Opportunities for Investors and Innovators

In The Texas Child and Youth Behavioral Health Landscape

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MEADOWS
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Contents

Executive Summary

Children and youth in Texas are facing a growing behavioral health crisis with profound human, societal, and economic tolls, and Texas is uniquely suited to respond to this crisis.

The largest challenges underpinning the behavioral health crisis affecting children and youth are barriers to accessing effective care, workforce limitations (both volume and quality), and systemic problems that delay illness detection and intervention.

The state of Texas is well positioned to become a global leader in child and youth behavioral health by demonstrating effective strategies to increase access and improve health outcomes; as an example of its commitment, the state has consistently increased investment in mental health care in recent years. Further, Texas has the right business and investment environment to foster rapid innovation, an ideal incubator for mental health technology companies to develop and scale innovative products and services, including gaining reimbursement and policy support for these products and services. Texas has a unique ecosystem for innovators and investors to drive impactful child and youth behavioral health improvements and positive outcomes. With the groundwork laid by state investment and a burgeoning innovation ecosystem, investors are now willing to lean into frontier areas such as child and youth behavioral health innovation in Texas.

Opportunities include expanding the adoption and use of child and youth behavioral health integrated care models, leveraging digital health tools to bolster existing workforce gaps and scale solutions, and expanding the state's strong existing telemedicine models to increase access to effective care.

There has never been a more opportune time for investors to do good. Addressing the child and youth behavioral health crisis is a moral and medical imperative; it is key to ensuring we have the next generation of leaders needed to build a healthy and resilient future for the state and country. Investors have the opportunity to mitigate the child and youth behavioral health crisis while investing in a market estimated to represent a $26 billion opportunity by 2027.[1]

In the full document that follows, the Meadows Mental Health Policy Institute and GreyMatter present a review of the current child and youth behavioral health landscape in Texas primed for innovation and investment.

Introduction: Overview of the Child and Youth Behavioral Health Crisis

The world is amidst a behavioral health crisis with profound human, societal, and economic tolls. Behavioral health encompasses our emotional, psychological, and social well-being and exists on a spectrum from mental wellness to mental distress.[2,3] Mental distress includes: behavioral illness, including mental health and substance use disorders; life stressors and crises; and stress-related physical symptoms.[4] Every year, one in five adults in the United States experiences mental illness.[5] Beyond the intensely personal and societal ramifications, there are also large economic implications. Across the United States economy, serious mental illness causes $193.2 billion in lost earnings each year.[6]

Children and youth especially are facing a growing behavioral health crisis, which has been amplified by the COVID-19 pandemic. The quality of behavioral health in childhood can have lifelong effects, including human and brain capital implications across the lifespan. Many behavioral health conditions begin in childhood with 50% of all lifetime illnesses beginning by age 14 and 75% by age 24.[7] One in six or nearly 17% of children and youth in the United States ages 6–17 experience a mental health condition each year.[8] And suicide has become the second leading cause of death among young people ages 10–14.[9] In December 2021, United States Surgeon General Dr. Vivek Murthy issued a Surgeon General's Advisory on the urgent need to address the nation's youth mental health crisis.[10]

Similar to youth across the nation, children and youth in the state of Texas are facing severe behavioral health challenges. Within Texas, more than 500,000 children were diagnosed with anxiety or depression in 2020, an increase of 23% since 2016.[11,12] Additionally, 10% of high school students in the state report attempting suicide, tens of thousands higher than the nationwide average of 9%.[13] Youth in underserved areas or those who are low income or in minoritized groups have been particularly impacted, especially children of color and those who are LGBTQIA.[14,15,16,17,18] As one example, 22% of high school students in Texas who identify as gay, lesbian, or bisexual reported attempting suicide.[19,20]

Critical Problems in the Child and Youth Behavioral Health System

Problem 1: Challenges with Access to Effective Care and Workforce Limitations

Lack of access to effective care is the largest challenge in the current child and youth behavioral health crisis. Nationwide, current data indicates that only 50.6% of United States children and youth ages 6–17 with a mental health disorder are receiving treatment, and there is an average delay of 11 years between the onset of behavioral illness symptoms and the start of treatment.[21]

Workforce challenges exacerbate the lack of access to effective care. The child and youth behavioral health workforce is over-stretched and mis-deployed. Recent nationwide estimates

predict provider shortages across six behavioral health subspecialties surpassing a quarter of a million full-time employees by 2025.[22] The shortage in the child and youth behavioral health workforce is particularly alarming, especially for underserved communities and communities of color.[23,24,25,26,27,28] A recent analysis showed that the state of Texas has the highest number of counties in the United States without any behavioral health providers, in areas known as "mental health care deserts."[29] Rural areas especially face unique strains and challenges to accessing effective youth behavioral health care and training a sufficient workforce.

While workforce challenges are often framed as being about a lack of specialists such as psychiatrists, psychologists, and social workers, this is only part of the problem. There is also an urgent need for more mid-level mental health professionals and more mental health care extenders. One possibility is to expand the umbrella of trained, eligible professionals who can address youth behavioral health concerns to include peer support specialists, mental health and recovery coaches, and non-clinical health care workers, among others.[30] In addition, we must find solutions that can optimize our existing workforce and allow them to work more effectively and efficiently, such as digital treatment companions or clinician adjudicators.

Further compounding challenges accessing care is the significant portion of the population without health insurance. The state of Texas ranks last in the nation in the number of children without insurance.[31,32]

Problem 2: Fragmentation and Lack of Measurement-Based Care

Beyond access, effective care is stymied by fragmentation in the system, the lack of providers trained in evidence-based treatments, and the lack of measurement-based accountability. Organizations involved with treating child and youth behavioral health—including schools, the justice system, community organizations, primary care clinicians, and others—are rarely coordinated in their efforts. Behavioral health also remains largely segregated from the rest of medical care. Additionally, while effective, proven treatments for youth behavioral health conditions exist, few behavioral health providers are trained in evidence-based treatments.[33] Measurement of outcomes in child and youth behavioral health also remains scarce, leading to limited use of measurement-based treatments and limited accountability.[34]

Within Texas, there is significant fragmentation between psychiatric specialists, behavioral health clinicians, pediatric primary care clinicians, school counselors, and families who identify children with behavioral health challenges.[35,36] The large gaps and disconnections between these key stakeholders also reduce the likelihood of measurement-based and evidence-based care for youth behavioral health, which require coordination amongst different youth behavioral health stakeholders.

There are also concerns about cultural competency and responsiveness in child and youth behavioral health services in Texas. For example, despite the high percentage of Hispanic or Latino residents in the state, large deficits exist in numbers of behavioral health providers trained to competently address the cultural and linguistic needs of this population of youth.[37,38]

Problem 3: Delays in Illness Detection and a Reactive Treatment Approach

Many behavioral health conditions begin in childhood with 50% of all lifetime illnesses beginning by age 14 and 75% by age 24 years.[39] There is an average delay of 11 years between the onset of mental illness symptoms and the start of treatment, causing many behavioral health challenges in children and youth to go undetected, especially during the early stages.[40] The child and youth behavioral health workforce is not deployed well upstream. Opportunities for prevention, early detection, and early intervention in the existing behavioral health system are extremely limited; the existing system is reactive rather than proactive and is crisis oriented. Delayed diagnosis and treatment often lead to more severe symptoms and suffering, including juvenile justice involvement.[41]

To compound this issue, the youth behavioral health system often struggles to connect and engage with children and youth in a way that works for them. Many young people are either not able to or do not want to receive help for behavioral health challenges in traditional ways, but prefer instead digital-based tools, telehealth services, and youth-centered integrated mental health centers.[42]

Within the state of Texas, schools face unique challenges to identify and treat behavioral health concerns in children and youth. For example, while most Texas school districts have school guidance counselors, they are often overwhelmed and stretched thin, oftentimes spending most of their time helping students with academics and graduation requirements.[43] When behavioral health issues are identified, children and youth are typically referred to therapists outside of the school. The lack of connection or fragmentation among behavioral health providers, pediatric primary care clinicians, school counselors, and families highlighted in Problem #2 also inhibits the opportunity for early intervention and detection of behavioral health conditions.[44]

How Texas is Poised to Be a Global Leader Through Innovation Ecosystem

The state of Texas is staged to become a global leader in child and youth behavioral health, even with the major challenges to its care system. Texas has a unique ecosystem for innovators and investors to drive impactful child and youth behavioral health improvements and positive outcomes. The state itself is already investing in initiatives such as the Texas Child Mental Health Care Consortium (TCMHCC) which has an anticipated budget of $337.1 million for fiscal years 2024–2025 and runs the Texas Child Health Access Through Telemedicine (TCHATT)

program, which has an anticipated $172.7 million commitment for fiscal years 2024–2025. Texas Tech University Health Sciences Center, one of the medical school hubs in the TCMHCC with the most experience in delivering telehealth services and the pioneering institution of the TCHATT model, provides tele-mental health services to children and youth across Texas with a budget of $26.5 million in state funds for fiscal year 2024-2025.

Further, Texas has the right business and investment environment to foster rapid innovation. The state has a business-friendly climate with no corporate or personal income tax, a highly skilled and diverse workforce, easy access to global markets, and a reasonable regulatory environment. Texas provides an ideal incubator for mental health technology companies to develop and scale innovative products and services, including gaining reimbursement and policy support for these products and services. In the past couple of years, Toyota, Tesla, SpaceX, and Charles Schwab have all relocated their headquarters to Texas, and Apple has broken ground on a new Austin Campus. Chief Executive Magazine has ranked Texas "the #1 state for business" for 18 consecutive years. And if Texas were a country, it would be one of the world's top 10 largest economies.[45]

With the groundwork laid by state investment and a burgeoning innovation ecosystem, investors are now willing to lean into frontier areas such as child and youth behavioral health innovation in the state of Texas. The child and youth behavioral health space has received growing interest by technology investors; technology offers a large opportunity to increase access and quality of behavioral health care, especially for children and youth. Every $1 of investment in prevention and early intervention for behavioral health yields $2 to $10 of savings in health costs, criminal and juvenile justice costs, low productivity costs and economic loss.[46] Behavioral health technology investment opportunities will increase to $132.4 billion by 2027, with youth behavioral health representing a $26 billion opportunity by 2027.[47,48] In 2021, there was a new record for global deals, exits, unicorns, and valuations in the behavioral health space.[49] According to a recent Telosity report, there has also been a 15x growth rate over the last four years in the United States child and youth behavioral health market.[50] Specifically in the state of Texas, innovation incubators such as the Texas Medical Center are starting to prioritize behavioral health solutions. Telosity Ventures, Texas Children's Hospital, and the Meadows Mental Health Policy Institute recently launched the first Youth Behavioral Health Innovation Challenge in the state. The challenge was designed to catalyze and accelerate innovation by helping digital startups and non-profits access capital, develop, and launch their bold ideas. The challenge targeted innovators creating solutions that positively impact the industry and accelerate transformative solutions to better serve people with mental health challenges. Innovation Challenge themes included pediatric mental health, suicide prevention, neurodevelopmental challenges, and more.

Opportunities in Texas

Opportunity 1: Integrated Care Model Expansion and Workforce Optimization

New models of care provide innovative ways to organize and deploy the mental health workforce, improve access to effective measurement-based care, and enable early detection and intervention. The Collaborative Care Model (CoCM) addresses workforce shortages by treating child and youth behavioral health through a team-based approach in the pediatric or primary care setting. CoCM is the integrated behavioral health model with the largest evidence base; over 90 randomized controlled trials have demonstrated its efficacy in diverse settings, diagnoses, and populations.[51] Importantly, CoCM is proven to work just as effectively for Black, Hispanic, and other communities of color as it does for White populations.[52,53] Additionally, CoCM is particularly promising for Hispanic and Latino populations as research shows that these groups tend to support primary care physicians as the ones to treat child and youth behavioral health symptoms and are more willing to allow their child to receive other mental health services if recommended by a primary care physician.[54,55,56]

In practice, CoCM allows for real-time availability of child and youth behavioral health care and employs brief, evidence-based interventions in a short-term care format to help families access care sooner. CoCM effectively addresses pediatric workforce shortages and can optimize the existing workforce.[57,58,59,60,61] The model can leverage a psychiatrist's time 3.5 times over.[62] The integration of services also circumvents the stigma and difficulty often found when navigating specialty youth behavioral health care, and CoCM has dedicated insurance billing codes for long-term financial sustainability.[63] Ultimately, CoCM can enable early detection and treatment of youth behavioral health challenges before they become crises.[64]

Currently, CoCM for child and youth behavioral health is being implemented at scale in health care systems serving millions of Texans.[65] Funded by $10 million from Lyda Hill Philanthropies and Lever for Change, and as the recipient of the Texas-based Lone Star Prize, the Meadows Mental Health Policy Institute is collaborating with the Center for Depression Research and Clinic at The University of Texas Southwestern Medical Center, Harvard Medical School's Department of Global Health and Social Medicine, and The Path Forward for Mental Health and Substance Use to develop and scale CoCM across Texas. Through these resources and with additional funding from the American Rescue Plan Act, Texas is implementing pediatric-focused CoCM in 18 health systems across the state.[66] Expanding the adoption and use of CoCM is an essential step toward addressing the child and youth behavioral health crisis. By expanding CoCM, Texas will dramatically improve the access and quality of youth behavioral health care and enable early detection and intervention at scale.

Opportunity 2: Building Upon Texas' Existing Telemedicine Infrastructure

Telemedicine has a critical role in youth behavioral health care. Given its size, the high number of under-resourced rural communities, numerous regions where people experience transportation challenges, and the significant mental health workforce shortage,[67,68] Telehealth provides a valuable tool to transform the child and youth behavioral health care delivery system by overcoming geographical distance, enhancing access to care, and building efficiencies.[69] Especially beneficial in rural communities, telemedicine in both inpatient and outpatient youth behavioral health services provides an opportunity for access to effective care that otherwise would only be available in urban areas. Telehealth also has potential to catalyze collaborative care, measurement-based care, and early detection and intervention strategies. A large volume of research has demonstrated that clinical outcomes with telehealth are as good or better than outcomes from typical care,[70] including telehealth used for youth behavioral health care.[71] Telemedicine companies already operating with success in Texas and could be more impactfully integrated into the state's strategy to fill critical gaps in care, including establishing a revenue pipeline with Medicaid.

Texas has an opportunity to build upon its existing strengths in telemedicine to be at the forefront of child and youth behavioral health telemedicine. For example, the previously mentioned Texas Child Mental Health Care Consortium or TCMHCC was created by the 86th Texas Legislature to leverage and deploy the expertise and capacity of the state's health-related institutions of higher education to address urgent mental health challenges and improve the mental health care system for children and adolescents. One of its programs, TCHATT, is focused on expanding pediatric mental health access by implementing tele-mental health services in school districts across Texas.[72] Through this initiative, each medical school in the state of Texas that has a department of psychiatry is funded with state resources to operate a TCHATT program. TCHATT provides elementary and secondary schools with remote access to child and adolescent mental health providers for students school personnel have identified with mental health needs. The model utilizes a team of clinicians to assess, provide brief interventions, and refer students to local services as needed and clinically indicated.

From its inception in 2019 to the end of August 2022, TCHATT covered more than 44% of the student population in the state, representing nearly 2.4 million students who have access to services. By the end of state fiscal year 2022, which was in August 2022, 3,615 schools and 407 school districts were enrolled in TCHATT. Notably, TCHATT has improved access in certain under-resourced regions of Texas with 852 rural schools spanning 460,012 students able to obtain pediatric mental health services as of August 2022. Since TCHATT's launch in 2020, 13,309 students received more than 35,700 telehealth sessions; rates of referral into TCHATT continue to increase as more students are covered through statewide expansion.[73]

TCHATT is anticipated to receive $172.7 million from the state for the 2024–2025 fiscal years. Texas Tech University Health Sciences Center, one of the medical school hubs in the TCMHCC with the most experience in delivering telehealth services and the pioneering institution of the TCHATT model, provides tele-mental health services to children and youth across Texas with a budget of $26.5 million in state funds for fiscal year 2024-2025. Texas Tech is actively searching for partners to expand their footprint and the impact of the funds. TCHATT is just one forward-leaning example among many within a landscape that is becoming more buoyant and resourced, with many ripe opportunities to innovate and invest in the child and youth behavioral health space.

Opportunity 3: Scalable Digital Health Solutions

Digital health solutions have vast potential to optimize the existing workforce, serve as workforce extenders, and provide scalable consumer-driven approaches directly to children and youth. Technology-driven solutions can amplify and scale existing evidence-based approaches, such as CoCM. Technology companies that support risk detection and treatment decision-making, such as Neuroflow and Mirah, can be leveraged to increase provider effectiveness and efficiencies. For youth unable or unwilling to access traditional help for behavioral health care, digital tools can meet them where they are through the platforms and digital communities that are ingrained into their daily lives. A recent national survey by Hopelab and Well Being Trust found that adolescents (age 14–17) and young adults (age 18–22) extensively use a wide range of digital resources to access health information, tools, peer support, and providers online.[74] Virtual spaces and peer communities are also integral components of youth behavioral health.[75,76] Existing tools, including CenterLink's Qchat space and Trevor Project's TrevorSpace, provide affirming communities for LGBTQIA+ young people in times of crisis.[77] From August 2019 to July 2020, the Trevor Project made 150,000+ crisis contacts via phone calls, texts, and online chats, including 85,000 calls to the TrevorLifeline and 66,000 contacts to the organization's digital services.[78]

Further, digital health solutions can fill existing gaps in child and youth behavioral health treatment by providing tools for non-specialists or for youth themselves.[79] The Lab for Scalable Mental Health at Stony Brook University is a forefront innovator in developing digital tools for non-specialists and youth.[80] As one example, the lab developed Project YES (Youth Empowerment and Support), which offers free, anonymous, brief mental health tools for adolescents to teach new ways of dealing with stress while helping others do the same.[81] In a nationwide randomized trial, teenagers who used the YES intervention had significantly reduced symptoms of depression, hopelessness, anxiety, and restrictive eating three months later,[82] and Project YES tools have shown promising findings for LGBTQI+ teens in particular.[83]

Within Texas, many innovative digital health solutions are available or currently under development for child and youth behavioral health. In December 2020, Project YES partnered

with University of Texas Health Science Center at San Antonio to culturally adapt and validate Project YES, translate it into Spanish, and disseminate Project YES to 1,000+ youth across San Antonio, and the state.[84] Additionally, companies such as Daybreak Health, Hazel Health, BeMe, Kooth Health, and SonderMind offer Texas-based digital behavioral health solutions for children and youth. Digital health solutions may also be able to integrate or collaborate with TCHATT to serve as workforce extenders and optimization.

Technology is a backbone of life for youth. By leveraging digital health tools, existing gaps in youth behavioral health care in the state can be filled. Digital youth behavioral health tools provide a scalable approach to address the fragmentation of care and increase access to effective care for youth in Texas.

Looking Forward: Two Ways to Invest in Innovations in Texas

1. **Invest in solutions for implementation by the State of Texas.**

Investing in youth behavioral health solutions that are evidence-based and implementable across the state provides an opportunity to build significant and sustainable business models and develop and scale technology-based solutions for impact. Examples include addressing workforce gaps through child and youth behavioral health integrated care models and digital health solutions, such as TCHATT, which provides a near-term multi-million dollar partnering opportunity for well-positioned technology partners.

2. **Partner and invest in outcomes-driven organizations.**

Through outcomes-driven organizations that understand the state policy and systems marketplace, technology-based solutions can be developed and scaled, such as by leveraging the Meadows Mental Health Policy Institute's policy and systems marketplace expertise and GreyMatter's understanding of technology-based solutions with significant and sustainable business models.

There has never been a more opportune time for investors to do good. Addressing the child and youth behavioral health crisis is a moral and medical imperative and is key to ensuring we have the next generation of leaders needed to build a prosperous future for the state of Texas. Investors have the opportunity to mitigate this behavioral health crisis while investing in a market estimated to represent a $26 billion opportunity by 2027.[85] The Texas Tech University Health Sciences Center option alone offers a near-term multi-million dollar partnering opportunity for well-positioned tech partners, offering an entry point into the $26 billion market opportunity. As the Surgeon General's advisory on the nation's youth mental health crisis poignantly articulates, "If we seize this moment, step up for our children and their families in their moment of need, and lead with inclusion, kindness, and respect, we can lay the foundation for a healthier, more resilient, and more fulfilled nation."[86] Likewise, by investing in

child and youth behavioral health in Texas, we can shape the trajectory of the state and build a more healthy, resilient, and fulfilled future for Texas and ultimately for the nation.

About Meadows Mental Health Policy Institute

The mission of the Meadows Mental Health Policy Institute is to provide independent, nonpartisan, data-driven, and trusted policy and program guidance that creates equitable systemic changes so all Texans can obtain effective, efficient behavioral health care when and where they need it. Since our founding in 2014, we have demonstrated leadership and expertise in research and data analysis, policy development, and legislative advocacy for improved mental health care in communities across Texas and the nation. Our team of over 135 individuals is composed of a diverse group of mental health and policy experts with decades of experience in working to improve mental health services and resources. As a "think and do" tank, we have a strong track record of translating policy into practice, working with local, state, and national partners across systems—including health, education, and justice systems—to implement best practices, take advantage of new state and federal programs, and develop sustainable financing models. The Meadows Institute's annual budget is $34 million, and the current market value of our endowment is just over $16 million. We are overseen by a 25-person Board of Directors that comprises transformational leaders in business, health care, and academia; the Institute's current top donors include Lyda Hill Philanthropies ($10 million pledge over five years), The Meadows Foundation ($10 million pledge over five years), Pew Charitable Trusts, the Robert Wood Johnson Foundation, and Paso del Norte Community Foundation.

About GreyMatter

GreyMatter is a venture capital firm created to support bold founders building the future of mental health and emotional wellness. We believe innovative approaches to mental wellbeing have the power to not only reshape health care, but to touch every part of our lives, improving the way we live, work, learn, relate to one another. Our team has decades of experience investing in, building, and advising companies at the intersection of mental health and technology. We have built a network of advisors which includes many of the most successful behavioral health company founders alongside world-class clinicians, researchers, technologists, policy advocates, and health care executives: this includes the former head of the National Institute of Mental Health, the former CEO of Optum Behavioral Health, and the congressman who co-authored the Mental Health Parity Act. Through our community of luminary advisors, existing mental health founders, and scientific experts, we help founders identify the most promising areas of research and technological opportunity, provide access to playbooks and data to shape their strategy, support with critical hires, help close deals with customers, and provide specialized guidance and capital along the way. Our platform serves all stakeholders in the innovation space including builders, payors, and funders.

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