



The State of Parent Education in Houston, Texas:

An Opportunity to Strengthen Family Well-Being, Prevent Child Maltreatment,
and Prepare Children for a Brighter Future

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I. Executive Summary

Research has consistently shown that parent education has a positive impact on families, including lowering rates of social, emotional, and behavioral disorders in children, parental stress and anxiety, and child maltreatment. Parent education also improves school readiness and family relationships. Despite the numerous benefits of parent education, most parents do not attend parenting classes. As a result, CHILDREN AT RISK formed the Center for Parenting and Family Well-Being (CPFWB) to conduct an assessment of parent education services, develop community partnerships, analyze the community impact of evidence-based parent education classes, and develop recommendations for the future.

The Current Landscape of Parent Education in Houston, Texas

In Houston, Texas, parenting classes are not widely utilized or available. More than one million children live in Harris County, yet it is estimated that only 13,000 parents attend parenting classes from agencies that primarily provide parent education each year. Furthermore, the majority of these parents do not receive curricula that are evidence-based. An evidence-based program is a program that has demonstrated positive outcomes in rigorous evaluation and research studies. The significantly low number of parents accessing evidence-based parenting programs suggests a missed opportunity to improve parenting practices and promote family well-being. Agencies that provide parent education report that funding and stigma are the biggest challenges in reaching more parents.

Despite the limited number of parents currently accessing parent education, there is a clear interest and need in the Houston community to collaboratively develop an infrastructure so that more parents have access to effective parenting programs. Organizations ranging from schools to youth service organizations, medical providers, universities, and faith-based organizations have all expressed a need for more parent education classes in the community and an interest in incorporating evidence-based parent education into their organizations.

A Future Model of Parent Education for Houston, Texas

The CPFWB has determined that a population-based approach may be the most effective model to deliver parent education in Houston, Texas. Currently, most parenting classes target high-risk families. A population-based approach is designed to support *all* families in a community. Largely based on the Positive Parenting Program (Triple P), a population-based approach would provide a multi-tiered system of parent education programs to meet the varying needs of parents and families. At the foundation of a population-based approach is a large social marketing campaign to reduce the stigma associated with attending parenting classes. The social marketing campaign would bring attention to the challenges of parenting, provide information on how to get help, and re-assure parents that parenting classes are for all parents. In addition to the social marketing campaign, the population-based approach would include varying levels of parent support programs of increasing intensity to prevent low-risk families from becoming high-risk, and more intensive interventions for high-risk families that need the services the most. By providing varying levels of support, cost efficiencies are created by providing parents with the

right amount of support, instead of over-supporting parents that only need a “light touch” and under-supporting parents that need more intensive services.

The Triple P – Positive Parenting Program is built on 30 years of research and has repeatedly demonstrated positive impacts on family well-being, parent-child relationships, parental stress, and social, emotional, and behavioral disorders in children. In the US Triple P System Population Trial in South Carolina, the nine counties that received Triple P had a decrease in rates of child maltreatment, out-of-home placements, and hospitalizations from child maltreatment compared to the nine control counties that did not receive Triple P. The research from this study suggests that one case of child maltreatment could be prevented each time 327 children’s families receive Triple P, one out of home placement could be prevented each time 532 children’s families receive Triple P, and one hospitalization from child maltreatment could be prevented each time 1,667 children’s families receive Triple P. Given the high societal costs associated with child maltreatment, foster care, and hospitalizations, studies have confirmed that Triple P is a cost-effective prevention program.

Moving Forward

Based on the input of more than 70 organizations, the CPFWB has developed the following recommendations and conclusions:

- There is a need in Houston, Texas for a population-based approach to parent education to reach more parents with evidence-based programming.
- The research and academic literature on Triple P is compelling and the CPFWB anticipates it could have a significant positive impact on the well-being of children, families, and community health indicators.
- There is community support for the implementation of a population-based parenting support system. Triple P provides a model for a population-based approach, but the Triple P program should be integrated with other evidence-based programs that are used or supported by the Greater Houston community.
- Implementing a population-based parenting support system will require substantial infrastructure and coordination between agencies and organizations. Current agencies that provide parenting classes have limited capacity. To train enough providers for a population-based approach will also require training of staff at schools, hospitals, medical practices, faith based organizations, etc.
- More research is needed on how to structure, fund, and prioritize populations to effectively implement a population-based approach to parent education.
- Implementing Triple P will require a significant financial investment, however research suggests that it is a cost-effective program that would pay for itself within the first year of implementation through cost savings.

The CPFWB is committed to utilizing the results from this assessment to develop an infrastructure so that evidence-based parent education programs are easily accessible and that attending parenting classes becomes the norm for parents in our community.

II. Introduction

Child abuse directly impacts thousands of families in the Greater Houston area each year, yet most services that target child abuse are reactive and support the children and families that have already experienced abuse. While these services are critically important, they must be coupled with initiatives that prevent abuse from occurring in the first place. Experts agree that prevention requires a comprehensive approach that includes family strengthening.¹ Research has demonstrated that evidence-based parent education programs can reduce child maltreatment rates, strengthen families' well-being, improve parental mental health, and decrease rates of social, emotional, and behavioral problems in children.^{2,3} Parent education can be delivered through a population-based model, which involves providing a range of parent education services to meet the varying needs of all parents. Services may include a social media campaign to decrease stigma, seminars, group classes, individual consultations, and home visitation programs. The population-based model promotes prevention and cost-efficiency. The following report outlines CHILDREN AT RISK's Center for Parenting and Family Well-Being's assessment of parent education services in the Greater Houston area and the potential benefits from utilizing a population-based model to implement evidence-based parent education throughout the community.

III. Background

In 2009, a team of six leading pediatricians and academics came together to address the high rates of child maltreatment in Houston, Texas and to identify evidence-based strategies, programs, and practices to reduce rates of child maltreatment. The Houston-based team formed a PREVENT Coalition, which was part of a national initiative supported by the Centers for Disease Control and Prevention (CDC), the Doris Duke Charitable Trust, and the University of North Carolina Injury Prevention Research Center. PREVENT coalitions are designed to facilitate evidence-based primary abuse prevention through education, networking, and technical assistance.⁴ Members of the Houston-based PREVENT Coalition include: Stephani Adams, MPH; Angelo Giardino, MD, PhD; Christopher Greeley, MD, FAAP; Michelle Lyn, MD, FAAP; Judith McFarlane, DrPH, RN; and Cathy Rozmus, DSN, RN. After a rigorous review of evidence-based child abuse prevention strategies, the PREVENT Coalition identified the implementation of community-wide evidence-based parent education as having the greatest likelihood of reducing rates of child maltreatment in the Greater Houston area. Evidence-based parent education programs have not only demonstrated a positive impact on reducing rates of child maltreatment, but they also improve parent-child relationships and strengthen family well-being. Studies indicate that strong family and parent-child relationships are associated with a positive impact on children's development and a

¹ Child Welfare Information Gateway. "Preventing Child Abuse and Neglect." 2008. Web. Accessed Oct 11, 2012. <http://www.childwelfare.gov/pubs/factsheets/preventingcan.cfm>.

² Nowak, C., Heinrichs, N. "A Comprehensive Meta-Analysis of Triple P-Positive Parenting Program Using Hierarchical Linear Modeling: Effectiveness and Moderating Variables." *Clinical Child and Family Psychology Review* 11.3 (2008): 114-44.

³ Prinz, R., Sanders, M., Shapiro, C., Whitaker, D., Lutzker, J. "Population-based prevention of child maltreatment: The U.S. Triple P System Population Trial." *Prevention Science*, 10 (2009): 1 – 12.

⁴ PREVENT Coalition. "PREVENT Overview." Oct. 2004. Web. Accessed Aug 9, 2012. http://www.prevent.unc.edu/about/overview2_05.pdf.

reduction in child emotional and behavioral problems.⁵ Conversely, family risk factors such as poor parenting, family conflict, and marriage breakdown strongly influence a child's development and can lead to emotional and behavioral problems.

Implementing evidence-based parent education programs must meet the challenges associated with stigma, lack of flexibility, and accessibility in the community. Through the PREVENT Coalition's review of evidence-based strategies, the Positive Parenting Program (Triple P) was identified as having the strongest evidence to not only reduce rates of child maltreatment and overcome the challenges of effective application, but to also strengthen the overall well-being of children and families.⁶ The PREVENT Coalition's research was supported by conversations with Michael Foster and John Lutzker, the authors and researchers of the US Triple P System Population Trial and economic analysis that took place in South Carolina. The PREVENT Coalition concluded that before Triple P could be implemented in the Greater Houston area more research was needed to identify:

- Current services available and gaps in service;
- Capacity of the community to implement a community-wide parent support system; and
- Willingness and interest of the community to adopt such a program.

With generous funding from the Houston Endowment and the Ed Rachal Foundation, CHILDREN AT RISK formed the Center for Parenting and Family Well-Being (CPFWB) to conduct a community needs assessment to review child abuse prevention and parent education services, analyze the potential impact of Triple P on the Greater Houston area, and assess the community's willingness and ability to adopt Triple P.

Epidemiology

The development of interventions that promote positive, caring, and consistent parenting practices has been repeatedly cited as being critical to any attempt to reduce the incidence of child maltreatment and behavioral disorders in children.⁷ Nationally, each year more than 3.5 million children are reported to Child Protective Services for child maltreatment. In 2010, almost 700,000 children were confirmed victims of maltreatment at a rate of 9.2 per 1,000 children.⁸ In 2010 in the State of Texas, there were 288,080 alleged victims of child maltreatment of which 66,897 of these children were confirmed victims of child abuse or neglect.⁹ In addition to the immediate harm the child experiences from the abuse,

⁵ Sanders, M., Markie-Dadds, C., and Turner, K. "Theoretical, Scientific and Clinical Foundations of the Triple P-Positive Parenting Program: A Population Approach to the Promotion of Parenting Competence." *Parenting Research and Practice Monograph* (2003): 1-21.

⁶ Prinz, R. "Dissemination of a Multilevel Evidence-based System of Parenting Interventions with Broad Application to Child Welfare Populations." *Child Welfare* 88 (2009): 142-47.

⁷ Turner, K., and Sanders, M. "Dissemination of Evidence-based Parenting and Family Support Strategies: Learning from the Triple P—Positive Parenting Program System Approach." *Aggression and Violent Behavior* 11.2 (2006): 176-93.

⁸ U.S. Department of Health and Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau. "Child Maltreatment 2010." 2011. Accessed Aug 22, 2012. <http://www.acf.hhs.gov/programs/cb/pubs/cm10/cm10.pdf>.

⁹ Texas Department of Family and Protective Services. "DFPS 2010 Databook." Accessed Aug 28, 2012. http://www.dfps.state.tx.us/documents/about/Data_Books_and_Annual_Reports/2010/2010databook.pdf.

other negative effects include toxic stress, emotional/behavioral problems, negative performance in school, and increased likelihood of being involved in the juvenile and criminal justice systems.

Cost

Child maltreatment also carries a substantial economic burden. The Centers for Disease Control and Prevention estimates that each case of nonfatal child abuse costs \$212,012 in medical, criminal justice, and child welfare costs over the course of the child's lifetime. The estimated average lifetime cost per death from child abuse is \$1,272,900 in medical and loss of productivity costs.¹⁰ As these numbers show, child maltreatment carries severe consequences that ripple across society.

Impact

The Adverse Childhood Experiences (ACE) Study, a collaborative between the Centers for Disease Control and Prevention and Kaiser Permanente's Health Appraisal Clinic, conducted one of the largest investigative studies to assess the association between child maltreatment and later-life health and well-being. The findings of the ACE Study concluded that experiences such as emotional and physical abuse and/or neglect suffered during childhood are major risk factors for poor quality of life in adulthood as well as leading causes of illnesses such as depression, alcoholism, and heart disease.¹¹

The American Academy of Pediatrics studied the lifelong impact of childhood "toxic stress." Toxic stress is prolonged exposure to stress without the protection of a supportive adult relationship, and it is frequently found in children who experience abuse or neglect. Toxic stress leads to anatomical and physiologic changes in the brain which puts the child at greater risk of developing physical and mental illnesses along with impairments in behavior and the ability to learn.¹²

Parent Education

Parent education, implemented across a community, is one strategy to decrease rates of child abuse, while simultaneously strengthening the well-being of a family. The National Parenting Education Network describes parent education as a process that involves the expansion of insights, understanding and attitudes, and the acquisition of knowledge and skills about the development of both parents and their children, and the relationship between them.¹³ Parent education is designed to improve parenting skills and family communication, prevent child and family problems, and educate parents on child

¹⁰ Centers for Disease Control and Prevention. "Child abuse and neglect cost the United States \$124 billion." Feb 1, 2012. Web. Accessed Jul 12, 2012, http://www.cdc.gov/media/releases/2012/p0201_child_abuse.html.

¹¹ Centers for Disease Control and Prevention. "Adverse Childhood Experiences (ACE) Study: Major Findings." Sept 20, 2010. Web. Accessed Aug, 16 2012. <http://www.cdc.gov/ace/findings.htm>.

¹² Shonkoff, J., Garner, A., The Committee on Psychosocial Aspects of Child and Family Health, Committee on Early Childhood, Adoption, and Dependent Care, Section on Developmental and Behavioral Pediatrics, Siegel, B., Dobbins, M., Earls, M., Garner, A., McGuinn, L., Pascoe, J., and Wood, D. "The Lifelong Effects of Early Childhood Adversity and Toxic Stress." *Pediatrics* 129 (2012): e232-e246.

¹³ National Parenting Education Network. "Vision, Mission, and Goals." Web. Accessed Jun 13, 2012. <http://npen.org/about/background.html>.

development and positive parenting practices with a goal of developing safe, stable, and nurturing parent-child relationships.¹⁴

The quality of family life is fundamental to the well-being of children. Family relationships in general and the parent-child relationship in particular have a pervasive influence on the psychological, physical, social, and economic well-being of children.¹⁵ Parent education has a positive impact on the prevention of early childhood social, emotional, and behavioral problems, academic failure, truancy and school dropout, conduct disorders, delinquency, substance abuse, childhood and adolescent anxiety disorders, teenage parenthood, and the transmission of sexually transmitted diseases.¹⁶ With an increasing child population in Houston, there is a need for a population-based parent education program. Parent education would positively impact the community by improving a child's mental health, development, positive family environment, and the overall population's well-being. Parents that have completed evidence-based parent programs have lower rates of depression and stress, and higher rates of confidence, appropriate use of discipline techniques, and knowledge of child development.¹⁷

Evidence-Based Parent Education

Children are not born with an instruction manual, so many parents start by relying on their personal experience, observation, and advice from others. Parent education programs aim to educate parents on best practices. However, many programs, including those available through various Houston outlets, lack a framework rooted in the best research evidence available. Many programs are created by service providers and agencies and have not been subject to a rigorous evaluation. While the creation of new programs is essential to innovation and finding new solutions, whether or not these non evidenced-based programs will result in the intended outcomes is unknown. Using non evidence-based programs not only runs the risk of not benefiting the families that attend the programs, but it can also result in unintended negative consequences in addition to diverting resources from programs that have been proven effective.

Organizations such as the California Evidence-Based Clearinghouse for Child Welfare (CEBC) and the National Registry of Evidence-Based Programs and Practices (NREPP), provide access to vital information about child welfare programs and mental health and substance abuse interventions while providing useful information to assist in the selection and implementation of evidence-based practices. These registries evaluate health interventions and rate the quality of the research and the effectiveness of the intervention. The information provided by clearinghouses and registries promotes the implementation and dissemination of proven evidence-based parenting programs.

¹⁴ CHILDREN AT RISK. "Center for Parenting & Family Well-Being." Web. Accessed Jun 13, 2012. <http://childrenatrisk.org/policy/cpfbw/>.

¹⁵ Sanders, M., Markie-Dadds, C., and Turner, K. "Theoretical, Scientific and Clinical Foundations of the Triple P-Positive Parenting Program: A Population Approach to the Promotion of Parenting Competence." *Parenting Research and Practice Monograph* (2003): 1-21.

¹⁶ Prinz, R. "Dissemination of a Multilevel Evidence-based System of Parenting Interventions with Broad Application to Child Welfare Populations." *Child Welfare* 88 (2009): 142-47.

¹⁷ Sanders M., Ralph A., Sofronoff, K., Gardiner P., Thompson R., Dwyer S., Bidwell K. "Every Family: A Population Approach to Reducing Behavioral and Emotional Problems in Children Making the Transition to School." *Journal of Primary Prevention* 29.3 (2008): 197-222.

The National Registry of Evidence-based Programs and Practice (NREPP), developed by the Substance Abuse & Mental Health Services Administration, is a searchable online registry of mental health and substance abuse interventions, including parenting programs.

The California Evidence-Based Clearinghouse for Child Welfare (CEBC) provides child welfare professionals with access to information about child welfare programs that improve child safety, increase permanency, increase family and community stability, and promote child and family well-being.

Four parent training programs, Triple P – Positive Parenting Program, the Oregon Model Parent Management Training, The Incredible Years, and the Parent-Child Interaction Therapy, all received the top rating of “well-supported by research evidence” by the CEBC. Appendix A provides a summary of parent training programs that have been reviewed by the CEBC and have been identified as “well-supported by research evidence”, “supported by research evidence”, and “promising research evidence”.

The Incredible Years, the Oregon Model, and the Parent-Child Interaction Therapy are efficacious evidence-based parenting interventions, however they only target high-risk families or families with children with existing behavioral problems. As a result, even if these programs were implemented across a community, only a limited segment of the population would be eligible for the services. Triple P utilizes a comprehensive, tiered, community-wide approach focused on preventing low- and medium-risk families from becoming high-risk, and providing intensive services to those who are already of high-risk status. This model creates a cost-effective system of intervention by providing the appropriate level of support to parents with varying levels of need.

IV. Theoretical Model for Child Maltreatment Prevention: The Social-Ecological Model

The Social-Ecological Model provides a framework for the prevention of child maltreatment that demonstrates how multiple levels of influence impact rates of child maltreatment. Research demonstrates that preventing child maltreatment is not as simple as changing the behaviors of “bad parents,” but requires a comprehensive multi-faceted approach to address individual behaviors, interpersonal relationships, community, and societal factors. Prevention strategies that offer a continuum of services across these levels are more likely to be sustained than interventions that only address a single level.¹⁸

- Individual Factors: The first level of the model addresses individual factors that may increase or decrease an individual’s risk of abusing their child such as attitudes, knowledge of child development, anger management, personal stress, substance use, and history of abuse. Prevention strategies may include education and counseling.
- Interpersonal Relationships: The second level of the social-ecological model addresses interpersonal relationships, and how social networks and relationships with family and peers impact the potential of risk for abuse. Prevention strategies may include classes that teach

¹⁸ Centers for Disease Control and Prevention. “The Social-Ecological Model: A Framework for Prevention.” Sept 9, 2009. Web. Accessed on Jun 12, 2012. <http://www.cdc.gov/ViolencePrevention/overview/social-ecologicalmodel.html>.

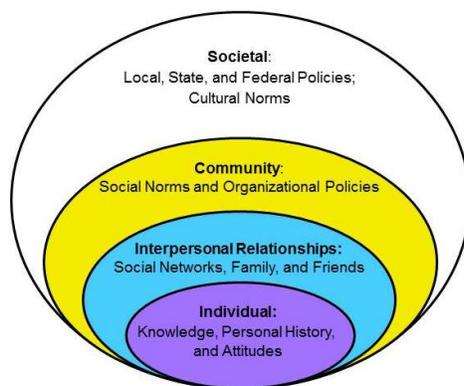
parents to develop safe, stable, and nurturing relationships with their children or classes that promote healthy marriages.

- **Community:** The third level addresses community and how community factors such as unemployment rates and social norms impact rates of abuse. Prevention strategies may target social norms such as a media campaign that normalizes participation in parent education classes.
- **Society:** The final level addresses societal factors, and how local, state, and federal laws and regulations impact rates of child abuse. Prevention strategies may include passing legislation that provides funding for evidence-based parent training and home-visitation programs.

The levels of the socio-ecological model are not mutually exclusive. The promotion of risk reduction on the individual level will benefit interpersonal relationships, the community, and societal factors. In applying this to parent education, as an individual parent benefits from newly acquired parenting skills so too will the family, community, and ultimately society as a whole.

Figure 1. A Social-Ecological Model to Prevent Child Maltreatment

Adopted from the Centers for Disease Control and Prevention’s Injury Center’s Framework for Prevention



V. Methodology

A community needs assessment is a systematic method for reviewing the strengths and needs in a community and leading to agreed priorities that will improve the community’s well-being. Two models are commonly used in community needs assessments and implementing community health interventions: a research-driven approach and a community engagement approach.¹⁹ A research-driven approach emphasizes the importance of disseminating rigorously evaluated interventions that have been proven effective to local communities. A community engagement approach emphasizes the importance of community input in the identification of community needs, strengths, and solutions.

To conduct the community needs assessment of child abuse prevention and parent education services in the Greater Houston area, a community engagement approach was integrated with a research-driven approach. The community engagement component of the needs assessment was guided by the CPFWB

¹⁹ Payde, P., Christiansen, A., Peterson, D., Guse, C., Maurana, C., Brandenburg T. “A model to translate evidence-based interventions into community practice.” *American Journal of Public Health* 102(2012). 617- 624.

Partnership, which ensured that the recommendations developed by the CPFWB accurately reflect the strengths, needs, and priorities of the Houston community. The research and evaluation component, which was guided by an Academic Advisory Council, ensured that the recommendations in this report are supported by evidence. Both community engagement and research and evaluation are critical components in a needs assessment as community engagement increases the likelihood that the community will accept the initiative, and research and evaluation increases the likelihood that the intervention will result in the intended outcomes.

Community Engagement

Center for Parenting and Family Well-Being Partnership

The core of the community engagement activities of the CPFWB focused on the CPFWB Partnership. The Partnership consists of over 100 members across sectors that meet on a quarterly basis to provide input, recommendations, and prioritize the initiatives of the CPFWB. Initial partners were recruited through CHILDREN AT RISK's network of partners. At the first Partnership meeting, the partners provided recommendations on other individuals and organizations that should be invited to the Partnership. During the Partnership meetings the CPFWB gave a brief presentation on relevant topics followed by a group discussion to provide an opportunity for all members of the Partnership to give input to the CPFWB's activities and recommendations. The Partnership also completed surveys in January and July 2012 which were used to guide the activities and recommendations from the CPFWB. In addition to the Partnership, the CPFWB participated in the Parent Education Providers (PEP) Partnership. The PEP Partnership consists of organizations that provide parent education in the Greater Houston area. The purpose of the partnership is to create a unified effort to positively impact parenting education in the Greater Houston area through an ongoing partnership of providers of parent education that effectively maximize efforts, coordinate services, and support individuals and organizations that comprise the partnership. The PEP Partnership meets quarterly.

Key Informant Interviews

Key informant interviews were also a key component of the CPFWB's community engagement efforts. The CPFWB interviewed over 70 organizations representing a variety of sectors including:

- Advocacy organizations
- Child abuse prevention experts
- Child Protective Services
- Communities that have implemented Triple P
- Community health clinics
- Faith-based organizations
- Health departments
- Health insurance providers
- Hospitals
- Law firms
- Mental health service providers
- Museums
- Non-profits
- Parents
- Parent educators
- Parent Teacher Organizations (PTOs)
- School districts
- Triple P staff
- Universities

Results from the interviews were incorporated into the CPFWB's activities, recommendations, and this final report.

Parenting and Family Well-Being Conference

To further community engagement efforts, the CPFWB hosted a three-day Parenting and Family Well-Being Conference on April 2 - 4, 2012. Notable national, state, and local leaders attended the conference and provided a call to action on the need for evidence-based child abuse prevention interventions and parent education in our communities. Speakers included Dr. Robert Block, President of the American Academy of Pediatrics; James Hmurovich, President of Prevent Child Abuse America; Texas State Representative Garnet Coleman; and Gwen Emmett, local community activist and wife of Harris County Judge Ed Emmett. The Conference included 8 separate events that targeted different stakeholder groups, from students to senior leaders, and ample opportunities for networking and discussions that enabled attendees to provide input and become involved in the Partnership. Over 300 individuals attended the Conference.

Research and Evaluation

Academic Advisory Council

To guide its research and evaluation activities, the CPFWB formed an Academic Advisory Council comprised of six leading academics, pediatricians, and public health practitioners who are experts in child maltreatment prevention, cost-effectiveness research, evaluation, family demography, policy, evidence-based programs, and dissemination. The Academic Advisory Council is co-chaired by Angelo Giardino, MD, PhD, and Christopher Greeley, MD, FAAP and includes the following members:

Charles Begley, PhD

Professor, Division of Management, Policy and Community Health
University of Texas School of Public Health

Luisa Franzini, PhD

Professor and Director, Division of Management, Policy and Community Health
University of Texas School of Public Health

Angelo P. Giardino, MD, PhD

Vice President and Chief Medical Officer, Texas Children's Health Plan
Chief Quality Officer-Medicine, Texas Children's Hospital
Vice Chair, Prevent Child Abuse America
Clinical Professor of Pediatrics, Department of Pediatrics, Baylor College of Medicine

Christopher S. Greeley, MD, FAAP

Associate Professor of Pediatrics, Center for Clinical Research and Evidence-Based Medicine
University of Texas Health Science Center at Houston
Chair, Prevent Child Abuse America

Chair, Blue Ribbon Task Force to Prevent Child Abuse

Holly E. Heard, Ph.D.

Senior Social Scientist
HERC Data Specialist
Houston Education Research Consortium, Rice University

Susan Tortolero, Ph.D.

Allan King Professor of Public Health
Director, Center for Health Promotion and Prevention Research
Director, Texas Prevention Research Center
Associate Professor, Health Promotion and Behavioral Science
Editor-in-Chief, Journal of Primary Prevention
The University of Texas-Houston, School of Public Health

The Academic Advisory Council guided the CPFWB in the following assessments, research, and analyses:

Review of data. The CPFWB collected and reviewed existing data. Data sources included the number of requests for parent education to the United Way 2-1-1 helpline, child abuse rates and costs of services maintained by the Texas Department of Family Protective Services, and hospitalization discharge data from the Texas Health Care Information Collection Inpatient Discharge Database. The United Way 2-1-1 helpline is a free service available to residents in Texas that provides information and referrals to social services.²⁰

Literature review. The CPFWB conducted a literature review on Triple P and other evidence-based parenting programs. Triple P maintains a database of all peer-reviewed journal articles on Triple P that is available at <http://www.pfsc.uq.edu.au/research/evidence/>. As of October 2012, the database included 259 articles. The database includes 100 articles on empirical evidence, 5 meta-analysis/reviews, and 3 articles on cost-effectiveness. The CPFWB utilized this database to evaluate the effectiveness of Triple P. Research was supplemented by using PubMed and Google Scholar to identify additional articles on Triple P and evidence-based parenting interventions. The CPFWB also reviewed evidence-based registries of parent education programs to identify other evidence-based parent programs. The evidence-based registries include: the California Evidence-Based Clearinghouse for Child Welfare, National Registry for Evidence-based Programs and Practices, Promising Practice Network, and Find Youth Net.

Triple P Trainings. The CPFWB's Director attended Triple P trainings in Level 4 and Level 5. The Director also reviewed the Triple P media campaign (Stay Positive), tip sheets, and Triple P online to better understand the Triple P content and materials. CPFWB partners were also invited to review the Triple P materials.

²⁰ United Way of Greater Houston. "2-1-1 Texas/United Way HELPLINE." Web. Accessed Aug 22, 2012. <http://www.unitedwayhouston.org/default/toolbox/2011-download-Center/About-UW/11-211-english.pdf>.

Analysis of Triple P. To analyze the potential impact of Triple P in Houston, the CPFWB analyzed the following variables: neighborhood, parent, and child outcomes; school performance; client satisfaction; community satisfaction; costs; and economic impact.

- *Neighborhood outcomes.* The CPFWB reviewed Triple P studies and identified the US Triple P System Population Trial²¹ as a predictor of the impact of Triple P on neighborhood variables in Houston. Based on the data available, the CPFWB calculated the number of children whose families need to receive Triple P in order to prevent one case of child maltreatment, out-of-home placement, and hospitalization from child maltreatment.
- *Parent and child outcomes.* The CPFWB reviewed Triple P studies to identify parent and child outcomes that consistently were impacted by Triple P such as rates of social, emotional, and behavioral problems in children. The CPFWB also reviewed four meta-analyses in the peer-reviewed literature that assessed the overall impact of all the Triple P studies in the peer-reviewed literature.
- *School performance.* The CPFWB conducted a literature review on studies that link Triple P, parenting styles, and participation in evidence-based parenting classes with academic performance.
- *Client satisfaction.* The CPFWB reviewed the peer review literature on Triple P studies that discussed parent satisfaction.
- *Community satisfaction.* The CPFWB interviewed five agencies that implemented multiple levels of Triple P in Galveston, TX; Baton Rouge, LA; Santa Cruz, CA; San Francisco, CA; and Palm Beach County, FL. The agencies reported on their experiences in implementing Triple P, which aspects of the program they liked the most, satisfaction of the providers, parent and child outcomes, implementation challenges, and overall satisfaction with the program.
- *Costs.* The CPFWB requested quotes from Triple P America for implementing Triple P city-wide. The CPFWB calculated salary costs for the providers of parent education based on the average annual salaries of school counselors. Triple P is designed to be able to be incorporated into organizations and not require salary support for the providers of parent education. However, the CPFWB's partners argued that in order for Triple P to be successful in Houston funding must be allocated for salary support for providers of parent education.
- *Economic Impact.* The CPFWB compared the costs of training providers in Triple P and one-year costs of implementing the program with the cost savings associated with expected changes in child maltreatment rates, out-of-home placements, and hospitalizations from child maltreatment within two years of starting to train providers. The CPFWB only looked at the cost savings from neighborhood variables with well-supported evidence and did not account for cost savings from parent and

²¹ Prinz, R., Sanders, M., Shapiro, C., Whitaker, D., Lutzker, J. "Population-based prevention of child maltreatment: The U.S. Triple P System Population Trial." *Prevention Science*, 10 (2009): 1 – 12.

child outcomes. A detailed justification for each item in the economic impact analysis is available in Appendix B.

Assessment of parent education programs in Harris County

The CPFWB conducted a needs assessment of current parent education programs in Harris County. The CPFWB individually met with organizations that were part of the Parent Education Providers Partnership and conducted semi-structured interviews to learn about the strengths and challenges of providing parent education in Harris County. Also, through Internet searches and its network of partners, the CPFWB met with additional providers of parent education. The CPFWB built upon data originally collected by the Collaborative for Children on current parent education programs in Harris County. The CPFWB collected data on the names of the organizations, curricula used, description of classes, format of classes, location of classes, and number of parents served each year.

After collecting data on the number of parents reached each year and the curricula used by organizations, the CPFWB was able to review registries of evidence-based programs to identify the number and percentage of parents in Harris County that receive evidence-based parenting curricula each year. For those organizations that did not provide the number of parents served each year, the mean number of parents served was calculated for all the organizations that provided data. The mean number of parents served by each organization was added to the total for each organization that did not provide data.

VI. Child Abuse in Houston, Texas

In 2010, Harris County Child Protective Services assigned 28,549 reports of child abuse for investigation and investigated 21,727 of those reports. These investigations resulted in a total of 6,535 confirmed cases of child abuse/neglect at a rate of 5.9 cases per 1,000 children.²² A total of 2,636 children were removed from their homes and taken into protective custody. Neglectful supervision was the most common type of maltreatment (41.8%), followed by physical abuse (27.9%), sexual abuse (12.1%), and physical neglect (10.6%). Children from all ages, races/ethnicities, and gender were among the victims of maltreatment in Harris County. Furthermore, in 2009, 188 Harris County children were hospitalized from child maltreatment.

VII. Parent Education in Houston, Texas

In 2010, there were more than 800,000 parents with children under the age of 18 in Harris County.²³ It is estimated that less than 1% of these parents have access to evidence-based parent education programs. A survey of seventeen Harris County based agencies that provide parent education

²² "CPS in Harris County Annual Report." (2011). Web. Accessed Jun 12, 2012. <http://www.hc-ps.org/2011CPSAnnRep.pdf>.

²³ U.S. Census Bureau. "Profile of General Population and Housing Characteristics: 2010." Web. Accessed Oct 1, 2012. http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_10_DP_DPDP1

revealed that fifteen of the agencies collectively provide parent education to 11,409 parents each year. Assuming the two non-responding agencies reach the average number of parents of the responding agencies, it is likely that the number of parents reached is closer to 13,000. These survey results only reflect classes on basic parent education and do not reflect classes such as childbirth classes or classes on how to help your child get into college. Agencies that provide parent education are listed in Table 1.

Table 1: Organizations that provide parent education

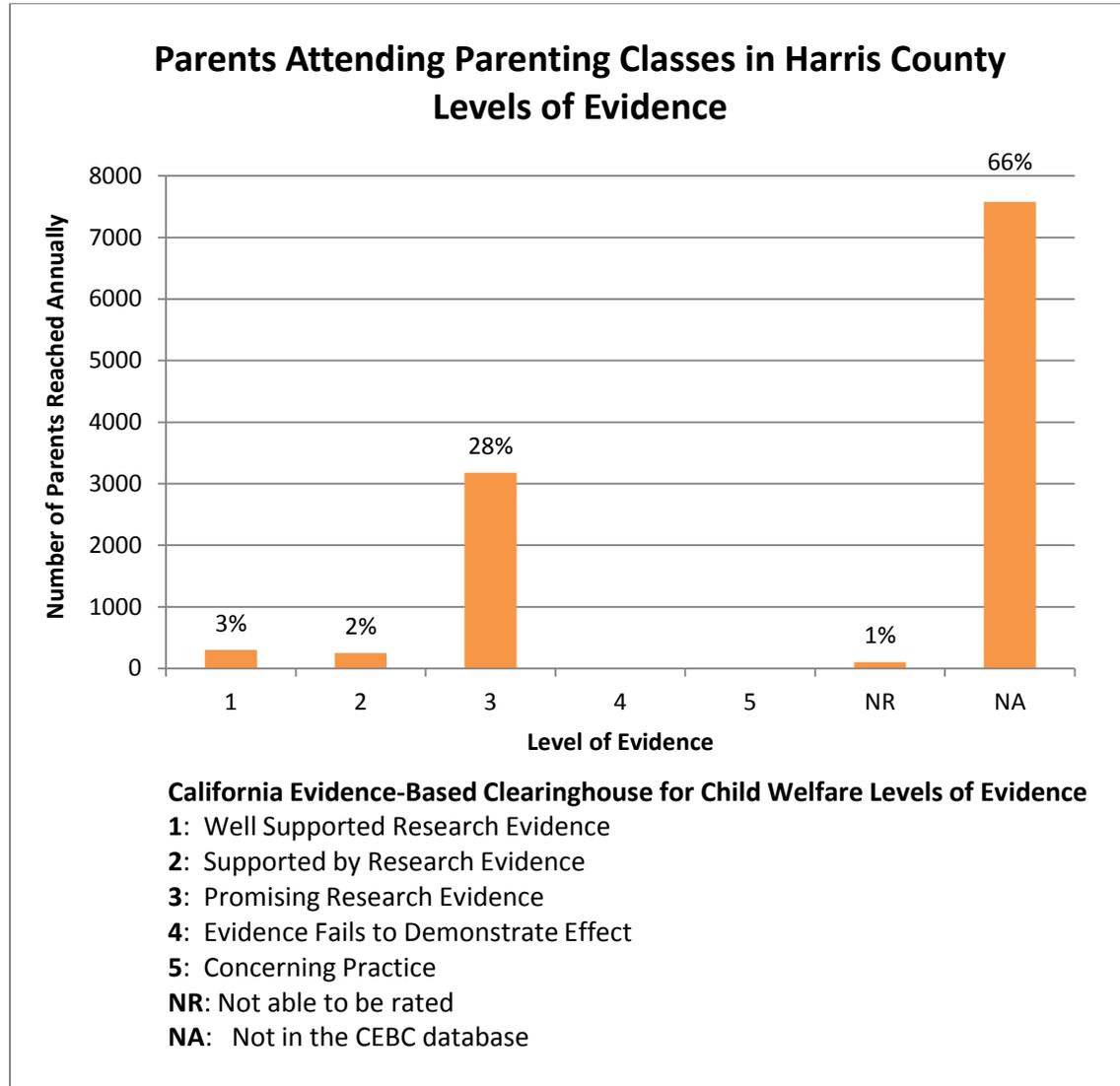
Organization	Description
Adults Relating to Kids Program (ARK)	Teaches adults how to discipline behavior while affirming the worth of the child. ARK addresses parenting behaviors, helps make great parents even better, and helps at-risk families develop new parenting styles. The program helps parents deal with practical issues such as school work, sibling rivalry, and bully-proofing.
AVANCE Parent-Child Education Program	Enhances school readiness for children, and prepares parents to advocate for and involve themselves in their child’s education. Each session includes a parent education component, a toy making component, and a guest speaker.
Collaborative for Children	Offers two parenting curriculums. Practical Parent Education is a series of parenting classes that covers communication, child development, child guidance and discipline, family involvement, and parent/child activities. Parents as Teachers is a home visitation program focusing on child development and parenting for families who are expecting and/or raising children under the age of three.
Community Family Center	Works to strengthen families and end generational poverty through intensive intervention, including parenting classes. Uses the Postive Action curricula.
Council on Drugs and Alcohol Houston	Offers Nurturing Parents curricula to parents of young children with a history of alcohol, tobacco, or other drug use.
DePelchin Children’s Center	Offers Nurturing Parents, which provides resources and information to support parents dealing with common parenting challenges. Positive discipline, communication, and problem solving techniques are presented in a way to help parents implement new tips and strategies at home. Divorce classes are also offered to parents.
ESCAPE Family Resource Center	Offers parenting classes that cover a variety of topics including: Building Confident Families, How to Speak with Your Children about Sexuality, Parent Support Groups, Families and Divorce, Building New Beginnings, Exceptional Parenting, Cablispainian, Circle of Love, Empowered to Motherhood, Building Confident Teens, The First Five, Dads Count, and Parent Aide.
Family Outreach	Offers parent education, parent coaching and anti-victimization classes. The parent education classes include Parent University, Love U-2, Parenting Seminars, and Practical Parenting.
Family Services of Greater Houston	Offers divorce classes, family life skills classes and personal family consultations. The classes teach what it means to be a good parent, effective ways to discipline, how to build a healthy self-esteem in children, how to talk to children, stages of child development, and how to manage anger.
Family Time Crisis and Counseling	Offers a parenting skills training course, “Family Foundations”, for parents ordered to attend classes by CPS. Divorce classes are also offered to parents.

Center	
Home Instruction for Parents of Preschool Youngsters (HIPPY)	A home visitation, parent involvement, school readiness program that helps parents prepare their children for success in school and beyond through encouragement and developing their child’s potential. It is offered at some school districts in Harris County such as Houston Independent School District.
Mona Mentors	Offers the Nurturing Parenting program for parents who have had their children removed from their homes or are at high risk for having their children removed from the home by Child Protective Services.
Nurse Family Partnership	Provides home visits by registered nurses to first-time mothers who are of low socioeconomic status, unmarried, or under the age of 19. The program improves pregnancy outcomes by promoting health-related behaviors and competent care giving skills to improve the child’s health, development, and safety.
Parenting Partnerships	Provides family life education services to businesses, families, schools and any organization that provides services to families. Parenting Partnerships teaches life skills that provide hands-on tools parents need to help their children build character, develop responsibility, problem solve and become resourceful adults.
Texas AgriLife Extension	Offers Parenting Now in 3, a program that empowers parents by providing effective parenting skills to combat bullying and other issues effecting today's families; Better Living for Texans, a program that educates attendees how to plan and prepare nutritious meals, adopt food safety practices, and engage in active lifestyles; and Financial Literacy, which is designed to help parents and families improve their financial well-being by developing the money management skills that parents need to take control of personal and family finances.
TRIAD	Offers Parenting with Love and Limits. The program reestablishes the parents’ ability to determine rules and restore nurturance to the parent-child relationship. It provides both group and individual coaching to parents and children with extreme emotional or behavioral problems such as running away, chronic truancy, depression, and drug or alcohol abuse.
The YMCA Success by Six	Offers parent education to build self-esteem, family values, family health awareness, prenatal care health screenings, and job readiness. It assists families in reaching self-sufficiency while strengthening family life that ensures school readiness for all young children.

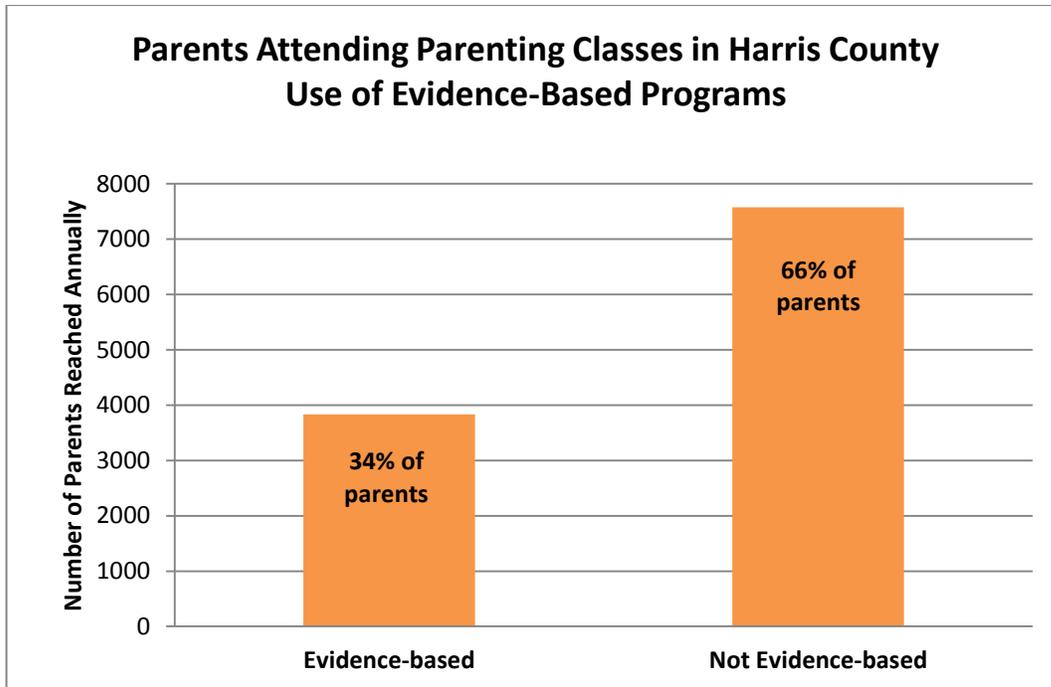
Additional organizations such as the Children’s Museum, ChildBuilders, Arc of Greater Houston, schools, and hospitals provide classes for parents that address issues such as helping children succeed in school, childbirth, and understanding special education.

Using the California Evidence-Based Clearinghouse (CEBC) rating system, which imparts scientific ratings to evidence based practices, only 5% of parents that attended parenting classes received evidence-based programs with a rating of “well supported by research evidence” and “supported by research evidence”. In contrast, 66% of parents that attended parenting classes received parenting classes that have not been rated as an evidence-based practice, representing a significant

population of parents receiving parenting education that lacks evidence on its impact on child well-being.



Many experts in child maltreatment regard the CEBC as the most widely accepted resource to evaluate evidence-based programs related to child welfare. However, other registries such as the NREPP, the Promising Practice Network, and Find Youth Net are also valuable resources in assessing outcomes of parenting programs. Similar to the CEBC registry, it appears that only 34% of parents that are attending parenting classes in Houston are receiving parent education that is well-supported by evidence, supported by research evidence, or promising research evidence on any of the evidence-based registries. This significantly low number of parents accessing evidence-based programs relative to the total parent population suggests a missed opportunity to end ineffective or maladaptive parenting practices.



Under the current system in Harris County, many parent education programs are perceived as punitive, such as those associated with divorce or Child Protective Services. The benefit of applying evidence-based parenting education across Harris County is that it removes the stigmatization associated with punitive programs by providing parental enrichment services to the entire community. Studies of evidence-based parenting education programs have established that parent education benefits not only those associated with low socioeconomic status, victims of abuse or neglect, children in foster care, or those within the juvenile justice system, but also first-time parents, stable married couples, single parents, and grandparent caregivers.

VIII. Positive Parenting Program (Triple P)

Overview

The Triple P – Positive Parenting Program was developed by Matthew Sanders at the University of Queensland in Australia. It is a multilevel system of parenting intervention designed to improve the quality of parenting advice available to parents that has evolved into a comprehensive public health model of intervention. All levels aim to prevent behavioral, developmental and emotional problems in children. The program promotes: the enhancement of skills, knowledge, confidence, and resourcefulness of parents; more nurturing, safe, engaging, and nonviolent environments for children; and children’s social, emotional, linguistic, intellectual, and behavioral competencies.²⁴

²⁴ Nowak, C., Heinrichs, N. “A Comprehensive Meta-Analysis of Triple P-Positive Parenting Program Using Hierarchical Linear Modeling: Effectiveness and Moderating Variables.” *Clinical Child and Family Psychology Review* 11.3 (2008): 114-44.

Triple P uses a self-regulatory framework and teaches parents to be independent problem solvers. The program is based on five key principles and teaches seventeen specific parenting skills. The five key principles are: ensuring a safe and engaging environment, creating a positive learning environment, using assertive discipline, having realistic expectations, and taking care of oneself as a parent. The seventeen parenting skills are:

- Brief quality time
- Talking to children
- Affection
- Modeling
- Incidental teaching
- Ask, Say, Do
- Behavior charts
- Praise
- Positive attention
- Engaging activities
- Establishing ground rules
- Directed discussion
- Planned ignoring
- Clear, calm instructions
- Logical consequences
- Quiet time
- Time out

Through its multi-level approach, Triple P matches intervention intensities to a family’s needs, builds on a strong scientific base, provides multiple access points for parents, and offers a de-stigmatized, cost-efficient framework. It incorporates five levels of intervention of increasing strength for parents of children and adolescents from birth to 16 years. A key element of the multiple levels of intervention is a universal media campaign which aims to remove stigma associated with attending parenting classes and informs parents how to ask for help. The tiered approach with Triple P is designed to maximize efficiency, contain costs, and avoid waste and over servicing. It ensures the program has wide reach in the community. The multi-disciplinary nature of the program utilizes the available professional workforce in the task of promoting competent parenting.

Table 2: Triple P Levels

Level	Level of Intensity	Population Targeted	Description
Level 1	Very Low Intensity	All parents and community members	Provides universal parent information with an aim to increase community awareness of parenting resources and the receptivity of parents to participating in programs while creating a sense of optimism and depicting solutions to common behavioral and developmental concerns.
Level 2	Low Intensity	Parents seeking general information or with specific concerns	Involves 1-2 sessions that address positive parenting and child development. Intended for parents that are generally coping well with parenting but may have a few concerns.
Level 3	Low to Moderate Intensity	Parents with specific concerns requiring training support beyond level 2	Involves a four-session intervention. This level targets children with mild to moderate behavioral difficulties or developmental issues and includes active skills training for parents.

Level 4	Moderate to High Intensity	Parents requiring intensive training skills	Intensive individual, group or self-directed parent training program for parents of children with more severe behavioral difficulties; group can also be used as a preventative intervention.
Level 5	High Intensity	Parents of children with behavioral problems and family dysfunction	Additional modules that can be added to a Level 4 intervention that address parent and/or family dysfunction or distress, (e.g., parental anger or stress management, partner conflict, currently separating or divorcing parents.)

In addition to the five levels of intervention, Triple P has developed variations of the five levels to meet the needs of special populations. For example, Lifestyles Triple P is a parenting intervention for parents of overweight or obese children that supports family lifestyle changes. Other variations include: Stepping Stones for parents of children with a developmental disability, Teen Triple P for parents of children 12 – 16 years of age, and Triple P Online for parents who prefer working independently through an online course.

Impact on Neighborhood Variables

Research has demonstrated that Triple P can have a positive impact on community outcomes. In the *Population-based Prevention of Child Maltreatment: The US Triple P System Population Trial*, 649 service providers in South Carolina were trained in Triple P in nine counties, and nine control counties received care as usual. The 649 providers delivered services through schools, social service agencies, daycare centers, health care facilities, and mental health agencies. Two years after the providers were trained in Triple P, the Triple P counties had statistically significant lower rates of substantiated child maltreatment, reductions in out-of-home placements, and hospitalizations from child maltreatment when compared to the control counties. Specifically, in the Triple P counties there was an 8% increase in substantiated child maltreatment compared to a 35% increase in the control counties; a 12% decrease in out-of-home placements compared to a 44% increase; and an 18% decrease in hospitalizations from child maltreatment compared to a 20% increase in the control counties.

Table 3. Changes in Neighborhood Variables in the US Triple P System Population Trial

Rate of Substantiated Child Maltreatment per 1,000 Children, Ages 0 - 7				
	Pre-Intervention	Post-Intervention	Percent Change	P-value*
Triple P	10.86	11.74	+8%	0.03
Control	11.12	15.06	+35%	
Rate of Out-of-Home Placements per 1,000 Children, Ages 0 - 7				
	Pre-Intervention	Post-Intervention	Percent Change	P-value
Triple P	4.27	3.75	-12%	0.01
Control	3.10	4.46	+44%	
Rate of Hospitalizations from Child Maltreatment per 1,000 Children, Ages 0 - 7				
	Pre-Intervention	Post-Intervention	Percent Change	P-value
Triple P	1.73	1.41	-18%	0.02
Control	1.41	1.69	+20%	

*A p-value of less than 0.05 indicates that the finding is statistically significant and that it is unlikely that the observed differences occurred by chance.

Based on the impact of Triple P in South Carolina, one case of child maltreatment could be prevented each time 327 children’s families receive Triple P, one out of home placement could be prevented each time 532 children’s families receive Triple P, and one hospitalization from child maltreatment could be prevented each time 1,667 children’s families receive Triple P. If these numbers are applied to the population of Houston with children 0 – 12 years of age, 1,202 cases of child maltreatment, 739 out-of-home placements, and 236 hospitalizations from child maltreatment could be prevented within the first two years of implementation. Given the high societal costs associated with child maltreatment, foster care, and hospitalizations, the potential savings could be substantial for Houston. This is discussed in more detailed in the economic impact section of this report.

Impact on Parents

The research on Triple P has demonstrated that it has consistently had a positive impact on parents. In a meta-analysis of 55 peer-reviewed journal articles on intervention studies of Triple P, the authors concluded that participation in Triple P results in positive changes in parenting skills and parental well-being such as parental stress, depression, and relationship quality.²⁵ For example, in the Every Family Study, Triple P was implemented in Australia in ten regions and ten regions received care as usual. A random sample of households was surveyed before the implementation of Triple P and two years after the implementation. The parents that lived in the ten regions that received Triple P had statistically significant improvements in rates of parental depression and stress compared to the control regions. Specifically, the parents in the Triple P community had a 4%

²⁵ Nowak, C., Heinrichs, N. “A Comprehensive Meta-Analysis of Triple P-Positive Parenting Program Using Hierarchical Linear Modeling: Effectiveness and Moderating Variables.” *Clinical Child and Family Psychology Review* (2008): 114-144.

decrease in parental stress compared to an 8% increase in the control regions and a 26% decrease in rates of depression compared to a 3% decrease in the control regions.²⁶

Impact on Children

The research on Triple P has also consistently demonstrated a positive impact on children. In the same meta-analysis of 55 peer reviewed journal articles, the authors concluded that Triple P has a positive impact on child behavior which includes social, emotional, and behavioral problems. Studies have demonstrated both the prevention and reduction in rates of children with clinically significant social, emotional, and behavioral problems in families that receive Triple P compared to families that receive care as usual. This indicates that the effect size of Triple P is large enough that it can have a positive impact on the rates of common disorders in children such as ADHD, conduct disorder, and oppositional defiant disorder. In the Australian Every Family Study described above, children in the Triple P communities experienced a 22% decrease in total social, emotional, and behavioral disorders compared to a 7% increase in the control communities. The Triple P communities also experienced an 18% decrease in the percentage of children with clinically elevated emotional disorders compared to an 11% increase in the percentage of children with clinically elevated emotional disorders in the control communities.²⁷

Impact on School Performance

While the majority of the school-based research on Triple P has focused on children's behaviors, research has shown that parents who have undergone evidence-based parenting interventions have higher levels of parent-initiated school involvement, such as parent attendance at school activities and parent-teacher conferences. There is a strong positive relationship between school-initiated parental involvement practices and children's school outcomes.²⁸ Authoritative parenting leads to a child's stronger work orientation, greater engagement in classroom activities, more positive feelings about school, greater time spent on homework, and lower levels of school misconduct.²⁹

Community Satisfaction

To assess community satisfaction, the CPFWB interviewed agencies that have implemented multiple levels of Triple P in Baton Rouge, LA; Galveston, TX; Palm Beach, FL; San Francisco, CA; and Santa Cruz, CA. Overall, the five agencies expressed high levels of satisfaction with Triple P. The agencies reported that their parent educators have high job satisfaction because they are able to see positive

²⁶ Sanders, M., Ralph, A., Sofronoff, K., Gardiner, P., Thompson, R., Dwyer, S., Bidwell, K. "Every Family: A Population Approach to Reducing Behavioral and Emotional Problems in Children Making the Transition to School." *Journal of Primary Prevention* 29.3 (2008): 197-222.

²⁷ Sanders M, Ralph A, Sofronoff, K, Gardiner P, Thompson R, Dwyer S, Bidwell K. "Every Family: A Population Approach to Reducing Behavioral and Emotional Problems in Children Making the Transition to School." *Journal of Primary Prevention* 29.3 (2008): 197-222.

²⁸ Spera, C. "A Review of the Relationship Among Parenting Practices, Parenting Styles, and Adolescent School Achievement." *Educational Psychology Review* 17.2 (2005): 125-146.

²⁹ Steinberg, L., Lamborn, S., Dornbush, S., Darling, N. "Impact of Parenting Practices on Adolescent Achievement: Authoritative Parenting, School Involvement, and Encouragement to Succeed." *Child Development* 63(1992): 1266-1281.

outcomes in the parents they are working with. The parent educators also felt the Triple P structure made it easier to manage group classes when compared to other curricula. The coordinators also expressed high levels of satisfaction with the outcomes they have seen in parents which are in-line with the outcomes observed in the peer reviewed literature. Finally, one agency that serves racially diverse clients reported having analyzed outcomes by race and ethnicity and observed no differences in outcomes.

The agencies also provided input on areas of Triple P that they were not satisfied with. Two agencies reported that the Level 1 Media Campaign was too expensive so they developed their own media campaign. Another agency reported that there are challenges with implementation, especially the accreditation process for the parent educators, so it was helpful to gradually implement Triple P in their community. Finally, several agencies reported that it is important to have organizations and practitioners be committed to Triple P before having them trained. Several agencies require supervisors to attend training with the parent educators to ensure organizational support. Other agencies require practitioners to apply to be trained and commit to offering a minimum number of classes to ensure the practitioners are committed to the program.

Client Satisfaction

Some of the Triple P studies included measures of parent satisfaction with the program. Overall, parents reported high levels of satisfaction with the Triple P program. For example, 90% of the 3,000 parents in the Every Family Study reported the program was good or excellent.³⁰

Costs of Triple P

The majority of the costs incurred in offering Triple P are for the training of providers, resources for parents, technical support for the parent educators, and media campaign materials. The following cost estimate was developed by Triple P for Houston, Texas and is based on 392,962 children 0 – 12 years of age, 1.9 children per family, and a total number of 206,822 families. The training provides the parent educators with the training and materials they need to teach Triple P. It would cost \$3,662,630 to train 3,320 practitioners in Triple P (\$1,103 per provider). The materials for classes include the materials that the Triple P providers would use and give to parents such as tip sheets and a workbook. The total cost of materials for classes for a 12 month period is \$1,739,881 or \$8.41 per family. The technical assistance includes management briefings, pre-accreditation consultations to help practitioners prepare for accreditation, peer supervision and support networking, and post-accreditation clinical consultations to support practitioners with implementation challenges. The total cost of technical assistance is \$871,740. The media campaign materials costs cover the material costs and development costs of the campaign. It does not include the costs to purchase advertising time and/or space. The costs of the media campaign can vary significantly but it is estimated to cost \$2.54 per family for a total of \$524,710.

³⁰ Sanders M, Ralph A, Sofronoff, K, Gardiner P, Thompson R, Dwyer S, Bidwell K. "Every Family: A Population Approach to Reducing Behavioral and Emotional Problems in Children Making the Transition to School." *Journal of Primary Prevention* 29.3 (2008): 197-222.

Table 5. Triple P Costs

<i>Triple P Costs</i>	
Training providers	\$3,662,630
Materials for classes	\$1,739,881
Technical assistance	\$871,740
Media campaign materials	\$524,710
TOTAL Triple P costs	\$6,798,961

In sum the total Triple P costs to implement Triple P in Houston would be \$6,798,961. A detailed breakdown of the costs is available in Appendix B.

Economic Impact

Several studies have reviewed the economic impact of Triple P and concluded that the intervention is cost-effective. For example, Foster and colleagues conducted an economic analysis of the US Triple P System Population Trial in South Carolina and concluded that the total training costs for a sufficient population-approach would cost \$22 per family or \$11.74 per child. The authors concluded in a community where rates of abuse and neglect are approximately 100 per 100,000, the training costs would be recouped in a single year by reducing the rates of abuse and neglect by 10%.³¹

Researchers also reviewed the Every Family Study and conducted a threshold analysis to determine the point at which Triple P paid for itself in a community by preventing conduct disorder. The study concluded that when Triple P is implemented across a population of 2 – 12 year-olds in a community, Triple P would only have to divert 1.5% of cases of conduct disorder in order to pay for the service delivery of Triple P to families in the community.³²

In another report, the Washington State Institute of Public Policy (WSIPP) calculated the return of investment to taxpayers in the State of Washington from evidence-based prevention and intervention programs. The WSIPP determined that the benefit-cost ratio of the Triple P system is \$6.06. This indicates that for every dollar spent, it is estimated that \$6.06 will be recouped by the system. The benefit-cost ratio of Level 4 Triple P standard is \$1.98 and Level 4 Triple P group is \$5.63. Table 5 provides additional results.³³

³¹ Foster, M., Prinz, R., Sanders, M., & Shapiro, C. "The cost of a public health infrastructure for delivering parenting and family support." *Children and Youth Services Review* 30 (n.d.): 493-501.

³² Mihalopoulos, C, Sanders, MR, Turner, KMT, Murphy-Brennan, M & Carter, R. "Does the Triple P-- Positive Parenting Programme provide value for money?" *Australian and New Zealand Journal of Psychiatry* 41.3 (2007): 239-46.

³³ Aos, S., Lee, S., Drake, E., Pennucci, A., Klima, T., Miller, M., Anderson, L., Mayfield, J., & Burley, M. *Return on investment: Evidence-based options to improve statewide outcomes; April 2012 update*. Olympia: Washington State Institute for Public Policy, 2012.

Table 5: Washington State Institute of Public Policy’s Return of Investment of Evidence-Based Prevention and Intervention Programs

Program	Total Benefits	Costs	Benefits Minus Costs	Benefits to Cost Ratio	Measure of Risk (odds of a positive net present value)
Alternative Response	\$852	(\$96)	\$756	\$8.88	100%
Healthy Families America	\$2,589	(\$4,601)	(\$2,011)	\$0.56	26%
Incredible Years: Parent Training	\$2,482	(\$2,074)	\$408	\$1.20	61%
Intensive Family Preservation (Homebuilders)	\$6,942	(\$3,288)	\$3,655	\$2.11	99%
Nurse Family Partnership	\$22,781	(\$9,600)	\$13,181	\$2.37	80%
Parent-Child Home Program	\$3,920	(\$5,496)	(\$1,576)	\$0.71	38%
Parent-Child Interaction Therapy: Child Behavior	\$3,385	(\$1,335)	\$2,049	\$2.53	100%
Parent-Child Interaction Therapy: Child Welfare	\$7,168	(\$1,551)	\$5,617	\$4.62	100%
Parents as Teachers	\$4,992	(\$4,227)	\$765	\$1.18	57%
SafeCare	\$1,501	(\$102)	\$1,399	\$14.65	100%
Triple P: Level 4, Individual	\$3,621	(\$1,833)	\$1,788	\$1.98	92%
Triple P: Level 4, Group	\$2,122	(\$375)	\$1,737	\$5.63	100%
Triple P: Full System	\$865	(\$143)	\$722	\$6.06	100%

Economic Impact in Houston

To determine the economic impact of implementing the Triple P model in Houston, the costs of the intervention were compared to the anticipated savings. To determine the costs, Triple P America provided CHILDREN AT RISK with a proposal to implement the Triple P model in Houston. These costs are described in the Cost section above and total \$6,798,961. Additional costs were included in the analysis to cover salaries for the providers of parent education, salaries of administrative support staff, and media time, and totaled an additional \$6,951,283. Savings were calculated based on the anticipated reductions in child maltreatment, out-of-home placements, and hospitalizations from child maltreatment for a cost savings of \$26,216,746 within two years after training providers has begun. Savings are based on the results of the US Triple P System Population Trial and the assumption that Houston would experience similar results. It is anticipated that savings will not be realized for two years after the initial training of providers due to the length of time expected to get all providers trained and accredited. Based on this assumption, the net savings of implementing Triple P city-wide in Houston is over \$12 million within two years after training has begun. Additional savings may occur through the other benefits of Triple P such as reducing rates of social, emotional, and behavioral problems in children. It should be noted that the savings from a population-based approach to parent education may not be directed to the same source as the

funding of the program. A detailed explanation of how the costs and savings were calculated is available in Appendix B.

Table 6. Costs and Savings of Triple P

Savings			
	Estimated Reduction of Cases Each Year	Annual Cost	Estimated Cost Savings
Child maltreatment	1,202	\$5,744	\$6,904,721
Out-of-home placements	739	\$22,433	\$16,577,987
Hospitalizations	236	\$11,585	\$2,734,039
TOTAL Savings			\$26,216,746
Costs			
Costs (Triple P)			\$6,798,961
Costs (infrastructure, salaries, media time)			\$6,951,283
TOTAL Costs			\$13,750,244
Expected Net Savings			
TOTAL Savings – Costs			\$12,466,502

IX. Partners and Outreach

The CPFWB interviewed over 70 organizations to gain a better understanding of current services available in parent education, interest and opportunities in expanding parent education services, and anticipated challenges and barriers. The following themes emerged from the interviews.

Overall need for parenting education

Partners agreed that there is a need to increase the availability and utilization of parent education. However, some partners expressed concerns regarding the challenges of getting parents to attend parenting classes.

Interest in participating in pilot

Numerous organizations expressed interest in the concept of a population-based approach to parent education and asked to be part of a pilot program.

Interest in Triple P

Partners were most interested in three elements of Triple P: the tiered approach with multi-levels, the media campaign, and the strong evidence-base.

Concerns with Triple P

Some partners expressed concern that the Triple P model does not effectively address the common challenges associated with parent education programs such as recruiting parents to attend, child care, and transportation. Several partners also expressed interest in comparing data and content of Triple P to other parent education programs.

Addressing benefits other than child abuse

Many of the CPFWB partners expressed that focusing on child abuse prevention was too narrow given the multitude of benefits of effective parent education. Partners expressed expanding the focus to using evidence-based parenting programs to improve family well-being, which may include improving school readiness and mental health and preventing behavior problems as well as risky behaviors.

Other parent education providers

During the interviews with organizations that currently provide parent education, most of the organizations expressed that they were content with the program that they are currently using. Some organizations expressed that the connection between the provider and the parent was more important than the specific curricula. Most of the organizations expressed interest in the media campaign and indicated that there is a need to increase awareness of parent education programs and to remove stigma from attending parenting classes.

Some organizations such as schools and faith-based organizations that currently offer parent education classes expressed interest in thinking more strategically about the classes they offer and using evidence-based programs.

Partnership Survey

In July and August 2012, organizations that participated in the CPFWB Partnership were asked to complete a survey to determine if there was a consensus on recommendations moving forward. The recommendations were initially developed by the CPFWB and the Academic Advisory Council, and they were revised based on the feedback of the partnership members during the July 2012 partnership meeting. The survey was distributed to 40 organizations and each organization was asked to have one representative from their organization complete the survey. Twenty-eight organizations completed the survey, including school districts, hospitals, nonprofit organizations, government agencies, collaboratives, and universities for a response rate of 70% percent.

Eighty-five percent of those responding agreed with the recommendations as written and 15% of the partnership agreed with the recommendations with minor additions (see recommendations below). A summary of the survey results are listed in Table 7.

Table 7: Summary of CPFWB Partnership Survey Results

Percentage of partnership that agreed or strongly agreed that...	
It is important that more parents in the Greater Houston area have access to parent education classes.	100%
The Greater Houston area would benefit from a population-based parent support system.	100%
Triple P provides a good framework on how to approach parent education in the Greater Houston area.	95.8%
Parent education classes should be proven effective (evidence-based).	92.6%
Percentage of partnership that reported the CPFWB should focus on...	
Developing partnerships and an infrastructure to increase the availability of parent education classes.	100%
Securing funding for parent education.	74.1%
Social marketing to decrease the stigma of attending parenting classes.	51.9%
Providing educational opportunities to partners.	51.9%
Evaluating the effectiveness of parenting programs.	48.1%
Advocating for policy changes.	40.7%

X. Recommendations and Conclusions

Based on the results from the community needs assessment of parent education programs in the Greater Houston area, the CPFWB and the CPFWB Partnership proposes the following recommendations:

- There is a need in Houston, Texas for a population-based approach to parent support programs to reach more parents with evidence-based programming.
- The research and academic literature on Triple P is compelling and the CPFWB anticipates it could have a significant positive impact on the well-being of children, families, and community health indicators.
- There is community support for the implementation of a population-based parenting support system. Triple P provides a model for a population-based approach, but the Triple P program should be integrated with other evidence-based programs that are used or supported by the Greater Houston community.
- Implementing a population-based parenting support system will require substantial infrastructure and coordination between agencies and organizations. Current agencies that provide parenting classes have limited capacity. To train enough providers for a population-based approach will also require training of staff at schools, hospitals, medical practices, faith based organizations, etc.
- More research is needed on how to structure, fund, and prioritize populations to effectively implement a population-based approach to parent education.

The CPFWB also proposes the following recommendation:

- If Triple P is implemented in Houston it would require a significant initial financial investment. However, due to the expected reductions in child maltreatment, out-of-home placements, and hospitalizations, the intervention would pay for itself in the first year after implementation is complete. Additional cost savings would be achieved from the program’s positive impact on family well-being. However, caution must be used in planning for the cost savings as it is unlikely that the cost savings will benefit the source that funds the intervention. Furthermore, given the tight budget that Harris County Child Protective Services is currently experiencing, reducing rates of child maltreatment and out-of-home placement may simply mean that resources and staff time are shifted to other priorities that are currently underfunded within the organization.

XI. Limitations

This report provides an overview of expected outcomes if Triple P is to be implemented in Houston in the same manner as the US Triple P System Population Trial in South Carolina. However, there are some limitations to this analysis that should be considered when planning for the future. First of all, when predicting reductions in child maltreatment, out-of-home placements, and hospitalizations from child maltreatment, the analysis was based on a single study, the US Triple P System Population Trial, and the study has not been replicated in another population to validate the findings. However, to our knowledge there are no other similar studies to validate these findings.

Demographics

The demographics in South Carolina are not the same as the demographics in Harris County. While the median household income in Harris County (\$50,422) is higher than South Carolina (\$42,018) the percentage of the population living below the poverty is similar, 18.7% and 18.2% respectively. The biggest difference among the populations is the racial and ethnic diversity. South Carolina has a higher percentage of whites and African Americans and Harris County has a higher percentage of Hispanics and Asians. See Table 8.

Table 8. Demographics of South Carolina and Harris County^{34, 35}

Variable	South Carolina	Harris County
Population	4,625,364	4,092,459
Persons under 18	1,080,474	1,147, 835
Persons per household	2.49	2.82
Median household income	\$42,018	\$50,422
Persons below poverty line	18.2%	18.7%
White, non-Hispanic	64.1%	33.0%

³⁴ U.S. Census Bureau. “Profile of General Population and Housing Characteristics: 2010.” Accessed Oct 1, 2012.

³⁵ U.S. Census Bureau. “Selected Economic Characteristics: 2010 American Community Survey 1-Year Estimates.” Accessed Oct 1, 2012.

African American	27.9%	18.9%
Asian	1.3%	6.2%
Hispanic	5.1%	40.8%

In addition, the US Triple P System Population Trial focused on families with children 0 – 7 years of age, while our analysis focused on children 0 – 12 years of age. Rates of substantiated child maltreatment are higher in younger children, so the impact of Triple P may be larger in families with children 0 – 7 years of age than families with children 0 – 12 years of age, which is the target age group of the Triple P curricula.

Finally, in determining the number of practitioners needed to train in order to have an impact on the population level, we relied on the expertise of Triple P International and their experience in implementing Triple P in other communities. However, if the practitioners in Houston do not reach as many families as predicted, the intervention may not have the same effect. Nevertheless, there have been countless studies in the peer-reviewed literature on how to engage practitioners to reach families, which can guide efforts to reach the target population.

Economic Impact

While the potential economic impact of implementing Triple P community-wide is promising, it is based on the assumption that Triple P will be successfully implemented on a large scale, and that the program will be adopted and accepted in a manner that is similar to other communities in the literature. Some of these factors include:

- Parents will respond to the media campaign and recruitment;
- Parent educators will provide the expected number of parent education courses;
- Attrition of parent educators is not more than 20%;
- Organizations will buy into the program and agree to have their staff trained and offer parent education classes; and
- Coordination will exist between organizations offering parenting classes.

To address these limitations, we determined that as long as the intervention is 52% as effective in Houston as it was in South Carolina, the intervention would still be cost neutral or lead to a cost savings.

$$52\% * \text{Total savings } (\$26,216,746) = \text{Costs } (\$13,750,244)$$

XII. Next Steps

Through the input of the CPFWB Partnership and the research of the CPFWB Academic Advisory Council, the CPFWB has determined that our community should move forward with developing a structure to implement a population-based approach to parent education in the Greater Houston area to ultimately reduce rates of child maltreatment and improve overall family well-being. A logic

model of how this approach will lead to a decrease in rates of child maltreatment and improve family well-being is in Appendix C.

Implementation of a population-based approach to parent education in the Greater Houston area will require substantial infrastructure and coordination. In order to reach a substantial segment of the population, classes must be offered through organizations that regularly connect with parents and families such as hospitals, schools, places of worship, childcare facilities, and health care providers. Now that it has been determined that our community *should* move forward with implementing a population-based approach to parent education, research is needed to determine *how* to move forward. Next steps may include:

- Developing an infrastructure to implement evidence-based parenting across the Greater Houston area. The infrastructure must incorporate the Triple P model with other evidence-based programs.
- Creating a referral system for providers of parent education.
- Developing guidelines on how geographic areas and organizations will be prioritized during the roll-out of the population-based approach to parent education.
- Designing a media campaign.
- Obtaining commitments from organizations to train staff and implement evidence-based parent education.
- Developing a research and evaluation protocol to measure the success of the implementation of a population-based approach to parent education.
- Applying for and securing funding for initial training.
- Securing public funding to sustain parent support programs.
- Implementing a pilot program to build capacity for the implementation of a population-based approach to parent education.
- Determining how ownership of the project can be shared by partners in an equitable manner.

The CPFWB is committed to utilizing the results from this assessment to develop an infrastructure so evidence-based parent education programs are easily accessible and attending parenting classes becomes the norm for parents in our community.

XIII. Appendices

Appendix A: Evidence-Based Parent Education Programs

The following parent training programs have been evaluated by the California Evidence-Based Clearinghouse for Child Welfare and given a rating of: 1 – well-supported by research evidence, 2 – supported by research evidence, or 3 – promising research evidence.

Rating 1: Well-Supported by Research Evidence			
Name	Description	Format of Classes	Target Population
Incredible Years	The Incredible Years is a series of three separate, multifaceted, and developmentally based curricula for parents, teachers, and children. This series is designed to promote emotional and social competence; and to prevent, reduce, and treat behavior and emotional problems in young children.	60 group lessons, offered 2 -3 times a week.	Parents and children 4 – 8 years of age
Parent Management Training Oregon Model	PMTO is a set of parent training interventions that can be used as a preventative program and a treatment program. PMTO interventions have been tailored for specific clinical problems, such as antisocial behavior, conduct problems, theft, delinquency, substance abuse, and child neglect and abuse. It can be delivered in many formats, including parent groups, individual family treatment, books, audiotapes and video recordings.	2-hour weekly parent group sessions and 1-hour weekly family sessions for 5 – 6 months.	Parents of children 2 – 18 years of age with disruptive behaviors such as conduct disorder, oppositional defiant disorder, and anti-social behaviors.
Parent-Child Interaction Therapy	PCIT was developed for families with young children experiencing behavioral and emotional problems. Therapists coach parents during interactions with their child to teach new parenting skills. These skills are designed to strengthen the parent-child bond; decrease harsh and ineffective discipline control tactics; improve child social skills and cooperation; and reduce child negative or maladaptive behaviors. PCIT is a treatment for disruptive behavior in children and is a recommended treatment for physically abusive parents.	Fourteen weekly or bi-weekly individual classes or until the parent improves.	Children ages 3 – 6 with behavior and parent-child relationship problems.
Triple P	The Triple P – Positive Parenting Program is a multi-level system of parenting and family support. It aims to prevent behavioral, emotional and developmental problems in children by enhancing the knowledge, skills, and confidence of parents. It incorporates five levels of intervention on a tiered continuum of increasing intensity for parents of children and adolescents. The multi-disciplinary nature of the program allows utilization of the existing professional workforce in the task of promoting competent parenting. The reach of the intervention can vary from being very broad (targeting an entire population) to quite narrow (targeting only high-risk children).	Varies by level. Classes range from one-time 1.5 hour group sessions to 12 weekly individual sessions.	Parents and other caregivers of children from birth through age 16.

Rating 2: Supported by Research Evidence

Name	Description	Format of classes	Target population
1-2-3 Magic Effective Discipline for Children 2-12	1-2-3 Magic is a group format discipline program for parents. It divides the parenting responsibilities into three straightforward tasks: controlling negative behavior, encouraging good behavior, and strengthening the child-parent relationship. The program seeks to encourage gentle, but firm, discipline without arguing, yelling, or spanking.	One or two group sessions per week. 1.5 hours per session for 4-8 weeks.	Parents of children from ages 2 – 12 years.
SafeCare	SafeCare® is an in-home parenting model program that provides direct skill training to parents in child behavior management and planned activities training, home safety training, and child health care skills to prevent child maltreatment.	Weekly 1.5 hour sessions for 18-20 weeks.	Parents at-risk for child neglect and/or abuse with children from 0 – 5 years.

Rating 3: Promising Research Evidence

Name	Description	Format of classes	Target population
Attachment and Bio-behavioral Catchup	ABC targets several key issues that have been identified as problematic among children who have experienced early maltreatment and/or disruptions in care. The first intervention component helps caregivers to re-interpret children's behavioral signals. The second intervention component helps caregivers provide nurturing care. The third intervention component helps caregivers provide a responsive, predictable environment that enhances young children's behavioral and regulatory capabilities.	Weekly one-hour individual sessions for 10 weeks.	Foster parents of children ages 0 – 5.
Circle of Security Program	The COS protocol is an early intervention program designed to prevent insecure attachment and child mental disorders. It uses a user-friendly, visually based approach to help parents better understand the needs of their children. It is based extensively upon attachment theory and current affective neuroscience.	One-hour home visits every three weeks for 3 – 4 months	High risk populations with children 0 – 5 years of age.
Common Sense Parenting	Common Sense Parenting focuses on teaching practical skills to increase children's positive behavior, decrease negative behavior, and model appropriate alternative behavior.	Six 2-hour weekly group sessions.	Parents and other caregivers of children ages 6 – 16 years.
Nurture Parenting Program	The Nurturing Parenting Programs are family-based programs utilized for the treatment and prevention of child abuse and neglect. The goals of the curriculum are: 1) to teach age-appropriate expectations and neurological development of children; 2) to develop empathy and self worth in parents and children; 3) to utilize nurturing, non-violent strategies in family discipline; 4) to empower parents and children to utilize to make healthy choices; and 5) to increase awareness of self and others in developing positive patterns of communication while establishing healthy, caring relationships.	Sessions are offered in groups or at the home. 12 to 48 sessions.	Parents who are at high-risk for child maltreatment with children ranging from newborns to 18.

Parenting Wisely	Parenting Wisely is a self-administered, highly interactive computer-based program that teaches parents and children skills to improve their relationships and decrease conflict through support and behavior management. The program operates as a supportive tutor pointing out typical errors parents make and highlighting new skills that will help them resolve problems.	Program takes 2-3 hours to complete and should be completed within a two-week period.	Families with children at risk for or with: behavior problems, substance abuse problems, or delinquency, ages 9 - 18.
Systematic Training for Effective Parenting	STEP is a multi-component parenting education curriculum that helps parents learn effective ways to relate to their children. By identifying the purposes of children's behavior, STEP helps parents learn how to encourage cooperative behavior in their children and how not to reinforce unacceptable behaviors. STEP also helps parents change dysfunctional and destructive relationships with their children by offering concrete alternatives to abusive and ineffective methods of discipline and control.	Weekly sessions, 60-90 minutes each for 7 weeks.	Parents of children, ranging from early childhood, to teenagers.
Teaching Family Model	TFM uses a married couple or other "teaching parents" to offer a family-like environment in residential group homes, home-based services, foster care and treatment foster care, schools, and psychiatric institutions. The teaching parents help with learning living skills and positive interpersonal interaction skills. They are also involved with children's parents, teachers, and other support network to help maintain progress.	For residential settings, it is a 24/7 program. For home-based interventions, it is 10-15 sessions per week for 6-10 weeks.	Parent of high-risk children, ages 0 – 17.

Appendix B: Detailed Economic Analysis

The following documentation provides a detailed description of how costs were calculated for the Cost-Benefit Analysis to implement Triple P in Houston, Texas. The program will target 206,822 families and 392,962 children 0 – 12 years of age.

Triple P Costs

Training Providers

The cost associated with training providers in parent education was based on a proposal submitted by Triple P to CHILDREN AT RISK. The number of practitioners needed to be trained was calculated by Triple P and is based on the number of practitioners needed to reach the necessary number of parents in the City of Houston. The total expected cost is \$3,662,630.

Triple P Course	Rate per course	Practitioners per course	Training cost per practitioner	Practitioners to be trained	Training Cost
Level 2: Selected Seminars	\$11,450	20	\$573	740	\$423,650
Level 3: Primary Care	\$23,555	20	\$1,178	1640	\$1,931,510
Level 4: Group	\$26,760	20	\$1,338	560	\$749,280
Level 4: Standard	\$26,760	20	\$1,338	180	\$240,840
Level 5: Enhanced/Pathways	\$31,735	20	\$1,587	200	\$317,350
TOTAL				3320*	\$3,662,630

**To be trained in level 2 or level 5 a practitioner must be accredited in level 3 or 4. The maximum number of unique providers is 2,380.*

Materials for Classes

Materials are provided to all of the participants in the Triple P classes. The quantity of materials needed is based on the number of targeted families from the Triple P model for one year of classes. The total cost of materials for one year of classes is \$1,739,881.

Triple P Course	Resource Item for Each Family	Total Targeted Families	Cost per Unit	Total Quantity	Total Cost Per Item	Shipping 10%	Total Costs
Level 2: Selected Seminars	2 Tip Sheets	124,093	\$1.21	248,186	\$300,305	\$30,031	\$330,336
Level 3: Primary Care	3 Tip Sheets	68,251	\$1.05	204,753	\$214,991	\$21,499	\$236,490
	1 Positive Parenting Booklet	68,251	\$7.15	68,251	\$487,995	\$48,799	\$536,794

Level 4: Group	Level 4 Group Workbook	13,960	\$23.10	13,960	\$322,476	\$32,248	\$354,724
Level 4: Standard	Level 4 Standard Workbook	3,723	\$28.60	3,723	\$106,478	\$10,648	\$117,126
Level 4: Self-help	Level 4 Selfhelp Workbook	931	\$28.60	931	\$26,627	\$2,663	\$29,289
Level 5: Enhanced/ Pathways	Level 5 Workbook, 3 modules	4,136	\$9.90	12,408	\$122,839	\$12,284	\$135,123
TOTAL							\$1,739,881

Technical Assistance

Technical assistance will provide funding to assist practitioners in the accreditation process, assist with case management, and provide supervisors with support in integrating parent education into their organization.

Triple P Course	Rate	Quantity	Total Cost
Manager Briefing Day	\$3,340	3	\$10,020
Consultation Days	\$3,340	258	\$861,720
TOTAL		261	\$871,740

Costs for Media Campaign

The cost of the Triple P media campaign varies significantly between communities based on the size of the campaign, the number of languages the campaign is offered in, and the types of media utilized (tv, radio, print, etc.). Based on discussions with the Triple P America, the cost of the media campaign is anticipated to be \$2.54 per family for the development of the campaign and one year worth of materials for a total cost of \$524,710.

	Cost per family	Number of families	Total Cost
Media Campaign	\$2.54	206,822	\$524,710

Local Infrastructure and Salary Costs

Salaries for Parent Educators

Salary costs for the parent educators provides salary support for the parent educators for the hours they will spend providing parent education. Salary costs were calculated in this manner as it is expected that the majority of the parent educators will not be full-time parent educators, but will spend the majority of their time in other job functions such as teaching, counseling, providing

medical care, etc. Calculations were based on the average salary of a school counselor in Harris County of \$50,000.

Triple P Level	Percent of families to be targeted	Number of families to be served	Number of parents per course	Number of courses needed	Number of hours per course	Total number of hours of all educators' time	Average hourly salary of educator	Cost of providers' salary to offer parenting classes
Selected (0-12) Triple P	60%	124,093	30	4,136	6	24,819	\$25	\$620,466
Primary Care Triple P	33%	68,251	1	68,251	2	136,503	\$25	\$3,412,563
Group Triple P	6.75%	13,960	12	1,163	22	25,594	\$25	\$639,856
Standard Triple P	1.80%	3,723	1	3,723	10	37,228	\$25	\$930,699
Combined Enhanced/Pathways	2%	4,136	1	4,136	8	31,023	\$25	\$775,583
Total								\$6,379,166

**Calculations based on 206,822 families with children 0 – 12 years of age*

Administrative salary costs

It is expected that additional funding for staff time will be necessary to support the organizations that are providing parent education. This funding may cover the time spent coordinating the parenting classes and/or supervisor's time and is calculated at 5% of the salaries for the parent educators for a total of \$372,117. Additional funding has been designated for a central agency to coordinate all of the Triple P trainings, distribution of materials, and to manage the city-wide effort.

	Parent educators' total salary costs	Percent of salary for administrative support	Total Cost
Administrative costs for agencies that provide parent education	\$7,442,343	0.05	\$372,117
	Salary per person	Number of staff	Total Cost
Salaries for central agency	\$50,000	2.5	\$125,000
TOTAL			\$497,117

Media time for media campaign

Similar to the cost of the materials for the media campaign, the cost of media time for the media campaign can vary significantly based on the types of media used. A public relations consultant estimated the cost of media time for a one-year media campaign to promote positive parenting to be \$75,000.

Total costs

The total cost of implementing the Triple P model in Houston is \$13,750,244. This includes costs associated with training providers, materials for one year of classes, technical assistance, materials for the media campaign, salaries for provider of parent education, administrative salary expenses and media time.

Triple P Costs	
Training providers	\$3,662,630
Materials for classes	\$1,739,881
Technical assistance	\$871,740
Media campaign materials	\$524,710
TOTAL Triple P costs	\$6,798,961
Local Infrastructure Costs	
Salaries for providers	\$6,379,166
Administrative salary costs	\$497,117
Media time	\$75,000
TOTAL local infrastructure costs	\$6,951,283
TOTAL COSTS	\$13,750,244

Cost Savings

The potential cost savings from the implementation of a population-approach to parent education is substantial given the lifetime cost of each case of child abuse is over \$200,000 and in 2010 there were 6,535 confirmed victims of child abuse in Harris County. Furthermore, additional cost savings could result from a decrease in rates of social, emotional and behavioral problems in children. However, for this analysis, calculations of cost savings were limited to one year cost savings from a reduction of substantiated cases of child abuse, out-of-home placements, and hospitalizations from child maltreatment. These measures were selected due to the ability to forecast the reduction of cases from the results of studies in the peer reviewed literature and the ability to calculate annual costs per child.

Child welfare costs

The average annual cost for each victim of child maltreatment in Texas in FY2011 was \$5,744, excluding out-of-home placement costs. This figure was provided by the Texas Department of Family Protective Services.

If Triple P is implemented city-wide in Houston and the same results are experienced as the US Triple P System Population Trial, then 1,202 cases of child maltreatment would be prevented for a cost savings of \$6,904,721.

Out-of-home placements

The average annual cost for each victim of child maltreatment that is removed from their home in Texas in FY2011 was \$22,433. This figure was provided by the Texas Department of Family Protective Services and is based on the average daily rate of \$61.46 per child.

If Triple P is implemented city-wide in Houston and the same results are experienced as the US Triple P System Population Trial, then 739 out-of home placements would be prevented for a cost savings of \$16,577,987.

Hospitalizations

Using information from the 2004-2009 Texas Health Care Information Collection Inpatient Discharge Database the CPFWB calculated that the average charge of each hospitalization from child maltreatment was \$31,133. A cost-charge ratio of 34.3% was applied to the average charge to reflect the actual cost of care. Adjusted for inflation, the average 2011 dollar value for hospitalization from child maltreatment was \$11,585 per incident.

If Triple P is implemented city-wide in Houston, and the same results are experienced as the US Triple P System Population Trial, then 236 hospitalizations from child maltreatment would be prevented for a cost savings of \$2,734,039.

Total cost savings

If Triple P was implemented city-wide in Houston, and the same results are experienced as the US Triple P System Population Trial, a savings of \$26,216,746 could result through the annual cost savings associated with preventing child maltreatment, out-of-home placements, and hospitalizations from child maltreatment.

	Number Needed to Treat (NNT)	Number of children, 0 - 12	Number of cases prevented (Number of children / NNT)	Annual cost per child	Cost savings
Child maltreatment	327	392,962	1,202	\$5,744	\$6,904,721
Out-of-home placements	532	392,962	739	\$22,433	\$16,577,987
Hospitalizations	1667	392,962	236	\$11,585	\$2,734,039
TOTAL					\$26,216,746

**Number needed to treat is based on the results of the US Triple P System Population Trial and reflects the number of children’s families that need to receive Triple P to prevent one case of child maltreatment, out-of-home placement, or hospitalization.*

Summary of Costs and Cost Savings

If Triple P is implemented city-wide in Houston, and the same results are experienced as the US Triple P System Population Trial, it is expected to cost \$13,750,244 but could save \$26,216,746, for a net savings of \$12,466,502.

Savings			
	Estimated reduction of cases each year	Annual cost	Estimated cost savings
Child maltreatment	1,202	\$5,744	\$6,904,721
Out of home placements	739	\$22,433	\$16,577,987
Hospitalizations	236	\$11,585	\$2,734,039
TOTAL Savings			\$26,216,746
Costs			
Costs (Triple P)			\$6,798,961
Costs (infrastructure, salaries, media time)			\$6,951,283
TOTAL Costs			\$13,750,244
Expected Net Savings			
TOTAL Savings - Costs			\$12,466,502

Please see the limitations section of the report for an overview of assumptions and limitations to this analysis.

Appendix C: Logic Model

The Center for Parenting and Family Well-Being

Only a limited number of parents in the greater Houston area take effective parenting classes that empower parents with the knowledge, skills, and confidence to raise healthy, competent, and resilient children. Many parents that seek parenting classes are mandated by courts or their child has already developed emotional or behavioral problems. Research studies have proven that effective parenting programs can support parents and increase parenting skills and confidence, decrease emotional and behavioral problems in children, and reduce rates of child maltreatment.

