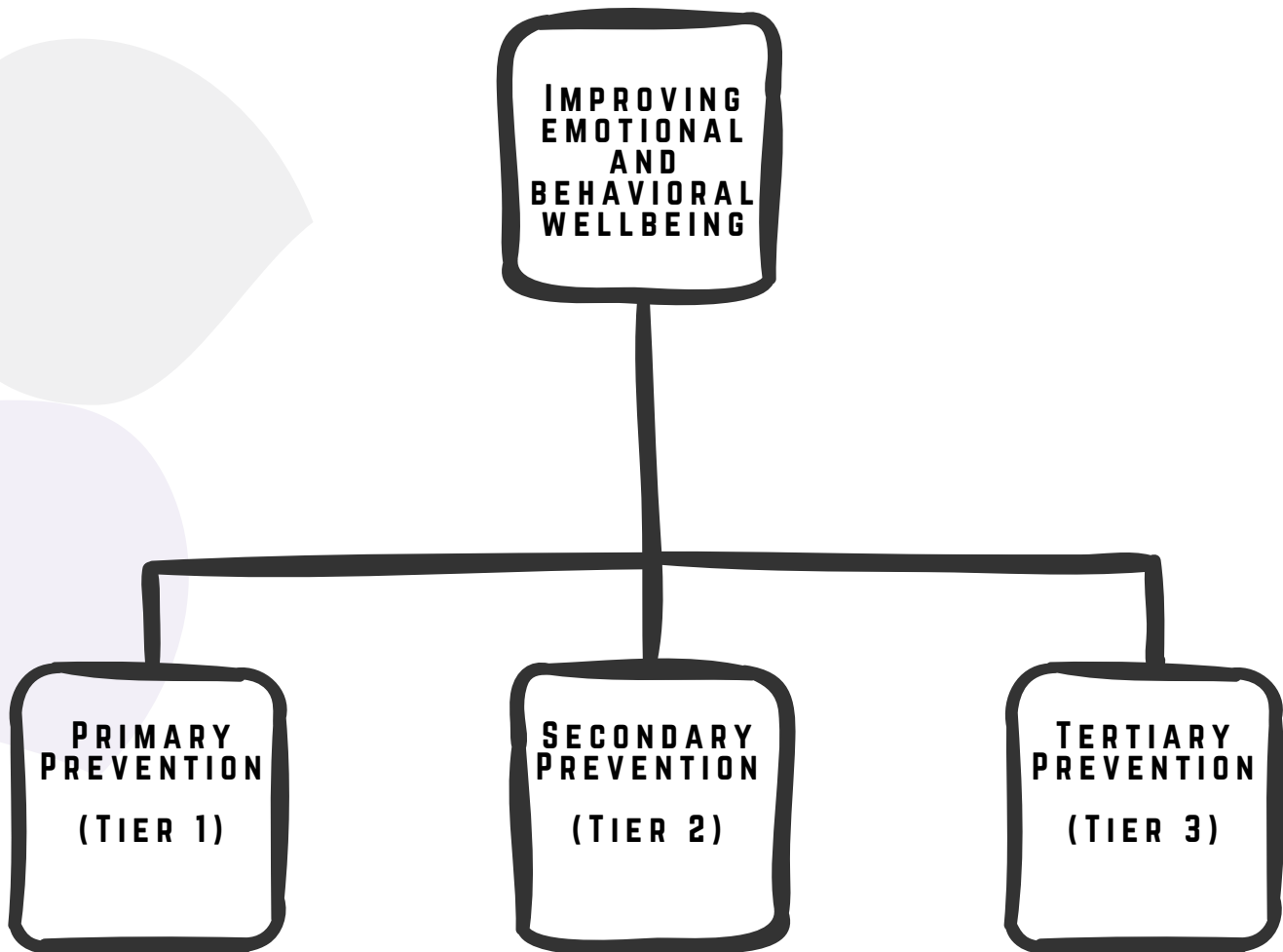


THE SHARPEN[®] SYSTEM

**PRIMARY, SECONDARY &
TERTIARY PREVENTION**
to improve behavioral well-being



BUILDING RESILIENCY THROUGH PUBLIC HEALTH PREVENTION MODELS



In response to empirically documented gaps in mental health literacy and stigma reduction across healthcare providers, educational leadership, and youth-parent dyads, Resiliency Technologies (RT) founder and CEO, Robyn Husa Farrell, initiated a systematic investigation and synthesis of evidence-based prevention science and stigma reduction methodologies. After working for four years in substance abuse and eating disorder treatment centers, Husa Farrell wanted to leverage established risk and protective factor frameworks incorporating suicide prevention¹, resiliency² and mental health literacy³ to bolster protection for vulnerable youth. She ultimately sought to improve eight primary protective factors that were inspired by the research of Neumark-Sztainer⁴ in 2006, Reupert⁵ in 2017 and Bhushan /Burke-Harris in 2020⁶ and to incorporate validated stigma reduction principles developed by Hinshaw and colleagues at University of California, Berkeley^{7,8}. Her work synthesized into a comprehensive psychoeducational intervention architecture incorporating 15 core evidence-based components optimized for enhancing protective mechanisms and mitigating stigma barriers.



OUR LOGIC MODEL

BUILDING PROTECTIVE FACTORS FOR EACH CIRCLE OF INFLUENCE USING COMMUNITY- BASED, PUBLIC HEALTH APPROACHES

This foundational framework was subsequently operationalized through Sharpen[®], an innovative digital implementation platform designed by the Resiliency Technologies team⁹. The platform's sophisticated infrastructure, grounded in social-ecological theory, enables precision delivery of prevention modules across multiple system levels and stakeholder interfaces - representing a significant methodological advancement in intervention dissemination science and digital therapeutic implementation.

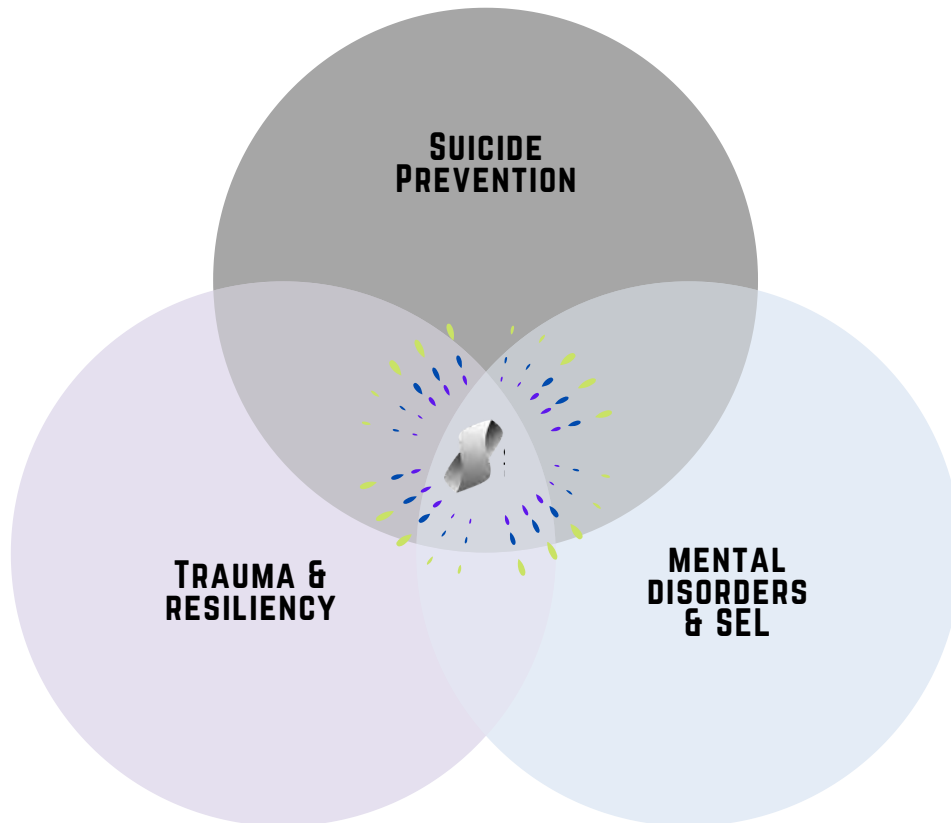




PROTECTIVE FACTOR FRAMEWORK

In 1999 the U.S. Surgeon General declared mental health a public health epidemic. In order to effectively address it, we must follow public health guidelines through primary, secondary and tertiary prevention.

Sharpen improves protection using evidence-based models into our comprehensive, user-friendly framework.



Initial deployment and systematic evaluation of Sharpen platform modules (2014-2024) demonstrated differential engagement patterns and stigma reduction outcomes across diverse demographic groups expanding across the social-ecological footprint. Over 700 Sharpen modules have undergone rigorous validation through multiple studies encompassing medical students¹⁰, foster parents¹¹, college students¹², athletes¹³, children and adolescents¹⁴.

THE SHARPEN[®] PREVENTION SYSTEM

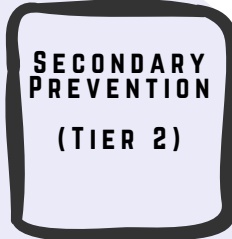
We provide affordable, digital toolkits that enable organizations to integrate directly and seamlessly to screening, psycho-educational content, daily MBSR engagements, and community resources for support.



Sharpen prevention system is associated with multiple accreditation and regulatory bodies: (i) University of Washington's SMART Center validation for high school adolescent implementation; (ii) South Carolina Department of Social Services certification for parent education; (iii) integration into medical education curricula across four medical schools; (iv) professional training and parent / youth resiliency platform for five year New York City VNS Health Safe Pathway suicide prevention program, funded through NY Office of Mental Health; and (v) peer resiliency and mentoring training component for adolescents engaged in multiple youth serving organizations in GA, CA, CO and SC.



With a commitment to ethical usage of data, we have gathered thousands of data points, evaluated outcomes with inter-disciplinary research teams, and have shown that Sharpen is a scalable solution that improves mental health literacy, decreases stigma, and bolsters individual, family and community resilience¹⁰⁻²¹. Our evidence-based design translates to sustained user engagement and—critically—seamless connection across all three prevention levels within a single integrated platform. [For up-to-date findings, please visit our blog here.](#)



60+
Custom prevention toolkits implemented

20,382
Screenings accessed

15,570
Crisis / help-seeking

92%
Completion rate of peer-focused documentary film video content

148,388
Resources accessed

112,436
Community resources and support accessed

2,850,546
Module views

85%
Increased help-seeking and connection to treatment

30+
Research studies currently utilizing Sharpen system

47,569
Unique users

8,492,364
API requests

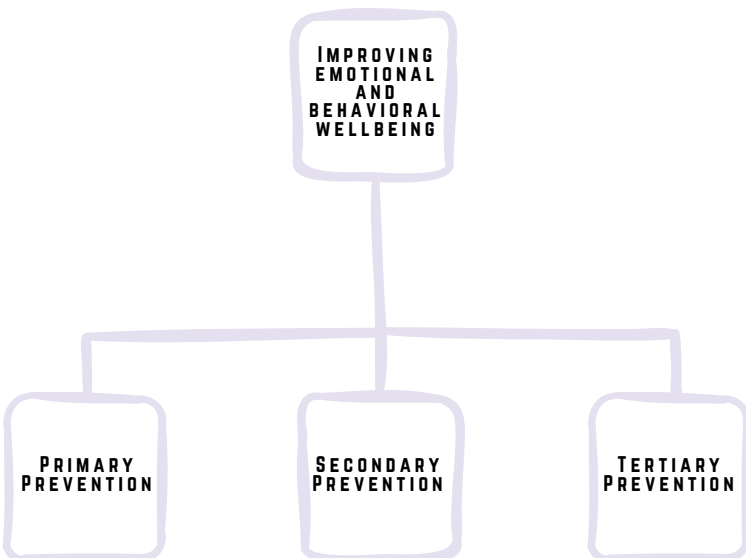
7 MIN
Average time spent per session

96%
Positive recommendations from young people

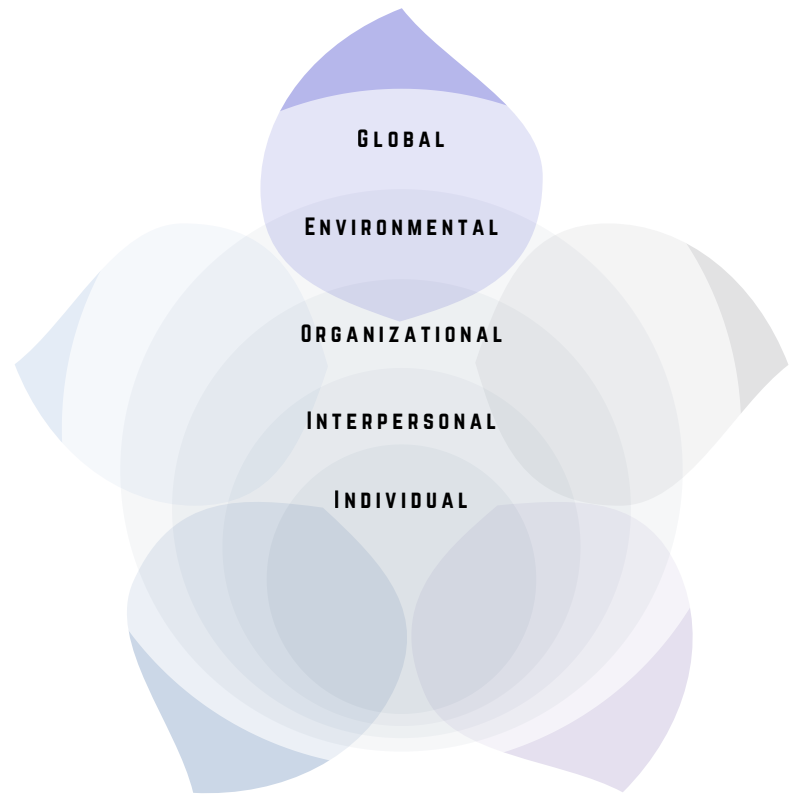
THE SHARPEN[®] SYSTEM

Over the past 20 years, we have developed a radical approach to implementation research focused on improving mental health disparities. These include:

1. Digitizing the social-ecological model to reduce stigma and improve mental health literacy.
2. Providing a library containing over 4,000 documentary films about resilience and mental health developed through community based participatory research.
3. Collaborating with kids and families to develop our award-winning mental health prevention content with a specific focus on populations where mental health disparities are present.
4. Validating and implementing culturally appropriate preventive interventions at the classroom and community-levels.



10 WAYS SHARPEN REDUCES MENTAL HEALTH DISPARITIES



5. Leading professional training workshops to optimize existing evidence-based approaches.
6. Trauma-informed training of medical providers to minimize bias in diagnosis and treatment.
7. Improving continuity of care and mental health outcomes through screening & assessment tools.
8. Increasing availability of mental health prevention and treatment interventions.
9. Ensuring that prevention and treatment interventions are relevant and appropriate for communities impacted by health disparities across a range of ages.
10. Practicing inclusive research that ensures all community members are at the table.

FIVE WAYS SHARPEN INTEGRATES WITH US SURGEON GENERAL'S NATIONAL STRATEGY FOR SUICIDE PREVENTION

1. ACTIVATE A BROAD-BASED PUBLIC HEALTH RESPONSE TO SUICIDE

- Sharpen broaden's perceptions of suicide, who is affected, and the many factors that can affect suicide risk by engaging in peer discussions of strength and resilience throughout our platform.
- We empower every individual and organization to play a role in suicide prevention, by making it available to all participants in the Sharpen service.
- We incorporate the Columbia suicide prevention screening, 988 crisis line, and suicide prevention training content throughout **every** Sharpen application.
- Through Sharpen's library of over 4,000 films, we engage people with lived experience in all aspects of suicide prevention through their direct testimony, and stories of strength and resilience.

2. IMPROVE PROTECTION AND PROTECTIVE FACTORS

- The Sharpen library is built through the shared protective factors for trauma, resilience and suicide prevention.
- We are able to deploy evidence-based content that addresses upstream factors that positively impact suicide, such as promoting and enhancing social connectedness and opportunities to contribute, strengthen economic supports and financial literacy, deploying our service to engage and support high-risk and underserved groups, and by dedicating resources to the development, implementation, and evaluation of interventions aimed at preventing suicidal behaviors.
- For example, Sharpen is the tech partner for the VNS Safe Pathway suicide prevention project focused on LGBTQ+ youth throughout all five boroughs in New York City.

3. ADOPTION OF EVIDENCE-BASED CARE FOR SUICIDE RISK

- Through our professional development trainings for educators and licensed clinicians, the Sharpen service supports the adoption of evidence-based care for suicide risk by
 - a.increasing clinical training in evidence-based care for suicide risk,
 - b.improving suicide risk identification in health care settings,
 - c.conducting safety planning with all patients who screen positive for suicide risk,
 - d.increasing the use of suicide safe care pathways and safety plans,
 - e.increasing the use of caring contacts in diverse settings.

4. SEAMLESS INTEGRATION WITH CRISIS RESPONSE

- Throughout the Sharpen service, we have integrated both local and national crisis response supports and have shown to increase use of statewide and regional crisis service hubs including mobile crisis teams, and crisis receiving and stabilization facilities.
- The "Get Help Now" button on the app immediately connects users to free and sliding-services along with crisis response teams available locally, regionally and nationally.

5. PROACTIVE DEPLOYMENT AND ENGAGEMENT BY FIRST RESPONDERS

- Because Sharpen can be deployed de-identified to an individual in crisis, we enable first responders to proactively deploy crisis response toolkits to individuals and their family members.
- This toolkit includes a safety plan mechanism that provides immediate support to those in crisis.
- First responder toolkits provide them with their own resiliency building tools

SHARPEN DTX

In 2024, after many years deploying the Sharpen consumer / prevention program, Resiliency Technologies determined that a digital therapeutic product that could integrate directly into electronic health records would bridge important divides in behavioral health triage and collaborative care.

As such, Sharpen DTX was created.



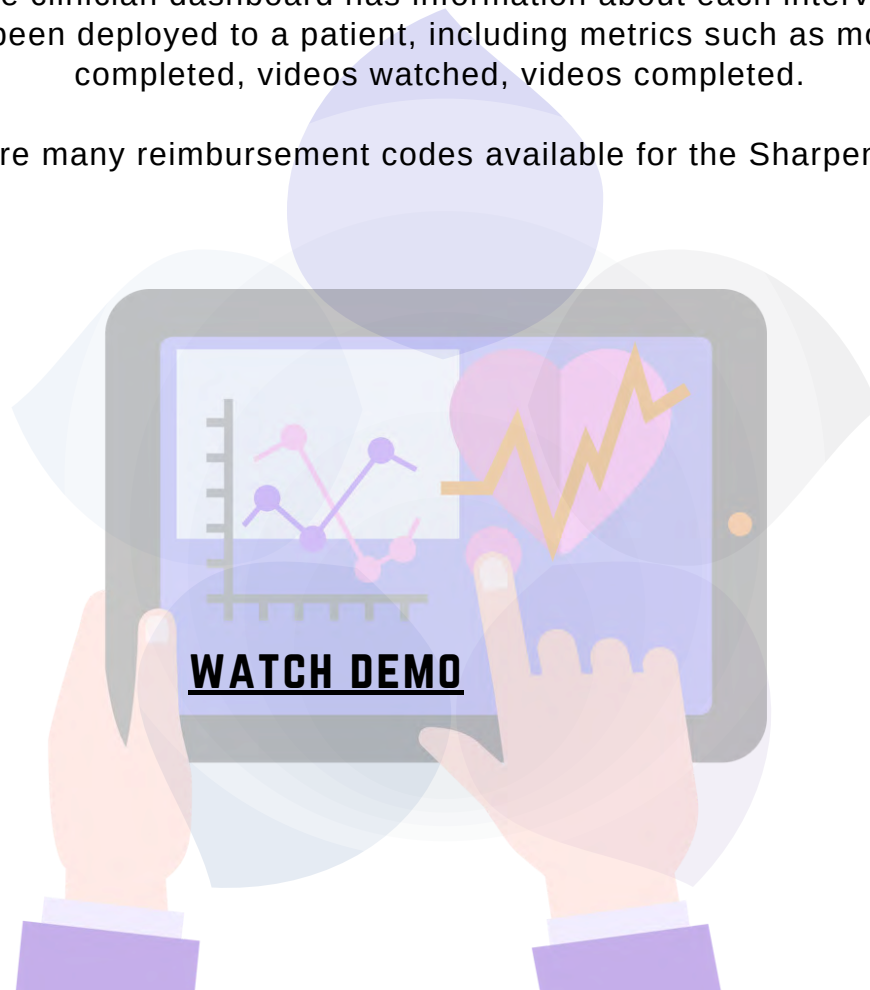
Sharpen DTX provides clinical professionals with comprehensive tools for mental health identification and intervention. Its unique value proposition lies in the integration of an extensive library of validated mental health screeners, interventions, crisis support and geographically curated mental health resources into a single, accessible solution. The proprietary online interface enables clinicians to prescribe peer-focused mental health interventions and monitor patient progress. All content is securely housed in the HIPAA compliant Sharpen database on AWS cloud infrastructure, with real-time data accessible via the Sharpen DTX dashboard.



HOW SHARPEN[®] DTX WORKS

Sharpen DTX therapeutic triage and decision support platform that integrates into electronic health records. Clinicians and health workers can deploy various Sharpen interventions to a patient via email or text message. Each intervention is delivered on a pre-determined schedule (generally 24-48 days). The clinician dashboard has information about each intervention that has been deployed to a patient, including metrics such as modules completed, videos watched, videos completed.

There are many reimbursement codes available for the Sharpen system.



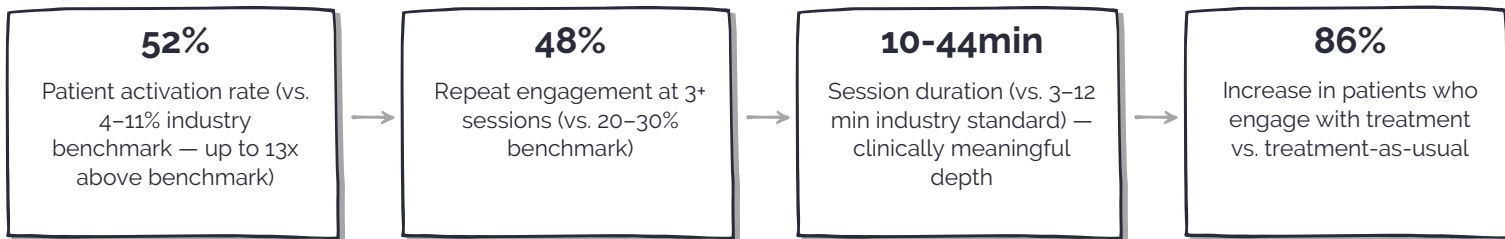
Sharpen DTX has four primary objectives relevant to a clinical setting: (i) facilitate early intervention by clinicians and support staff, (ii) enhance outcomes for individuals awaiting specialized mental health treatment, (iii) serve as an adjunctive therapy between formal mental health sessions, (iv) increase protection and response against suicidal ideation.

We are currently accepting up to 10 sites to participate in clinical pilot studies. Email Robyn Hussa Farrell at rfarrell@sharpenminds.com for more information.



Patients Engage. Clinicians Document. Payors Save.

PRISMA HEALTH DEPLOYMENT DATA (JULY–NOVEMBER 2025)
EARLY PILOT, PRIOR TO AI PERSONALIZATION LAYER



Clinical outcomes (30+ studies)

- 96% of users report the platform is effective
- 96% would recommend Sharpen to a friend or colleague
- Significant reductions in suicide risk following intervention (CAT-MH follow-up data)
- Increases in mental health literacy, engagement, and clinician confidence
- Decreases in stigma and time-to-support
- Effective across child, adolescent, and adult patient populations

What high engagement means

- 52% activation is the foundational requirement for HEDIS improvement
- High repeat engagement predicts PHQ score improvement and reduced ED utilization.
- 10–44 minute sessions signal clinical depth, and is the engagement level needed to produce measurable outcomes.
- Early intervention reduces long-term costs: \$2,400/patient (depression), \$1,800/patient (anxiety).



Partners
clinical and academic

- Stanford Children’s
- UCSF
- UC Berkeley
- Edward Via College of Osteopathic Medicine (VCOM)
- James Madison University
- Prisma Health Children’s
- VNS Health / NY OMH

Clinical Trials
2026-2027

- Full DTX triage system – depression & suicide risk (Stanford + UCSF)
- Mood disorders (Stanford)
- Substance use disorders (Stanford)
- Bilingual anxiety/depression – English + Spanish (UCSF)
- Eating disorders – waitlist patients (Prisma Health)

Partners
government and strategic

- SAMHSA (active suicide prevention grant)
- SC Department of Social Services
- NY Office of Mental Health
- Live Well San Diego
- South Carolina Research Authority
- Stanford/UCSF Pediatric Device Consortium
- FDA – 5 meetings; 513(g) recommended as next step

Sharpen® DTX is the only pediatric and adult DTX platform with 20 years of participatory research, active clinical trials, and live health system deployments.

Magalhaes et al. 2025; Biber, 2023; Biber & Rothman, 2024; Fadel et al. 2024; Rios et al. 2024; Levy et al. 2025; Spence et al. 2024; Anderson et al. 2014; Beretta et al. 2024

Our business model reflects our intentions of doing well and good in the world. Our content partners participate in a revenue-sharing model which enables nonprofit agency content partners to increase capacity while extending their reach, data and impact.

SOCIAL IMPACT

A portion of the proceeds from the sale of content benefits our nonprofit partners.



1.Karydi, A., Davis, T., Husa-Farrell, R. The Spartanburg South Carolina suicide prevention task force was created and led by Robyn Husa Farrell for 4 years in collaboration with the Office of Suicide Prevention, led by Dr. Alex Karydi and Taylor Davis, Ed.S. who wrote the suicide prevention plan for the state of South Carolina and for SC schools through the Department of Education. This foundational research led to a 5-year deployment in New York in collaboration with the NY Office of Mental Health, currently being evaluated by Biber, Rios and colleagues.

2.Between 2017-2019 Sharpen was deployed to educators who participated in 3 day resiliency training including Adverse Childhood Experiences (ACEs) and primary prevention programs to build community resiliency, led by Dr. Jennifer Parker and the University of South Carolina Upstate Child Protection Training Center. RT's CEO served as the invited mindfulness / resiliency presenter on Day 3 of the Compassionate Schools / Resilient Schools summits between 2016-2019. The 5 Minute Mindfulness training for educators that is currently in the Sharpen service, was a 1.5 hour component of the 3rd day of the Compassionate Schools initiative. After each workshop, educators received access to Sharpen to explore more topics on childhood trauma and resilience, along with tools to increase their own self-care, mental health literacy and best practices for prevention mental health and substance use disorders in the school setting.(Parker, J., Olson, S. & Bunde, J. The Impact of Trauma-Based Training on Educators. *Journ Child Adol Trauma* 13, 217–227 (2020). <https://doi.org/10.1007/s40653-019-00261-5>.)

3.Every module in Sharpen's course library is created using the MHL framework and (1) improves understanding of how to obtain / maintain good mental health; (2) improves understanding of various mental disorders and their treatments; (3) decreases stigma related to mental disorders through peer documentary film stories; (4) increases connection to treatment and help-seeking (Kutcher, S., Wei, Y., Costa, S., Gusmão, R., Skokauskas, N., & Sourander, A. (2016). Enhancing mental health literacy in young people. *European Child and Adolescent Psychiatry*, 25(6), 567-569. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/27236662>)

4. Neumark-Sztainer, D. R., Wall, M. M., Haines, J. I., Story, M. T., Sherwood, N. E., & van den Berg, P. A. (2007). Shared risk and protective factors for overweight and disordered eating in adolescents. *American journal of preventive medicine*, 33(5), 359–369. <https://doi.org/10.1016/j.amepre.2007.07.031>
5. Reupert A. A socio-ecological framework for mental health and well-being. *Adv Ment Health*. 2017;15(2):105–7.
6. Bhushan D, Kotz K, McCall J, Wirtz S, Gilgoff R, Dube SR, Powers C, Olson-Morgan J, Galeste M, Patterson K, Harris L, Mills A, Bethell C, Burke Harris N, Office of the California Surgeon General. Roadmap for Resilience: The California Surgeon General's Report on Adverse Childhood Experiences, Toxic Stress, and Health. Office of the California Surgeon General, 2020. DOI: 10.48019/PEAM8812.
7. Hinshaw, S., Porter, P., & Ahmad, S. (2024). Developmental psychopathology turns 50: Applying core principles to longitudinal investigation of ADHD in girls and efforts to reduce stigma and discrimination. *Development and psychopathology*, 1–15. Advance online publication. <https://doi.org/10.1017/S0954579424000981>
8. Martinez, A. G., & Hinshaw, S. P. (2016). Mental health stigma: Theory, developmental issues, and research priorities. In D. Cicchetti (Ed.), *Developmental psychopathology: Risk, resilience, and intervention* (3rd ed., pp. 997–1039). John Wiley & Sons, Inc. <https://doi.org/10.1002/9781119125556.devpsy420>
9. Hussa Farrell, R., Farrell, T., Painter, B. (2025). Since 2013 Robyn Hussa Farrell has worked with her co-founders, Tim Farrell and Brian Painter (software engineer) to architect the Sharpen system. It has evolved from a learning management system (2014), to an app prototype (2015-18), to a fully working system in 2019 and in 2024 has evolved to encompass integration into electronic health records (EHR). The team met doing a Bloomberg Philanthropies-funded public art / public safety project called Seeing Spartanburg in a New Light. Hussa and Farrell co-directed the award-winning Video Village installation for over 2 years. [See the amazing journey here \(4 min clip\)](#).

10. Berreta, K., Nguyen, C., Stoner, A. M., Ridgeway, L., Wilson, A., Fadel, N., & Biber, D. (2023). A RE-AIM Analysis of a Mental Health App for Undergraduate and Medical Students during the COVID-19 Pandemic: A Retrospective Cross-Sectional Study. *International Journal of Environmental Research and Public Health*, 20(13), 6266. <https://doi.org/10.3390/ijerph20136266>
11. Biber, D. The Impact of an mHealth Mental Health Literacy Training for Foster Parents Prepared for Trends in Psychology. *Trends in Psychol.* (2023). <https://doi.org/10.1007/s43076-023-00348-x>
12. Biber, D. and Rothman, R. (2024), "Mental health literacy training for college female peer mentors: a pilot study", *Higher Education, Skills and Work-Based Learning*, Vol. 14 No. 1, pp. 181-191. <https://doi.org/10.1108/HESWBL-06-2023-0148>
13. Biber, D. D., Davis, A., & Stewart, B. (2023). Heads Up! Using a Mobile Platform for Division II Student-Athlete Mental Health Screening. *Journal of Sport Psychology in Action*, 15(4), 263–273. <https://doi.org/10.1080/21520704.2023.2282191>
14. Cosgrove, V., Hussa Farrell, R. et al. (2025). Resiliency Technologies has applied for NIH SBIR funding to support clinical trials with Stanford Children's, UCSF / SF General, Prisma Health Children's and with Atlanta pediatric groups. Our goal is to leverage clinical trial data as part of our FDA approval process. Our team has completed pre-sub meeting with FDA in 2024.
15. Anderson C., Holody K., Flynn M., Hussa Farrell R. (2017). An exploratory evaluation of the feasibility, acceptability, and efficacy of the mental fitness disordered eating program in schools. *Eat. Disord.* 2017;25:230–245. doi: 10.1080/10640266.2017.1289793.
16. Fadel N., Stoner A., Berreta K, et al. (2024) A Process Evaluation of a Mobile App for Medical Students Aimed at Increasing Resilience and Decreasing Stigma in Mental Health. *Cureus* 16(6): e63054. doi:10.7759/cureus.63054

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18. Magalhaes, E., Fadel, N., Stoner, A., Husa Farrell, R., Farrell, T., & Karydi, A. (2023–2025). SAMHSA-funded suicide prevention program for medical students [Unpublished raw data]. Resiliency Technologies and Edward Via College of Osteopathic Medicine implemented the Sharpen system for medical student suicide prevention, faculty training protocols on crisis response, screening and safety planning.
19. Magalhaes, E., Fadel, N., Stoner, A., Redden, D., Ridgeway, R., Biber, D., Husa Farrell, R., Farrell, T., Chawla, J., & Ralston, G. (2026, April). Mental health knowledge and attitudes in medical students: Effects of a self-guided course [Conference presentation]. American Association of Colleges of Osteopathic Medicine Annual Conference, Las Vegas, NV, United States.
20. Rios, I., Biber, D. (2024). Sharpen Health Care Worker app data. Sharpen data were gathered from de-identified pre- and post- test surveys incorporating OMS-HC, and user acceptability and training feedback metrics. Ongoing evaluation is in process, led by Ileah Rios, MPH and Duke Biber, PhD with anticipated publication of findings in 2026-2027.
21. Spence, E., Davis, A., Biber, D., Haedicke, A. (2024). Examining the Relationship Between a Digital Mental Health Literacy Program and Student Athlete Mental Health. *International Journal of Exercise Science: Conference Proceedings*: Vol. 16: Iss. 3, Article 284. Available at: <https://digitalcommons.wku.edu/ijesab/vol16/iss3/284>