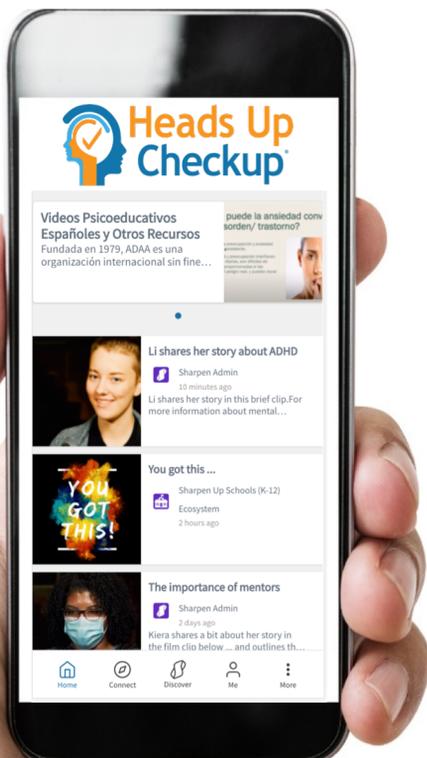


# Proactive - Heads Up Checkup® Care+ Education App



Screening for 90% of the most common mental disorders and risk assessment



Improves mental health literacy



Library of over 450 modules for educators, parents and students



Improves safety in managing mental health disorders in schools



Discreet connection to support resources



Builds resiliency through proven exercises and techniques

Specific social, emotional and mental health literacy content delivered through mobile or desktop for targeted audiences:

- Educators / Counselors
- Parents
- High school students
- Middle school students
- Elementary aged students

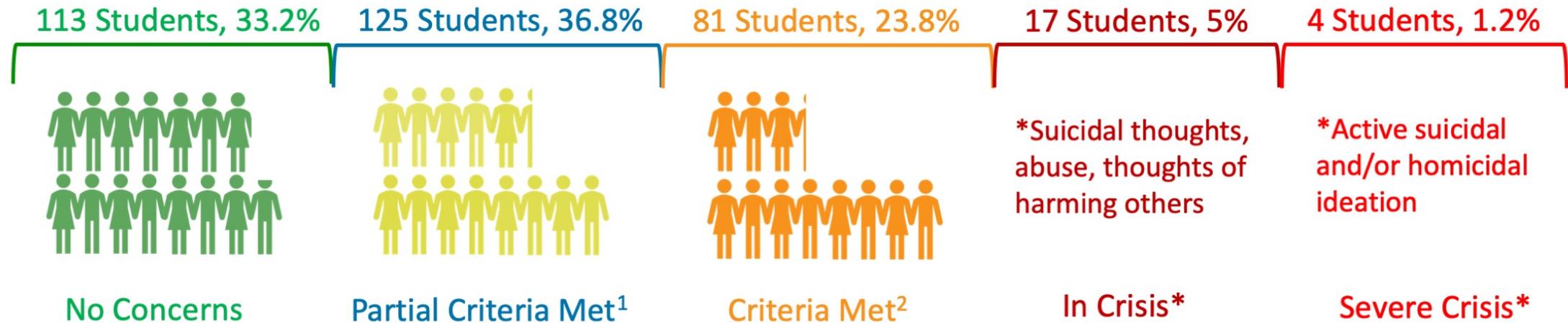
**Healthy communities are made up of healthy individuals**

Our comprehensive solution, in collaboration with our partners at Sharpen:

- Provides access to research-based, standards-aligned, and award-winning content for social, emotional and mental wellness.
- Builds individual, family and community capacity, competence, and confidence to navigate successfully in these uncertain times and in the future.
- Enhances, extends, and expands the reach of therapists and counselors.
- Connects and coordinates local and regional community resources.
- Provides data to improve resource utilization.

# Data Example – High School Screening Results

Out of 704 Students, 340 Completed Screening, May 17, 2021



## Most Common Symptoms

### Endorsed by Students:

- Social Phobia, 24%
- Sleep, 20%
- Depression, 19%
- PTSD, 16%

## Most Common Challenges:

- 20% Stressful life event
- 11% Being bullied
- 11% Difficulty controlling rage
- 7% Feeling outcast
- 7% Preoccupied w/violence

Post screening deidentified data aggregation gives school a snapshot of mental health trends on campus.

<sup>1</sup> Student endorsed between 50% and 99% of criteria for at least one mental health disorder

<sup>2</sup> Student endorsed 100% of criteria for at least one mental health disorder

# *Heads Up Checkup: State-of-the-Art Mental Health Screening in the Palm of Your Hands*

## **1. Executive Summary: An Efficient and Effective First-Step Screening**

Despite the high prevalence of mental health and substance use problems, 80% of students and adults go without treatment or wait years for treatment because their disorders go undiagnosed. This delay causes years of needless pain for themselves, their families and society<sup>1,2,3,4,5,6</sup> Heads Up Checkup (HUCU), a comprehensive mental health screening system, identifies those in crisis, provides diagnostic information for the most common mental health disorders, and connects users to support instantly. Catching mental health issues early reduces workplace inefficiencies, incarceration, homelessness and suicide. <sup>7,8</sup> HUCU is available world-wide at any time to any web-connected device.

Initial statistical validity and reliability studies for students and adults show high sensitivity and high specificity for identifying those in crisis. 481 of 489 students screened correctly with C-Alpha validity 0.932, P.001. Comparing HUCU with clinical interviews shows strong inter-rater reliability; 172 of 187 had equivalent diagnosis, a C-Alpha validity of 0.88235, P.001 Screening results show good results for most of the 40 relevant potential constructs. Initial statistical results for adult populations show similar trends.

Consequently, HUCU serves as an effective and efficient (average 8 minutes) first-step mental health screening to triage individual and large populations in outpatient medical or psychological offices and in urgent or emergency care and can simultaneously screen large groups such as schools and business. Its strong internal constructs will improve under large-scale usage; and its architecture supports easy customization and third-party integrations.

Because the system provides for screening at times convenient to the user, and allows use in private settings, users give more candid and truthful responses. Common causes of self-misrepresentation are minimized.<sup>9</sup> Outpatient usage also greatly reduces the wait time associated with assessments requiring a clinician's presence. <sup>10</sup>

## **2. Solution Overview**

Heads Up Checkup is a digitally delivered, cloud-based mental health and behavioral risk screening system that can be completed in 10 minutes or less on any device connected to Wi-Fi or cellular data.



**System Highlights**

- Threat assessment
- Mental ill health symptoms
- Adverse Childhood Experiences (ACEs)
- Average 8 minutes to complete
- Use on any internet-connected device
- Connects user to support resources

What makes Heads Up Checkup unlike any other mental health screening system currently available on the market is the integration of mental health screening with behavioral risk screening, the direct-to-user delivery, and the ability to connect the user immediately to support resources.

HUCU identifies individuals at risk of:

- Self-harm including suicide
- Harming/threatening to harm others
- Drug/alcohol use/abuse
- Bullying
- Dangerous behavior involving weapons

HUCU identifies possible mental health issues including:

- Depression, anxiety
- Conduct, behavior, thought disorders
- ADHD, ASD/Asperger's, learning disorders
- Stress factors, relational conflicts/abuse
- Adverse Childhood Experiences (ACEs)

On identifying conditions of interest, HUCU can connect user to immediate support to:

- Provide a warm hand-off directly from the screening to a supportive mental health resource. Upon completion of the screening, the user is immediately presented with an opportunity to connect.
- Get Support link can be customized to the client organization to connect to:
  - An in-house mental health service provider
  - A contracted mental health service provider
  - Resource listings

The primary features of HUCU that differentiate it from other commercial, academic, and government screenings include:

- Cloud-based, available anytime, anywhere
- Universal and comprehensive: one tool addressing 90% of common mental health symptoms plus ACEs plus risk assessment for suicidal ideation
- HIPAA compliant
- Usage in private yields candid, truthful responses, reduces self-misrepresentation
- Self-scoring immediate feedback to user and clinicians
- Seamless, real-time connection to online resources, telemedicine, or call centers
- Efficient and effective, able to ease load on psychologists, counselors, and ER rooms
- Aggregated data for mental-health snapshots (de-identified) of large groups
- Customizable and extensible to handle regional concerns

### 3. How the Screening Tool Works

Respondents, which might be students, employees, armed services personnel, or law enforcement workers; or parents or caregivers responding on behalf of others, answer questions by selecting choice alternatives corresponding to the behaviors and symptoms that are causing concern. The questions presented to respondents are based on actual diagnostic criteria as published by World Health Organization in *ICD-10 Classification of Mental and Behavioral Disorders: Clinical Descriptions and Diagnostic Guidelines*.

WHO Published Diagnostic Criteria	Heads Up Checkup Question	PHQ-9 Question
<b>&gt;=2 of the following:</b>		
Depressed, sad, empty or hopeless	Often feels sad, depressed, or hopeless.	Feeling down, depressed, or hopeless.
Fatigue or no energy	Doesn't seem to have enough energy to do anything.	Feeling tired or having little energy.
Very little interest or pleasure in normal activities	Has lost interest in doing things s/he used to enjoy.	Little interest or pleasure in doing things.
<b>&gt;=2 of the following:</b>		
Difficulty thinking or concentrating	Has trouble concentrating.	Trouble concentrating on things, such as reading the newspaper or watching television ( <b>outdated</b> ).
Feeling worthless	Feels guilty or unworthy.	Feeling bad about yourself – or that you are a failure or have let yourself or your family down.
Guilt or unworthiness	Feels guilty or unworthy.	Feeling bad about yourself – or that you are a failure or have let yourself or your family down.
Pessimism	Is doubtful/has a gloomy outlook regarding the future.	
Thinking about death, self-harm, ideation	Has thought about seriously hurting self or has tried to seriously hurt self.	Thoughts that you would be better off dead or of hurting yourself in some way
Sleeping too much or not enough	Sleeps too much. Doesn't get enough sleep.	Trouble falling or staying asleep or sleeping too much.
Decrease or increase in appetite	Doesn't feel hungry most of the time or has loss/lack of appetite. Doesn't eat enough. Sometimes eats way too much or eats when not even hungry.	Poor appetite or overeating.
<b>Lasting at least 2 weeks</b>	How long has your child been feeling sad, depressed, or hopeless?	Over the last two weeks, how often have you been bothered by any of the following problems?
<b>Difficulty functioning.</b>	Rate the impact of your child's sadness/depression on everyday activities.	If you checked of any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

*Close correspondence between ICD-10 Criteria, HUCU questions, and PHQ-9*

Describe your sleeping habits:

Please choose answers that are true most of the time. If none of the answers are true most of the time, choose **None of the above**.

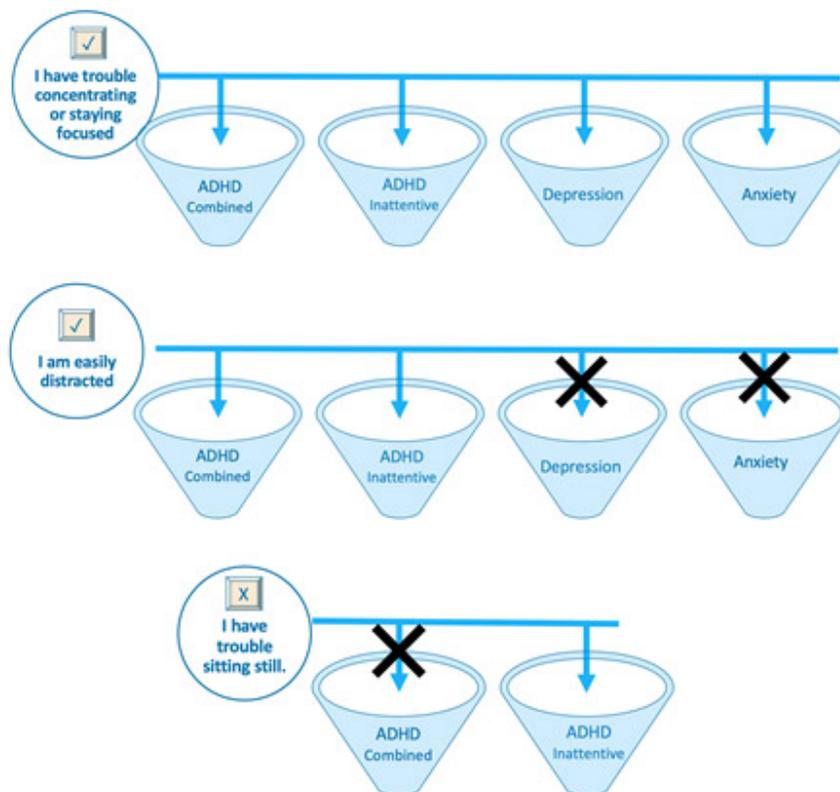
- I have trouble falling asleep at night.
- I have trouble staying asleep and wake up during the night.
- I don't get enough sleep.
- I feel tired when I wake up and/or feel sleepy during the day.
- I have trouble waking up in the morning.
- I sleep too much.
- None of the above**

*Example question from screening*

As symptoms are endorsed, the system groups responses into categories representing diagnostic specific considerations. Adaptive branching based on the state of the respondent as computed from prior responses

presents a resulting line of questioning, drawing relevant questions from the HUCU question bank. The system also checks for discriminating factors. <sup>11,12,13,14</sup>

In the example below, the respondent indicated trouble concentrating or staying focused. A follow-up question did not indicate depression or anxiety, further refining the line of questioning. The subsequent question response directs the line of questioning, at least in the near term, away from ADHD combined presentation, since the respondent indicated no trouble sitting still. <sup>15</sup>



Using this approach, responses regarding behaviors and symptoms are funneled into the ICD-10 disorder category associated with that behavior or symptom. Like an idealized structured interview, questions are presented based on previous responses, consequently, the majority of Heads Up Checkup screenings are unique, each tailored to the respondent.

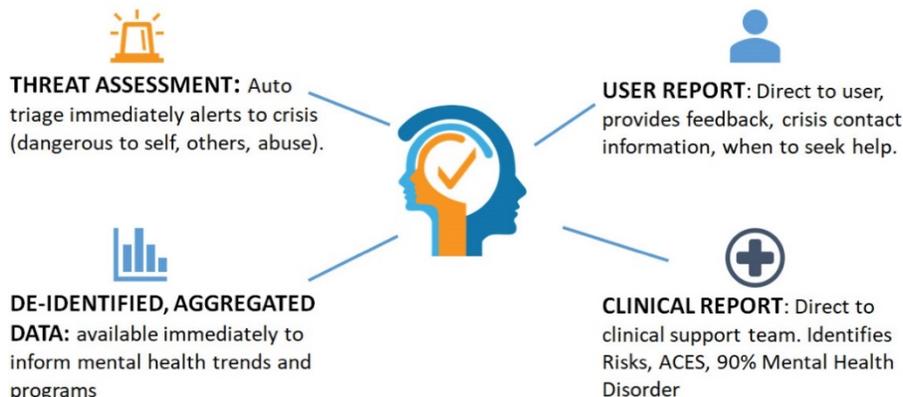
Upon completion of the screening, Heads Up Checkup will self-score and return results based on the percentages of specific diagnostic criteria from the WHO guidelines that have been endorsed.

The table below lists the disorders and areas of risk for which Heads Up Checkup includes questions in age-appropriate versions.

Diagnosis	Ages 0-5	Ages 6-11	Ages 12-17	Young Adult	Adult
F07.81 Postconcussional syndrome		X	X	X	
F10.99 Alcohol use				X	X
F19.19 Other psychoactive substance use				X	X
F20.3 Schizophrenia			X	X	X
F22.9 Persistent delusion disorder			X	X	
F31.9 Bipolar disorder		X	X	X	X
F32.9 Depression	X	X	X	X	X
F34.89 Early childhood anger/aggression	X				
F40.1 Social anxiety	X	X	X	X	X
F40.9 Phobic anxiety		X	X		
F41.0 Panic anxiety		X	X	X	X
F41.1 Generalized anxiety	X	X	X	X	X
F42.9 OCD	X	X	X	X	X
F43.10 PTSD	X	X	X	X	X
F43.20 Adjustment disorder	X				
F50.89 Eating disorder	X	X	X	X	X
F51.09 Insomnia	X	X	X	X	X
F51.11 Hypersomnia		X	X	X	X
F51.5 Nightmare disorder	X	X			
F60.2 Antisocial personality disorder				X	X
F60.3 Borderline personality disorder				X	X
F60.81 Narcissistic personality disorder				X	X
F80.1 Expressive language disorder		X			
F80.2 Social pragmatic comm disorder		X			
F80.9 Developmental language disorder	X				
F81.0 Reading disorder		X	X	X	X
F81.1 Writing disorder		X	X	X	
F81.2 Math disorder		X	X	X	
F84.0 Autism	X	X	X		
F84.5 Asperger's		X	X	X	X
F84.9 PDD	X				
F88 Global development delay	X				
F90 ADHD	X	X	X	X	X
F91.3 Oppositional defiant disorder		X	X		
F91.9 Conduct disorder		X	X		
F93.0 Separation anxiety	X	X			
F94.0 Selective mutism	X				
F95.1 Tic disorder	X	X			
F98.0 Enuresis		X			
F98.1 Encopresis		X			
R68.11 Excessive crying in infants	X				
AT RISK – self-harm, suicide		X	X	X	X
AT RISK – harm to others	X	X	X	X	X
AT RISK – drug/alcohol use/abuse		X	X		
AT RISK – current abusive situation		X	X	X	X
AT RISK – ACEs/stress factors	X	X	X	X	X

## Reporting

A user-friendly version of the results is provided immediately to the respondent through a confidential user account. Where users have specified that their results be shared with designated recipients, a professional version of the results is optionally provided immediately to the designated clinical administrator or guardian. In this scenario, an automatic triage process can then provide immediate notifications to clinical administrator when a user endorses criteria related to a crisis situation.



*Four types of HUCU reports*

**Heads Up Checkup Results Priority: 6**  
 no-reply@headsupcheckup.com  
 Tue 6/4/2019 11:03 AM

Dear ,

Your client has completed the Heads Up Checkup screening. Below is a copy of the results your client received.

Please click [here](#) to access your account and view the professional version of the results report. Based on the answers your client provided, a triage/priority code was assigned to notify you of possible risks and critical situations. For your convenience, the following table outlines the codes and their indications.

Triage/Priority Codes:

- 6:** Client has endorsed symptoms consistent with risk for harm to self or harm to others AND has endorsed criteria consistent with hostile or antisocial behaviors.
- 5:** Client has endorsed symptoms consistent with risk for harm to self or harm to others, and/or an ongoing traumatic/abusive event.
- 4:** Client has endorsed symptoms consistent with 100% of the criteria for one or more diagnostic considerations, and/or a significant number of risk/stress factors.
- 3:** Client has endorsed symptoms consistent with 70-99% of criteria for at least one diagnostic consideration and/or a moderate number of risk/stress factors.
- 2:** Client has endorsed symptoms consistent with 50-69% of criteria for at least one diagnostic consideration and/or a mild number of risk/stress factors.
- 1:** Client has not endorsed sufficient symptoms to create a diagnostic consideration or concern about risk or stress.

*Sample automatic triage notification*

**Areas of Concern: Attention**

Attention & Concentration



The ability to pay attention can be affected by many things - sleep, eating habits, stress, as well as environmental factors. People who have difficulty staying focused often report that they are easily distracted, have a hard time sticking with tasks, are unorganized, and may even avoid certain activities that require sustained mental effort. Sometimes, restlessness and hyperactivity are experienced as well. You may feel like you can't sit still or like you're always "on the move." Everyone gets distracted from time to time and it's common to sometimes feel restless. However, if your struggles with focus, hyperactivity, and attention are negatively affecting your work performance, relationships, self-esteem, everyday functioning, routines, or activities, or holds you back from the things you enjoy - it's time to seek help.

**Areas of Concern: Sleep**

Lack of Sleep



Getting enough sleep is just as important to your physical health as it is to your mental health. Sleep patterns affect alertness, concentration, mood, performance at work, and ability to cope with daily stress. Those who struggle to fall asleep or stay asleep report feeling excessively tired throughout the day and more irritable than usual. There are a number of reasons why someone may not be getting enough sleep - worry, stress, eating habits, or even certain medications. While it's common to occasionally go to sleep late or wake up in the middle of the night, consistent lack of sleep has many negative consequences. If lack of sleep is negatively affecting your work performance, relationships, mood, everyday functioning,

*Sample excerpt from user's report*



**Screening Results**

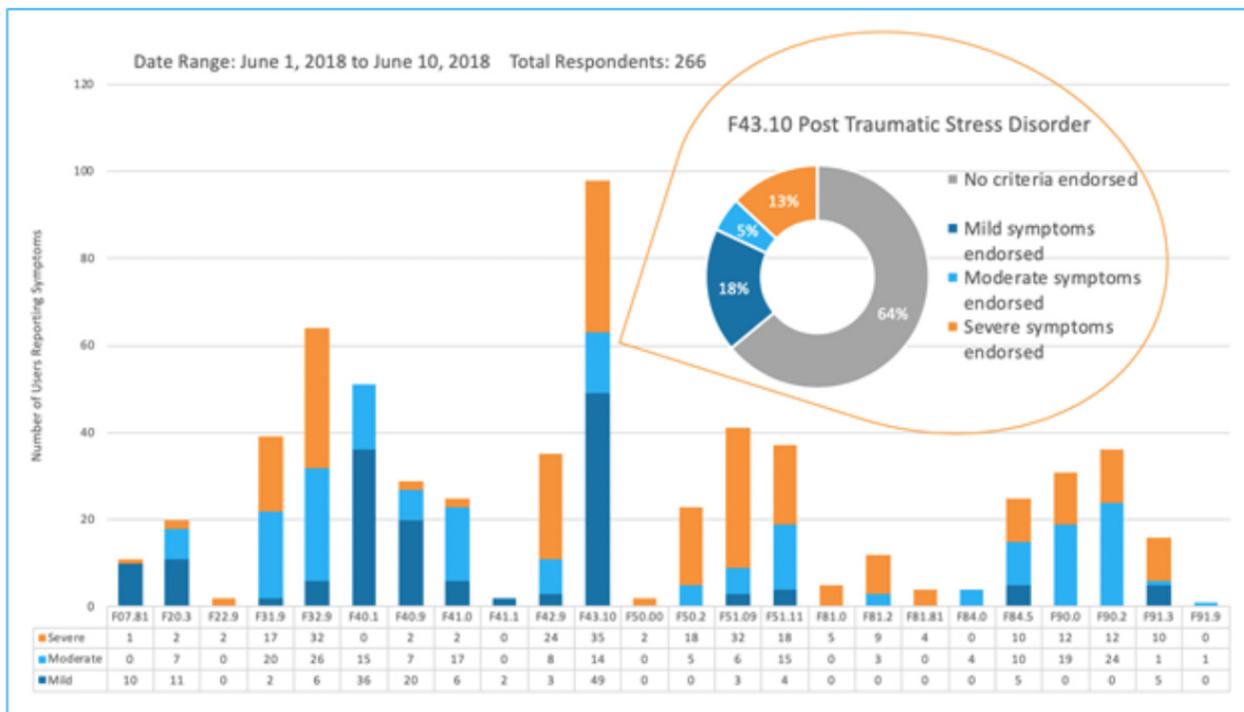
Screening Date : Feb 4 2019 2:36PM

Patient Information	
Patient's First Name	Patient's Last Name
Date of Birth	03/24/2005
Completed By	Patient/Parent's Name
Endorsed Factors that Increase Risk of Harm to Self	
Describe yourself in social situations:	I have been bullied (at school, at work, at home).
Describe your body and health:	I have difficulty controlling my drinking or drug use.
Describe your thoughts and thought processes:	I have thought about seriously hurting myself or have tried to seriously hurt myself.
Describe your sense of self:	My family is not aware of or does not support my gender and/or sexual orientation.
Endorsed Adverse Childhood Experiences (ACES)	
Describe your childhood experiences:	My parents are/were divorced or separated.
	There is a family history of mental illness, problems with alcohol or recreational drug use, and/or suicide attempts
Sufficient Endorsements to Meet Diagnostic Criteria	
ICD-10-CM Code	F43.10 - Post-traumatic stress disorder
Criteria endorsed	
Have you experienced, witnessed, or been affected by an upsetting event or situation?	Yes, and sometimes I have upsetting dreams about it.
	Yes, and sometimes I have flashbacks where I feel that it's happening again.
You said you experienced, witnessed, or have been affected by an upsetting event or situation. How long ago did the event or situation happen?	About 6 months.

*Sample clinical report*

### Aggregated Data

At any time during the collection of responses for a population, a designated representative of an organization can view aggregated data on that population. This view provides a snapshot of a population at a specific point in time. Aggregated data can inform administrators of needs regarding organization/campus culture and social-emotional education programs and track the impact of programs on screening results over time.



Example summary and insight from aggregated data

## 4. Results of Early Usage – Demonstrating That the System Works

### Initial Study Methodology

An initial middle school study (N=489, C-Alpha 0.932, P.001) showed the HUCU system to identify students in crisis. Further studies examined validity and reliability using results of the entire group and several subgroups. Technical properties of the test battery included content validation by subject matter experts, item analysis, and coefficient alpha. 17.6% students met 100% of at least one mental health diagnosis, consistent with the 2016 National Children’s Health Survey of 16.6% adolescent currently having a diagnosable mental health disorder. Moderate to strong evidence of validity and reliability (0.61 to 0.88) was found for individual constructs including Phobic and Social Anxiety, Sleep, ADHD, Major Depression, Autism and Panic Disorder with reliability coefficients significant to the P.005 level. Bipolar, Delusional Disorder and PTSD reflected acceptable reliability when compared to national norms at P.005 yet fell below acceptable validity levels, likely due to the low number of questions used to represent these domains. Oppositional Defiant, Learning, and Eating Disorders also showed good reliability when compared to national norms but had too few students endorsing these areas to yield meaningful validity statistics. A follow-up study to identify students in crisis was conducted with 765 middle school students. Results indicated 759/765 screened correctly. 20% of these students met at least one mental health diagnosis, consistent with the current National Institute of Mental Health research.

Discussion on the underestimating of validity and reliability statistics with “adaptive screening” follows, and the differential weighting of questions based on other will improve statistical results in future studies.

**Better than Face to Face**

The accuracy of diagnoses was examined by comparing it with semi-structured clinical evaluations by a qualified psychologist and confirming the resulting clinical diagnoses with those suggested by the screening. Descriptive analyses and paired t-tests were conducted to compare the mean number of diagnoses generated by the two interviews. Sensitivity, specificity, positive and negative predictive values were computed for the screening and the diagnostic sub-modules of the tool, compared to the clinical diagnoses. Kappa coefficients were computed to assess agreements between the diagnoses generated by the diagnostic sub-module and the clinical diagnoses.

The screening sub-module had high sensitivity, high specificity and negative predictive values for all disorders. It predicted 172 out of 187 with equivalent rater reliability with a C-Alpha Validity 0.88235, P.001. 27 out of 40 potential diagnosis categories were represented by the 187 patients. Due to a higher number of elementary age students the two largest diagnoses were 53/58 students identified correctly with ADHD and 17/20 for Autistic Spectrum Disorder. For adults, the two largest identified disorders were 17/20 with PTSD and 15/17 with Major Depression. 72 other patients displayed 23 different disorders. Examining the diagnostic sub-module, there was substantial agreement (kappa > 0.7) for all disorders. Positive predictive values were found to be either acceptable or high for most disorders, with consistently high negative predictive values. Most compelling was the large amount of information gleaned from the screening in comparison to face-to-face interviews. Screening users were most forthcoming regarding their multitude of symptoms they experienced, where interviews tend to focus solely on the most obvious or prevalent diagnosis and miss emerging symptoms or the frequent co-morbidity that represents many who experience a mental health disorder.

**Adult Homeless Populations High ACES, Personality Disorders Consistent with Research**

To confirm the effectiveness of the ACES part of the questionnaire and its impact on the brain development of adults predisposing them to higher likelihood of personality disorders, 178 residents from the Orange County Rescue Mission completed the Heads Up Checkup as part of their intake to the program or for their quarterly evaluation. These residents averaged 250% more adverse childhood experiences than the national norm identified by CDC and Kaiser’s original research. This affirms that these traumatic experiences do impact ones’ developmental experience and impacts the brain’s ability to cope with stress in the future.

Number of ACEs	CDC-Kaiser (N=17,337)	OCRM (N=178)
0	36.1%	17.4%
1	26.0%	19.1%
2	15.9%	17.4%
3	9.5%	14.6%
4 or more	12.5%	31.5%

Upon further examination, the Adverse Childhood Experiences found to be higher than the national norms focused on parental divorce, higher percentage of family members incarcerated, and more frequent endorsement of emotional neglect identified by participants. Regarding the likelihood of mental health disorder, nearly 50% of the residents met one or more mental health diagnoses (250% higher than the national norm). The diagnoses most frequently endorsed were:

Category	OCRM (N=178)
Personality disorder (antisocial, borderline, narcissistic)	54.5%
PTSD	50.6%
Sleep disorder	48.9%
Depression (major depressive disorder, bipolar)	47.7%
Anxiety (social phobia, panic disorder, GAD)	44.4%
ADHD	36.5%
Asperger’s syndrome	22.5%
Alcohol/drug abuse	21.9%

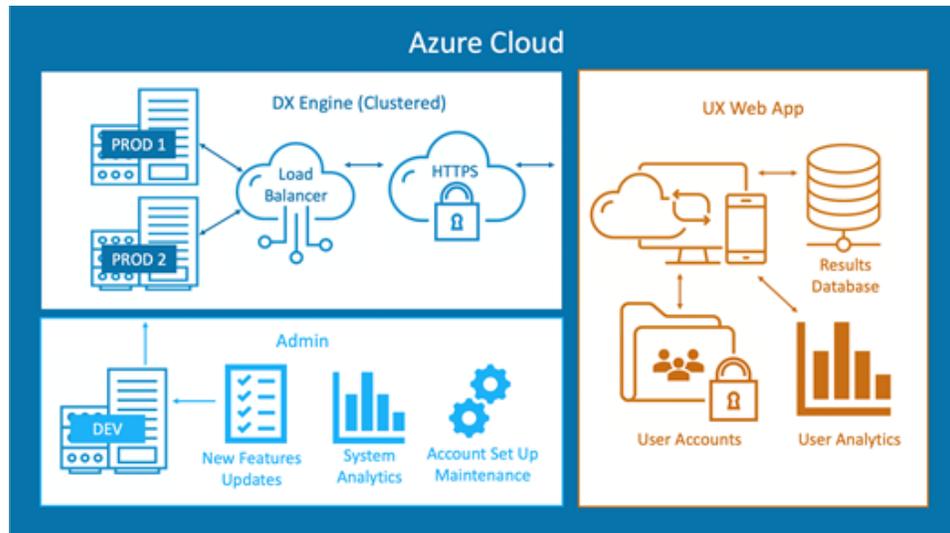
These results support that when a young person experiences consistent and significant Adverse Childhood Experiences, in combination with genetic predisposition, their capacity to navigate successfully to adulthood is compromised.



*ACEs influence on healthy development*

## 5. Technical Details

Because HUCU is cloud-based, it can be used anytime, anywhere on any web-connected device with a user interface. The current implementation is based on Azure Cloud, though it can easily be ported to equivalent cloud services such as Amazon or Google.



HUCU is not considered a medical device but conducts operations and manages user data as if it were a covered entity. HUCU safeguards and protects users' health information when it is at rest and in transit. Access control, authentication, encryption/decryption, automatic logging, and audit controls prevent personal data from leaving the system either through attacks or mishandling by HUCU employees.

The HUCU platform was designed in anticipation of potential regional or organizational needs to customize security rules, administrative rights, modular deployment, focus on a subset or superset of mental health areas of concern, special accommodations, and care plans.

## 6. Conclusion

The vast majority of students and adults go without treatment, or wait years for treatment, because their disorders go undiagnosed. Undetected and untreated mental health conditions cause needless pain and expense for everyone. HUCU was designed to identify those in crisis, to provide diagnostic considerations for mental health disorders, and to connect users to support. The HUCU system has been found to be comprehensive, fast, and effective, with demonstrated validity and reliability. Tests indicate that HUCU may provide more accurate results than traditional face-to-face assessments, as users are more transparent in their responses than they are in face to face evaluations. The system shows promise as a first-step screening for urgent and emergency care, for medical offices, and for large groups including schools and business.

## 7. References and Related Resources

1. [National Survey on Drug Use and Health \(NSDUH\)](#) External  
*NSDUH, administered by the Substance Abuse and Mental Health Services Administration (SAMHSA), provides national- and state-level data on the use of tobacco, alcohol, and illicit drugs (including non-medical use of prescription drugs), as well as data on mental health in the United States.*

2. [School Associated Violent Death Study \(SAVD\)](#)  
SAVD plays an important role in monitoring trends related to school-associated violent deaths (including suicide), identifying the factors that increase the risk, and assessing the effects of prevention efforts.
3. [National Health and Nutrition Examination Survey \(NHANES\)](#)  
NHANES assesses health and nutritional status through interviews and physical examinations, and includes conditions, symptoms, and concerns associated with mental health and substance abuse, as well as the use and need for mental health services.
4. [Youth Risk Behavior Surveillance System \(YRBSS\)](#)  
The YRBSS monitors health-risk behaviors, including tobacco use, substance abuse, unintentional injuries and violence, sexual behaviors that contribute to unintended pregnancy, and sexually transmitted diseases.
5. [National Health Interview Survey \(NHIS\)](#)  
NHIS collects data on children's mental health, mental disorders, such as ADHD, autism spectrum disorder, depression and anxiety problems, and use and need for mental health services.
6. Ready, Set, Go, Review: Screening for Behavioral Health Risk in Schools  
[https://www.samhsa.gov/sites/default/files/ready\\_set\\_go\\_review\\_mh\\_screening\\_in\\_schools\\_508.pdf](https://www.samhsa.gov/sites/default/files/ready_set_go_review_mh_screening_in_schools_508.pdf)
7. [National Survey of Children's Health \(NSCH\)](#)  
NSCH examines the health of children, with emphasis on well-being, including medical homes, family interactions, the health of parents, school and after-school experiences, and safe neighborhoods. This survey was redesigned in 2016. [National Survey of Children's Health \(NSCH 2003, 2007, 2011-12\)](#)  
[National Survey of Children with Special Healthcare Needs \(NS-CSHCN 2001, 2005-6, 2009-10\)](#)
8. *Counseling Today in School the Case for Universal Screening in Schools* Sept 5. 2019  
<https://ct.counseling.org/2019/09/the-case-for-universal-mental-health-screening-in-schools>
9. Malhotra, S., Chakrabarti, S., Shah, R., Mehta, A., Gupta, A., & Sharma, M. (2015). A Novel Screening and Diagnostic Tool for Child and Adolescent Psychiatric Disorders for Telepsychiatry. *Indian Journal of Psychological Medicine*, 37(3), 288–298. <http://doi.org/10.4103/0253-7176.162921>
10. Research (Journal of Applied Social Psychology, 2000, 30,1691-1708) *supports that users provide greater honesty when they feel they can provide anonymous information (e.g. internet screenings) in comparison to face to face disclosure.*
11. *Groundbreaking online test streamlines mental health screening and measurement in healthcare and beyond* University of Chicago, Aug. 2019 <https://www.uchicagomedicine.org/forefront/health-and-wellness-articles/online-test-streamlines-mental-health-screening>
12. *Validation of the computerized adaptive tests may offer alternative to other psychiatric exam* [Graham AK, et al. Ann Fam Med. 2019;doi:10.1370/afm.2316.](#) February 7, 2019.
13. *The Integration of Routine Behavioral Health Screening Into Pediatric Primary Care*  
<https://msp.scdhhs.gov/qtip/sites/default/files/uploads/2013/02/42%209b%20Ward-Zimmerman.pdf>
14. *Electronic vs. Paper: 5 Reasons Electronic Mental & Behavioral Health Screenings are the Future*  
<https://assessurhealth.com/electronic-vs-paper-5-reasons-electronic-mental-health-screenings-best-choice/>
15. Kingston, Dawn et al, 2014. *Comparing the feasibility, acceptability, clinical and cost-effectiveness of mental health e-screening to paper-based screening Edmonton: University of Alberta. Scientific Research Support Validity Process Ongoing:*