

## Positive Parenting Program to Improve Problem Behaviors in Preschool-age Children (PriCARE)

### Statement of Problem

Behavioral problems are common in young children. Approximately 11%-20% of children in the United States meet diagnostic criteria for a behavioral health disorder at any given time. Children with behavioral problems enter kindergarten disadvantaged in language, motor, social and school readiness skills, and are at increased risk of poor long-term academic outcomes. Behavioral problems are also associated with increased risk of substance abuse, anxiety disorders, attention-deficit/hyperactivity disorder (ADHD) and suicide. Furthermore, children with behavioral problems are at increased risk of harsh parenting and physical abuse.

Problem behaviors from young children can provoke negative and reactive parenting responses, which, in turn, increases the child's behavior problems. Parenting interventions that promote **positive, authoritative parenting** (characterized as reliable, dependable and nurturing) can reduce the severity and frequency of behavioral problems, decrease parental stress and reduce the risk of child maltreatment.

The pediatric primary care setting is an ideal venue to provide parent training and support. Between 25%-50% of pediatric office visits involve behavioral or emotional concerns. While some patients may require referral to a behavioral health specialist, many children may not need intensive, ongoing behavioral health treatment, especially in the early, formative years when these problem behaviors first develop. Providing a **family-centered** positive parenting program in the setting of the child's primary care pediatrician could support parents and prevent future severe behavioral health problems in their children.

### Description

#### PriCARE to Improve Problem Behaviors in Preschool-Age Children

Image

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Improved child behavior sustained two months after program completion



Increased parental empathy



Decreased belief in the use of corporal punishment

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Recognizing the untapped potential of the pediatric primary care setting for addressing children's behavioral problems, our team, alongside colleagues from [Safe Place: The Center for Child Protection and Health](#) and the Department of Child and Adolescent Psychiatry and Behavioral Sciences at Children's Hospital of Philadelphia (CHOP), modified an existing intervention called Child-Adult Relationship Enhancement (CARE) from the Mayerson Center for Safe and Healthy Children. Together, we developed **PriCARE**, a trauma-informed group-training program hosted in the primary care setting that teaches caregivers techniques to support the social and emotional growth of their children. As a group-training program for parents, **PriCARE** is designed to improve child behavior, strengthen parent-child relationships and decrease parental stress.

In the first study of its kind, our team tested the effectiveness of **PriCARE** through a randomized controlled trial (RCT) at CHOP's primary care facility in South Philadelphia. We enrolled 120 families and found that children whose parents participated in **PriCARE** had significant short-term improvements in behavioral symptoms. Additionally, after attending the **PriCARE** intervention, parents reported improvements in several common parenting behaviors that can influence child behavior. These include decreased belief in use of corporal punishment and increased empathy toward their children. [Academic Pediatrics](#), a premier medical journal, published the [findings](#) of this research trial.

Encouraged by the positive findings from the initial **PriCARE** evaluation, our team expanded the capacity of **PriCARE** to reach more families. Currently, we offer **PriCARE** to caregivers of children ages 2 to 6 at seven CHOP primary care network sites (Karabots, Cobbs Creek, Main Campus, Drexel Hill and South Philadelphia, Chestnut Hill and Roxborough). To date, more than 800 mothers, fathers, grandparents, foster parents and other caregivers of approximately 1,000 children from CHOP primary care practices have attended **PriCARE**.

In 2016 our team enrolled approximately 180 parent-child pairs in a second, larger **PriCARE** evaluation. Utilizing direct observation methods, we conducted video observations of children's behaviors on a subset of participants and conducted qualitative interviews with parents to inform program improvement efforts. Impactful feedback emerged from the qualitative interviews describing caregivers' experiences and perceived impact of participating in **PriCARE**:

- "The trainers were awesome. They seemed to be really knowledgeable, but also kind and understanding so you felt like you could be honest with a bunch of people who are having trouble with their kids. So, it was nice to feel like you were in a safe space where you could be honest and you weren't gonna get judged for it and that they were understanding."
- "I'm not as worried as if I'm a bad mom or I don't know what I'm doing. I feel more confident."
- "I'm not always frustrated or worried that if we are in public or if she's going to really act up and throw a hissy fit. So, it's like I'm more calm and relaxed."
- "I encourage her to do positive things...she changed a lot, not just at home but as well as in school...her behavior is much better."

Next, we enrolled 174 caregivers in a third RCT examining outcomes of parenting stress, disruptive child behaviors and parenting attitudes. Our results showed that parents who received **PriCARE** had decreased parenting stress and had improved parental perceptions of the severity of child behaviors.

We also developed, piloted and evaluated new technological advances—such as a text messaging platform and demonstration videos—designed to increase engagement with parents and reinforce key skills between weekly, in-person sessions. Participants reported that receiving the texts and video clips helped them remember how to practice the skills in between sessions, clarified class content and reminded them about upcoming sessions. Additionally, receiving the messages made caregivers feel supported, motivated, calm and connected to a community. One parent stated, “the texts made me feel like even when I’m not in class, the help and support was still there.”

Our fourth RCT examined if this text message system enhanced our prior findings on decreasing child behavior concerns and parenting stress; we are currently finalizing and publishing our results.

Additionally, we have made several adaptations to PriCARE in the past several years to meet the needs of families. Dr. Samantha Schilling, a former CHOP fellow, led the effort to implement and evaluate English and Spanish **PriCARE** in North Carolina; Dr. Erica Messer, one of the developers of the original CARE intervention, piloted **PriCARE** in Cincinnati Children’s Hospital suburban primary care practices. We also now offer **PriCARE** virtually, which started during the COVID-19 pandemic but continued due to caregivers’ positive feedback and to increase accessibility. The evaluation of these new initiatives shows promise that **PriCARE** is effective across caregiver groups in strengthening the child-caregiver relationship and providing caregivers the skills to nurture positive child behavior.

Lastly, Clinical Futures and PolicyLab awarded our team a grant through a joint pilot grant program to implement and assess a PriCARE module focused on positive discipline techniques and appropriate timeout procedures. You can read more about that project [here](#).

## Next Steps

Partnering with Dr. Schilling at UNC, we received a 5-year R01 grant from the Eunice Kennedy Shriver National Institute of Child Health and Human Development to evaluate **PriCARE’s** impact on child maltreatment. We will be collecting reports made to Philadelphia’s Department of Human Services (DHS) as long as 52 months after enrollment in the study to determine if participants randomized to receive **PriCARE** have fewer reports filed with DHS compared to those who did not receive the intervention. More details about this study can be found at ClinicalTrials.Gov.

As we continue to expand PriCARE, Dr. Joanne Wood and the PriCARE research team received a grant from the Annie E. Casey Foundation to explore modifying the PriCARE curriculum for caregivers who became parents before the age of 21 and their parent supports. Currently, qualitative interviews are being conducted to gather input from young parents and their parenting supports. These interviews, along with input from an expert panel, will inform curriculum changes. Pilot PriCARE groups for both caregivers and their partners using the revised curriculum are scheduled to occur in 2024.

Recently, we also launched a study funded by the Ray E. Helfer Society to examine the impact of PriCARE on foster families. This study is actively enrolling foster parents of children ages 18 months to 6 years old for virtual PriCARE classes.

Given the lessons learned by this research team, evaluating barriers and facilitators to engagement and retention in **PriCARE** will continue to be important. We plan to build on **PriCARE’s** preliminary evidence by continuing to rigorously evaluate and improve this model.

For more information about **PriCARE**, visit [www.chop.edu/centers-programs/pricare-parenting-program](http://www.chop.edu/centers-programs/pricare-parenting-program).

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## Related Tools & Publications

- [The Future of Virtual Service Delivery: Lessons Learned from Research and Programmatic Experience](#)  
[Blog Post](#)  
Sep 27, 2021
- [Child Adult Relationship Enhancement in Primary Care: A randomized trial of a parent training for child behavior problems](#)  
[Article](#)  
Jun 2016
- [Child-adult Relationship Enhancement in Primary Care: A Randomized Trial of a Skill-based Parent Training with Parent Mentor Adaptation](#)  
[Article](#)  
Dec 2019
- [Improving Child Behaviors and Parental Stress: A Randomized Trial of Child Adult Relationship Enhancement in Primary Care](#)  
[Article](#)  
Aug 2020
- [Child Adult Relationship Enhancement in Primary Care \(PriCARE\): Study Design/Protocol for a Randomized Trial of a Primary Care-based Group Parenting Intervention to Prevent Child Maltreatment](#)  
[Article](#)  
Feb 2023
- [Child Adult Relationship Enhancement in Primary Care \(PriCARE\) Theory of Change: A Promising Intervention to Reduce Child Maltreatment](#)  
[Article](#)  
Mar 2024
- [Evaluation of Virtual Enhanced Child Adult Relationship Enhancement in Primary Care Intervention](#)  
[Article](#)  
Jun 2024
- [A Feasibility Study on the Virtual Adaptation of Child Adult Relationship Enhancement in Primary Care](#)  
[Article](#)  
Dec 2024