

# STAYING AHEAD OF THE DATA CURVE

## Children's Crisis Treatment Center Uses Data to Improve Outcomes and Reduce Costs

Children's Crisis Treatment Center (CCTC) is a private non-profit agency that specializes in delivering behavioral health services to Philadelphia's children and families. What started in 1971 as a federally funded research demonstration project has grown exponentially year over year since its founding.



Today, CCTC offers 20 different programs at their center, in schools and in the community that focus on children, most of whom are 10 years of age or younger. In 2021, the organization is poised to serve more than 3,000 children in the greater Philadelphia area, each one a beneficiary of personalized, tailored behavioral health services that are rooted in evidence-based methods customized to the child's specific needs.

At the core of CCTC's approach to care is gaining an understanding of the impact of Adverse Childhood Experiences (ACEs) and providing the resources and support needed to promote healing from the psychological and emotional injuries caused by early traumatic experiences.

ANTONIO VALDÉS, CEO



**"We know that despite tremendous challenges, children can heal from psychological and emotional injuries. Through lasting partnerships with families, schools and communities, CCTC creates environments that foster resiliency and recovery,"** said CEO Antonio Valdés, who has led the organization since 1997.

# CASE STUDY

Children's Crisis Treatment Center  
cctckids.org

GORDON SHOPP, CFO



Gordon Shopp, CCTC's Chief Financial Officer shared that, thanks to Valdés' leadership, CCTC has successfully expanded seven-fold since its founding — with an over-all staff increase from 45 employees to over 400, an increase in its annual budget from \$1.8 million to \$20 million, and a service expansion of four programs to 20. "When Tony first joined CCTC, the Center served approximately 250 children and families per-year; today CCTC annually serves over 2,400 children and families across the greater Philadelphia community," Shopp added.

The organization's success and unwavering commitment to excellence have gained CCTC recognition for its expertise in the areas of trauma, school-based services, community integration and early childhood treatment. Partnerships with community-based organizations have contributed to CCTC's ability to meet the needs of Philadelphia-area children. Currently most of the center's patients are referred by direct sources such as school nurses, pediatricians, neighbors and family members.

The children and families they've served to date are just the tip of the iceberg when it comes to the numbers in need of behavioral health interventions and treatment. "The COVID pandemic has placed many more children in situations where adverse events and mental trauma may occur," said Valdés. "The fact that schools have been closed and children were isolated at home only contributes to increased family stress and the potential for adverse events." The center has already started to see an increase in referrals for services and that isn't expected to lessen any time soon.

One of the ways CCTC leadership plans to address the growing need is through gaining a solid grasp on just how much the organization's services are making a difference.

"We knew that the next phase in our organization's growth was going to be dependent on having data to back up our strategic and operational decisions," said Shopp. "We know that our efforts are impacting the lives of children and families, but we need to be able to show this unrefutably."

This concept is often referred to as "return on investment" (ROI); but Valdés and Shopp intend not just to obtain data to support their center's existence, but rather to clearly pinpoint the contributing factors that have the biggest impact on the services and programs they provide.



## CCTC is thinking big picture when it comes to data.

“Imagine the impact we could make if we knew which individual programs were most effective in improving outcomes; or, consider the correlation that may exist between having a Latino-bilingual case manager managing children in predominantly Spanish-speaking neighborhoods,” said Valdés.



Other potential ways data could be used to drive programs and operational focus might be to examine positive discharge statistics and length of stay averages to determine if specific treatments, programs, case workers, care coordination efforts, etc. have any relationship to one another.

If a single detail in the way we provide care, or if there are changes in the behavioral health system itself that could potentially have an impact on clinical and financial outcomes, we need to be able to identify them and implement proactive corrective action in response,” said Shopp.





The ability to accumulate and aggregate data will also benefit the organization when negotiating new contracts under value-based reimbursement models. Eventually, predictive analytics based on rich data will help the center decide where and under what conditions children are likely to need support. The goal is to be able to meet the needs of children and families at the micro level, right down to individual neighborhoods where they live. Social determinants such as economic, geographic and demographic factors have been shown to be key predictors of health outcomes.

“Developing favorable contractual relationships under value-based reimbursement will require this level of insight,” said Valdés. “At CCTC, we want to be well ahead of this data curve, so we have the statistics to justify the direction for and impact of the programs and services we provide.”



Toward this end, Children’s Crisis Treatment Center partnered with H4-Technology (H4T) in January 2021 to begin capturing and aggregating data. Specifically, CCTC relies on H4 Technology’s HIPAA compliant COMPASS data management and analytics system to integrate EMR, financial, HR and outcomes data from its various operational silos. H4T uploads the cleaned and normalized data to a centralized data warehouse where it can be aggregated and analyzed through self-service reports and dashboards.

“It all stems from the need to have data to make informed decisions for our organization and the families we serve,” said Valdés. After only one year of data collection, the next step involves the use of applied data science to extract meaningful insights. Being able to evolve to the point of having real-time data at their fingertips is exciting when thinking about the ways CCTC might provide even better outcomes for patients while reducing the costs of service.



Learn More about  
**Children's Crisis  
Treatment Center**  
and how you can help  
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"It really creates another set of challenges for CCTC," said Shopp, "in that we will need to expand our staff to include data analysts and other professionals who can help us define a course for the future that is based on actual community characteristics and needs.

Both Valdés and Shopp agree, the need to add staff to uncover valuable insights is great problem to have. Children's Crisis Treatment Center is well positioned to continue addressing the impact of child abuse, neglect, traumatic events, and other challenges on early childhood development, and to assist children in reaching their full potentials within their homes, communities, and society.

## ABOUT H4 TECHNOLOGY

*H4 Technology (H4T) provides data management as a service solution for hospital, health systems, state agencies and organizations. Pinpointing the health of a community is often as simple as looking closely at its ZIP Code. Understanding the challenges that exist – from obtaining clean water and nourishing food – to how easily it is to access healthcare services can mean the difference between simply surviving, or thriving. H4 Technology's data management solutions extend beyond just numbers and algorithms. It gets to the heart of every healthcare transaction to identify opportunities for improvement in the economic and social conditions where people live.*



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