioral Health Therapist for continuing support.

Qualitative Success Story: Rush Medical Center

MB is a student at RTC Med Prep (Crane), an academically rigorous school for students interested in pursuing health care careers. MB was a frequent user of the SBHC and quickly gained trust in staff. One day, prior to the initiation of TBH, she presented to the SBHC indicating she was experiencing suicidal thoughts. Staff initiated an emergency response plan that included SASS (the Illinois DHS Screening, Assessment, and Support Services for Children and Adolescents). MB had a short hospital stay that followed with a plan for care at the hospital's outpatient department for ongoing psychiatric management. ***Given the long wait for outpatient care, MB risked waiting many months for continued psychiatric management. This coincided with the launch of Rush's TBH program. MB was offered referral to the Rush PMHNP for ongoing management of her post-hospital plan. Because she already trusted the SBHC staff and didn't want to wait so long for care, MB decided this was preferable to going offsite for ongoing care***. MB was able to transfer her care to the Rush PMHNP and received care via TBH. Her thought regarding the referral process was that the TBH care she was receiving was simply an extension of the care she was already receiving in the SBHC, in which she already trusted and felt comfort.

Goal 4:
Preventing Escalation of Behavioral Health Issues/Concerns

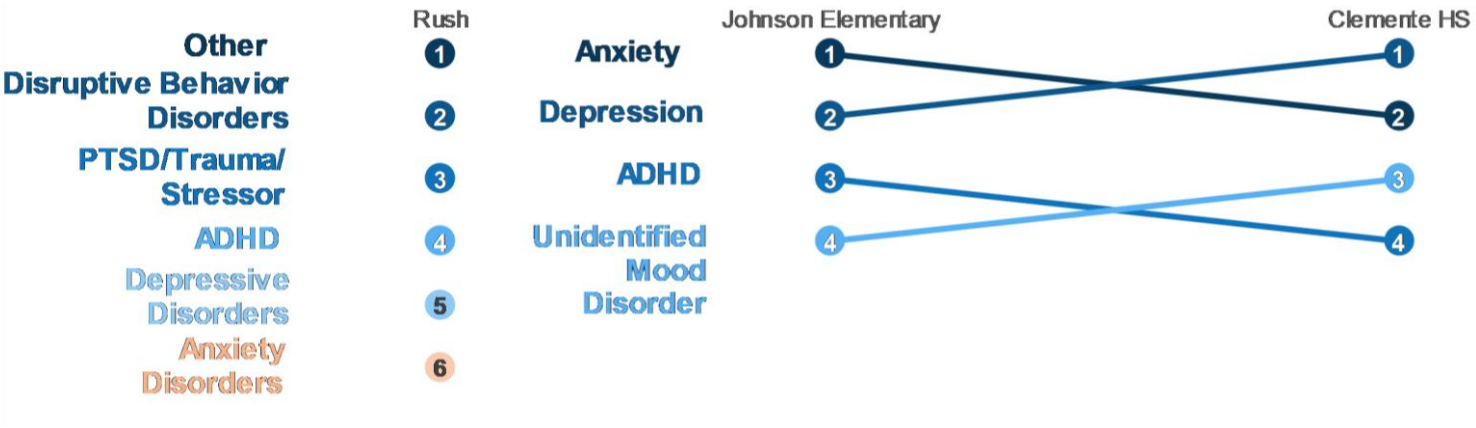
Metric 1: Increasing access to psychiatric services

Through TBH implementation at Rush SBHCs, 17 students received 30 diagnoses. At Erie SBHCs, 38 students received diagnoses and were connected to psychiatric providers (either a psychiatric nurse practitioner or behavioral health therapist).

TBH Diagnoses Ranking (1-most frequent to 6-least frequent)

The top two diagnoses at Rush SBHCs were Disruptive Behavior Disorders and Other Diagnoses.

The top two diagnoses at Erie's SBHCs were Anxiety and Depression.



Goal 4:
Preventing Escalation of Behavioral Health Issues/Concerns

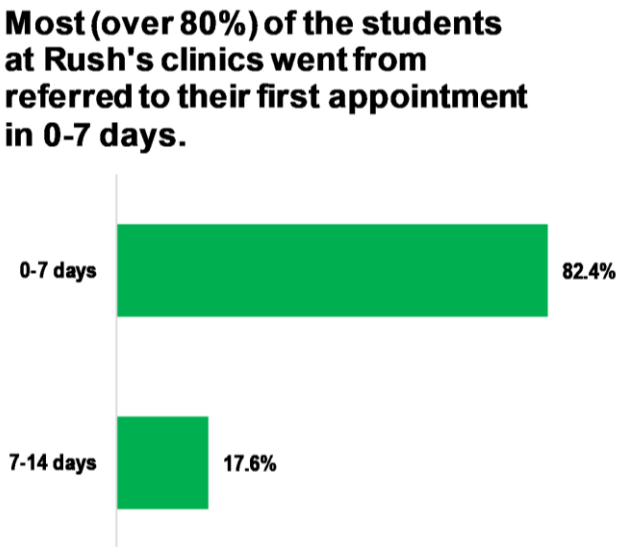
Metric 2: Increasing timeliness and frequency of behavioral health visits

The following qualitative story highlights an example of how Rush's TBH services at the Simpson HS clinic allowed a student to keep and to continue attending appointments.

Qualitative Success Story: Rush Medical Center

MN was a student at Simpson Academy for Young Women and a mother to a 1 year old son. She was struggling with stressful burden of managing school and motherhood. Determined not to be one of the nearly 50% of teen moms who do not finish high school, she sought mental health services in the Rush SBHC at Simpson. MN started counseling with the SBHC social worker, who thought she would benefit from a psychiatric evaluation. She was initially able to be assessed by the SBHC Psychiatric Mental Health Nurse Practitioner in person. She was diagnosed with ADHD and started on medication. Unfortunately, she often missed follow up appointments with the PMHNP, who was only onsite once a month, which was frustrating for both her and the SBHC staff. Once the TBH systems were up and running, she was able to transition her psychiatric care and medical management to tele-visits. MN had a very positive experience with TBH; she thought it was "cool" to see her provider via video. ***MN benefitted from TBH because as a parenting teen with competing personal demands, she would have otherwise fallen through the cracks due to missed appointments. With TBH she was able to continue care and get the support she needed to stay in school.***

This metric is also met with the numbers of average TBH visits by patient (1.76 visits for Rush SBHCs and 2 visits for Erie SBHCs). An average of visits above 1 visit at all SBHCs indicates that most students return to continue TBH services. Also, the average time from referral to 1st appointment (less than 2 weeks for Rush SBHCs and 3 to 5 days for Erie) showcases that a quick turnaround is another way all SBHCs are meeting this metric.



Further, an item on the Erie Student Survey asks "How easy is it to make an appointment?". Students are asked to choose from 1---not easy at all to 5—very easy. Overall, students rated this question on average as a 4—easy.

Other Successes

Improvement of Illinois Health Policy

Through the implementation of the TBH project, Partnership for a Connected Illinois (PCI) and other organizations have worked together for Illinois Healthcare policy to better support implementation of tele-behavioral projects, particularly those pertaining to school-based sites. Particularly, on January 1st 2019, a law was effective for the expansion of Medicaid reimbursement. The hope is that hospitals, such as Rush Medical Center, can now use this reimbursement for behavioral healthcare to receive money for their providers. The following outlines two specific ways this work has had impact on policy.

Type 56 School-Based Health Clinics

The Illinois Department of Healthcare and Family Services (HFS) is proposing modifications in Rule 140 of its Medicaid regulations to expand access to mental health services. Last year, PCI met with HFS and discussed the problem of Type 56 clinics being unable to be reimbursed by Medicaid for behavioral health services. HFS is establishing a new model for Medicaid reimbursement. The model is called a "Behavioral Health Clinic." EverThrive Illinois submitted comments to HFS recommending that the definition of a Behavioral Health Clinic specifically include School-Based Health Clinics (SBHC) (Attachment 2). This is of particular concern for Type 56, clinics not sponsored by an FQHC or a Rural Health Clinic (RHC). Type 56 SBHCs have never been able to bill for behavioral health services.

EverThrive believes that the criteria of the proposed rule will now allow Type 56 clinics to seek designation as a Behavioral Health Clinic and be reimbursed for the behavioral health services they provide. This change would allow the Rush SBHC's to bill Medicaid for their provider time.

SB3049

In January 2018, PCI, working with five respected organizations, prepared a memo to the Governor's Office on Medicaid regulatory changes that could advance the use of telehealth in the state (Attachment 3). The memo proposed expanding patient originating sites and to expand telehealth providers to include any eligible Medicaid participating provider, thereby expanding use of Advanced Practice Professionals. In February, Illinois State Senator Amy Manar introduced SB3049. This bill would require that Medicaid reimburse for behavioral health provided by advanced practice professionals and would expand eligible originating sites. This bill has the strong support of the Illinois Health and Hospital Association and the Illinois Critical Access Hospital Network. This provision could expand telebehavioral opportunities for students in locations beyond school-based clinics. The bill was unanimously passed out of committee in early April 2018.