Colorado Five-Year Family First Prevention Services Plan

SUBMITTED MARCH 1, 2022

COLORADO
Department of Human Services

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Introduction

Colorado's child welfare system is in the midst of a significant transformation. Over the last several years, there has been an intentional shift to focus on proactively strengthening families through prevention and early intervention strategies, on keeping families together safely, and when necessary, placing children and youth in family-like settings. This redirection has helped reduce deep child welfare system penetration and produced positive change for the state's most vulnerable children, youth and families. Colorado is committed to continuing this trajectory and ensuring that all children, youth and families have timely access to community services and supports that meet their needs and promote safety and well-being. Family First offers an exciting opportunity to accelerate

Colorado's progress toward greater investment in prevention services and increased capacity to ensure that, when necessary, children are placed in the least restrictive, most family-like setting possible.

At the same time, Colorado views Family First as an important piece of a broader strategy to further evolve the child welfare system into one that truly improves the safety, permanency and well-being of all children, youth and families through a continuum of community-based prevention services and supports. Colorado's five-year prevention plan reflects this broader vision and is deeply rooted in a strong foundation of practices and principles that have been honed and tailored in Colorado over the last decade.

THE VISION

Colorado has created a bold vision for a 21st century child welfare system that positively and proactively supports children and youth through strong and healthy family formation with a continuum of community-based, prevention-focused services. While Family First centers on evidence-based secondary and tertiary prevention services,[1] Colorado sees this as one component of a more comprehensive approach to preventing child/youth maltreatment. Thus, while Colorado is fully committed to and engaged in implementing Family First, it must simultaneously focus on activating all points along the prevention services continuum. Critical elements of this strategy include continuing to invest in robust primary prevention efforts, building multi-sector partnerships under a common vision, maximizing Medicaid and Title IV-E reimbursements for effective practices, and utilizing state and local resources to build capacity in evidence-based services. This multi-layered strategy requires leveraging diverse funding streams alongside Family First.

Additionally, Colorado acknowledges this vision cannot be realized through child welfare programs alone. Colorado has approached Family First implementation as a broad systems transformation effort that cuts across multiple offices within the Colorado Department of Human Services (CDHS), including the Division of Child Welfare (DCW), Office of Behavioral Health (OBH), Office of Early Childhood (OEC), and Office of Economic Security (OES). Other state agencies, including the Colorado Department of Health Care Policy and Financing (HCPF), judicial, and the Colorado Department of Public Health and Environment (CDPHE) have been essential in ensuring a holistic approach to implementation. As a state-supervised, county-administered human services system, Colorado's 64 counties supporting 59 departments of human services have been critical partners in co-designing the future of child welfare, along with private providers and community-based organizations.

Over the next five years, Colorado will continue to carefully assess where Family First interventions are most appropriate along the prevention services continuum, while also progressively expanding their reach—both in terms of at-risk populations served and the variety of evidence-based practices tailored to the unique needs of Colorado communities and Tribes. Colorado has intentionally designed a broad definition of candidacy for placement prevention services that pushes to serve children, youth and families as early as possible and, ideally, before a report is made to the child welfare system.

OUTCOMES

Colorado will incorporate the Family First prevention plan into a broader strategy to provide appropriate services to children, youth and families, at the appropriate level of intensity, for the appropriate length of time. Toward that end, Colorado has made efforts to ensure that families involved in our system have what they need to prevent maltreatment occurring in their homes and that families experience out-of-home care only when necessary to ensure safety or address acute clinical needs. Colorado strives to keep children/youth safely in their home or with family/kin whenever possible.

As a result of these measures, Colorado will see a decrease in the number of children/youth entering out-of-home care as measured by state data.

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1   In this context, primary (universal) prevention includes services aimed broadly at the general population (e.g., public awareness campaigns about the scope and effects of child maltreatment, parenting classes, efforts to educate children about safety). Secondary prevention includes services such as home-visiting programs, parenting classes or respite care that are targeted to populations at higher risk for maltreatment. Tertiary prevention includes services for families already affected by maltreatment (e.g., family preservation services, parent mentoring and support groups, and mental health services).

Colorado's Prevention Landscape

Colorado has been building the groundwork for a 21st century child welfare system over the past decade, and the opportunities and challenges of Family First must be viewed within the context of Colorado's ongoing work with children, youth and families. The following are key components of this foundation, each serving to strengthen and amplify the impact of Family First implementation.

HUMAN SERVICES APPROACH

Colorado is a state-supervised, county-administered human services system consisting of 64 counties and 22 judicial districts. Under this system, county departments are the main provider of direct services to Colorado's families. County human services departments are not only responsible for overseeing traditional child welfare services, but also a broad range of other programs from food assistance and low-income child care to health coverage, Temporary Assistance for Needy Families (TANF), child support services and employment development programs. Human services are viewed through a Social Determinants of Health lens that informs both the variety of services that county departments provide directly and the coordination across sectors and agencies. Thus "child welfare" means something much broader in this state; with a wide array of support, Colorado aims to address the root causes of crisis and instability through integrated prevention and service delivery focused on supporting whole families and individuals across generations.

Human Services Approach and Family First:
In 2019, the Colorado Human Services Directors Association (CHSDA), which represents counties from all regions across the state, identified Child Maltreatment Prevention through Early Childhood Investments as a critical focus area. The priority is to provide services to those in need as early as possible to strengthen families, boost health and well-being, and avoid more difficult and costly crises later. Colorado human services is on a path that is fully aligned with the vision of the Children's Bureau and Family First to keep families healthy, together and strong.

COLORADO'S FAMILY PRESERVATION ACT

Colorado's Family Preservation Act, known as Core Services, was passed by the Colorado General Assembly in 1994 to provide funding for strength-based resources and support to families. The program's goals are to safely maintain children and youth in the home, return children and youth home, promote the least restrictive setting for children and youth, and provide services for families at risk of involvement or further involvement in the child welfare system. Each of the state's 64 counties develops a plan annually to address program goals through locally tailored strategies and services. Colorado's two federally recognized Tribes can opt to submit a plan to access Core funding, and funds are set aside for them. The Core Services Program is a $55-million distinct funding stream, essential to the service continuum in Colorado.

In calendar year (CY) 2020, a total of 24,829 distinct clients were served by the Core Services Program. Annual evaluations have shown the Core Services Program is an effective approach to strengthening families and keeping children and youth at home. According to the 2021 annual report, without this funding and service interventions, Colorado
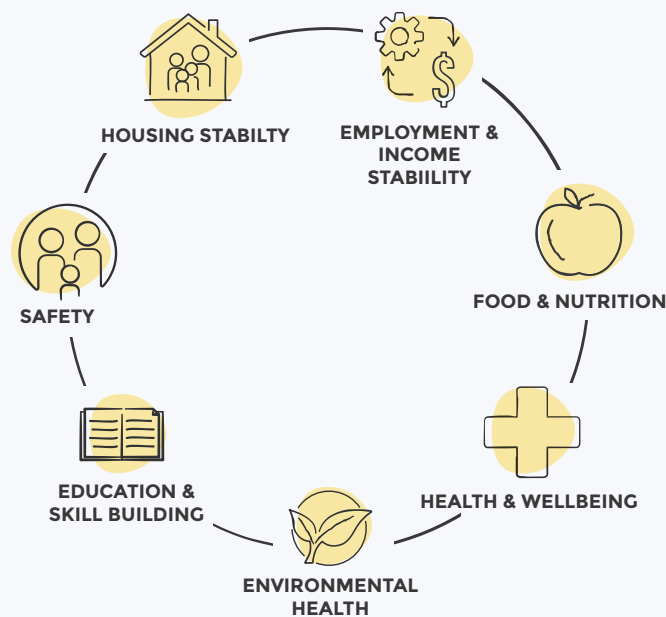

FIGURE 1: THE SOCIAL DETERMINANTS OF HEALTH

counties would have spent an estimated $50 million in CY 2020 on out-of-home placements for children and youth.[1]

Core Services and Family First: The Core Services Program has helped build a prevention infrastructure across the state, by enhancing collaboration with community partners and providers, and expanding intensive in-home therapeutic services, substance abuse treatment and mental health services, and innovative county-designed services. The implementation of Family First in Colorado will benefit from and build upon this existing network.

In 2020, county-designed services represented the most common type of service provided through Core Services funding, accounting for 35% of all service episodes statewide. Examples of county-designed services include but are not limited to, family group decision-making, domestic violence interventions, and family support services. Many of these services will likely not meet the Family First evidence standards and qualify for federal reimbursement soon. At the same time, not all families will benefit from the limited set of evidence-based interventions approved by the Family First Title IV-E Prevention Services Clearinghouse. Thus, Colorado has prioritized continuing to maintain, evaluate and adapt county-designed prevention services to meet the needs of local communities, while clarifying how these services will complement and align with Family First. Additionally, Colorado will increase engagement with both Tribes, as one of the two Tribes did not submit a Core plan this year. CDHS is committed to collaborating with both the Southern Ute Indian and Ute Mountain Ute Tribes individually to evaluate and adapt prevention services to meet the needs of their communities.

TITLE IV-E WAIVER DEMONSTRATION PROJECT

In October 2012, the Children's Bureau, an office of the Administration for Children & Families, awarded the CDHS Division of Child Welfare (DCW) a Title IV-E Waiver Demonstration Project (Waiver). The Colorado Waiver focused on five interventions to build on existing child welfare practice: Family Engagement, Permanency Roundtables, Trauma-Informed Assessment, Trauma-Informed Treatment, and Kinship Supports. Collectively, the interventions were designed to support children, youth and families throughout the various levels of child welfare involvement.

Colorado's Waiver interventions were far-reaching, with 53 of 64 counties across the state receiving funds to implement one or more of the five interventions during the initial five-year IV-E Waiver period and almost 30,000 children and youth receiving one or more interventions. Overall, the independent third party evaluation findings indicate that the percentage of all out-of-home removal days in kinship care increased, while the percentage of foster and congregate care days, as well as the total expenditures for out-of-home care, decreased. Children and youth who received the interventions generally had better permanency and safety outcomes than matched children and youth who did not receive the interventions.[2]

Waiver and Family First: Colorado's Waiver design was not merely a collection of individual interventions, but rather the beginnings of a uniquely Colorado child welfare model. Family engagement and kinship support have become embedded in statewide practice. During the 2019 legislative session, $9.7 million was appropriated specifically to extend Title IV-E Waiver interventions, with the requirement that CDHS develop a detailed plan for long-term sustainability. Thus, similar to Core Services, the question is not how Family First will replace the IV-E Waiver, but rather how Family First will align with and continue to strengthen Colorado's current approach to promoting child and family well-being.

Colorado's Waiver experience offers lessons learned that can be applied to Family First implementation.

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1   Core Services Program Annual Evaluation Report: Calendar Year 2020. Social Work Research Center, Colorado State University, October 2021.

2   Colorado Title IV-E Waiver Final Evaluation Report. Human Services Research Institute, December 2018.

Overall, the approach was to have consistent parameters around a common set of interventions statewide and to allow flexibility in county implementation. For example, with facilitated family engagement, counties determined which established model fit county-specific philosophy and goals, with all models having the same basic components. Similarly, Colorado's Family First statewide planning efforts have resulted in a common set of key values, definitions and policies, while embracing the fact that local implementation will look different county to county.

COLLABORATIVE MANAGEMENT PROGRAM

The Collaborative Management Program (CMP), administered by CDHS, was created in 2004 and establishes a collaborative approach at the county level to improve outcomes for children, youth and families involved with multiple systems, including child welfare, juvenile justice, education and health/behavioral health. Through incentive funds and grants, local CMPs improve service delivery by facilitating cross-agency coordination and creating a tailored collective community approach to serving children and youth with complex needs.

CMP has 10 mandated system partners, including human services, courts, probation, school districts, public health, mental health centers, domestic violence providers, managed service organizations for the treatment of drugs and alcohol, and behavioral health organizations. 46 Colorado counties are currently implementing CMP.

Collaborative Management Program and Family First: Findings from the 2018 independent evaluation of CMP indicate multiple benefits to structured collaboration, including efficacy in coordination of resources and serving multi-system-involved families, staying informed on community-specific practices, and learning from other partner agencies regarding shared successes and challenges. As such, CMP will be a critically asset to implementing approved Family First practices in coordinated and meaningful ways, with a shared commitment to keeping families together.

Consultation and Coordination

In addition to the building blocks described above, Colorado has a robust system across state agencies, departments, offices and community programs to define a continuum of programs and services to meet the needs of families through primary, secondary and tertiary prevention and early interventions. Colorado utilizes mixed funding streams to provide prevention services beyond those identified as IV-E reimbursable and included in the plan, creating a broader continuum of services.

CDHS's Office of Early Childhood (OEC) utilizes the Child Maltreatment Framework to guide its work. The Office's Division of Community and Family Support houses several of the state's secondary prevention programs, including many that are listed on the Title IV-E Clearinghouse. The OEC administers the federal Maternal, Infant, Early Childhood Home Visiting (MIECHV) funding, Promoting Safe and Stable Families (PSSF) funding, Fatherhood Family-Focused, Interconnected, Resilient, & Essential (FIRE) funding, as well as the Community-Based Child Abuse Prevention (CBCAP) grant. In addition, there are state funding streams supporting home visiting, family resource centers, parenting education, and other child abuse and neglect prevention programs.

COLORADO CHILD MALTREATMENT PREVENTION FRAMEWORK FOR ACTION

Colorado uses the Child Maltreatment Prevention Framework for Action (Framework) as a road map for child abuse prevention strategies at the state and local level. This tool is used across the state, resulting in alignment of strategies to maximize the impact on shared outcomes. This includes the development of county level child abuse prevention plans. The Framework and accompanying community planning toolkit, were jointly developed by CDHS's OEC, the Chapin Hall Center for Children at the University of Chicago, the Children's Trust of South Carolina, the Children's Bureau, and numerous Colorado agencies and partners. The Framework has helped guide investments, programs and policies under the purview of CDHS. CDPHE has also adopted the Framework to inform its child maltreatment prevention efforts.

This year, the OEC is undertaking a process to develop a revised version of the Framework to center the road map from an equity lens and develop new tools for local communities to engage cultural brokers in the planning. In response to Family First requirements, Colorado's Child and Family Services Plan (CFSP) calls for revisions to the Framework to include additional strategies needed to serve as the state's Child Maltreatment Fatality Prevention Plan.

Colorado's CFSP also includes a goal to ensure that all counties have needed support to develop and implement local child abuse prevention plans using the Framework. Federal CBCAP funds are being used to support local planning and implementation of identified strategies. Tribes will be consulted to explore prevention practices within their communities should CDHS consider funding toward this end.

COLORADO PARTNERSHIP FOR THRIVING FAMILIES

The Colorado Partnership for Thriving Families (Partnership) is a multi-sector, multi-community partnership at the state and local level that bridges public health, health care, human services, and nonprofit organizations—the first of its kind in Colorado—focused on the primary prevention of child maltreatment. The Partnership works collaboratively across Colorado to create the conditions for strong families and communities where children are healthy, valued, and thriving. The goal over the next five years is to strengthen and promote a statewide vision around primary prevention. Together, the Partnership will target efforts to significantly reduce child fatalities and child maltreatment for children ages zero to five with an initial focus on the well-being of families during the prenatal period through the first year of a child's life. The Partnership has identified strategies across three priority areas: community norms change around social support, expansion of an early touchpoints service array, and systems alignment in family strengthening investments (data sharing, braiding funding, policy development and leadership).

The Partnership is a systems change initiative that requires attention to the underlying conditions and root causes that maintain and perpetuate inequities and prevent families from receiving the support they deserve and need to thrive. Therefore, the Partnership prioritizes family voices and expertise of all kinds to drive systems change at every level and is committed to centering equity at every step along the way. The Partnership has begun to recruit housing/homeless experts in its work, which provides an opportunity for integration, specifically addressing housing security as a prerequisite to socioeconomic mobility for families.

REGIONAL PARTNERSHIP GRANT

In 2019, the Colorado Judicial Department and CDHS were awarded a five-year, Round 6 Regional Partnership Grant through the Children's Bureau. This grant will evaluate the effectiveness of the Circle of Parents Expansion (COPE) intervention in increasing family well-being, improving permanency, and enhancing the safety of children who are in, or at risk of, an out-of-home placement due to a parent's or caregiver's opioid or other substance use. The COPE intervention integrates Circle of Parents in Recovery—an evidence-informed model that strengthens families, prevents child maltreatment, and supports recovery through

a pro-social peer network—within counties that have implemented the Dependency and Neglect System Reform program (DANSR) to manage dependency and neglect cases following the principles of Family Treatment Drug Courts. The work of COPE includes those within the child welfare court system, and it may be utilized for prevention or as a support to help prevent re-entry.

COMMUNITY-BASED CHILD ABUSE PREVENTION

In FFY 2020, Community-Based Child Abuse Prevention (CBCAP) grant supports direct services in communities through evidence-based and evidence-informed parenting programs including: Nurturing Parenting Programs, The Incredible Years, and Circle of Parents. Other activities implemented through the child maltreatment prevention plans funded in Colorado, include increasing community and family awareness around Adverse Childhood Experiences (ACEs) to decrease intergenerational ACEs and maltreatment, two generational model of parent education and financial literacy, and the creation of a data sharing system to offer enhanced supportive services to families.

CBCAP and Family First. CBCAP grant supports programs at the local level, to create the foundation for building and delivering services identified in Colorado's Family First Prevention Plan.

PROMOTING SAFE AND STABLE FAMILIES (PSSF)

The OEC oversees Colorado's PSSF program. The overarching objectives for Colorado's program include:

- Secure permanency and safety for children by providing support to families in a flexible, family centered manner through collaborative community efforts.

- Enhance family support networks to increase well-being.

- Prevent unnecessary separation of children from their families.

- Reunite children with their parents or provide other permanent living arrangements through adoption or kin.

- Support preservation efforts for families in crisis who have children at risk for maltreatment or re-abuse.

These objectives are addressed through the provision of services in four service categories or areas through family support, family preservation, time-limited family reunification, and adoption promotion and support services. CDHS spends approximately 20 percent of PSSF funding in each of the four service categories, and 10 percent to support special projects, planning, training, and service coordination.

PSSF and Family First. Children and their families receive services through local sites after first engaging with PSSF providers to determine needs and goal setting with the family. Services are administered by county departments of human/ social services and eligible American Indian Tribes through awarded grants. These grants allow for local control of selection and provision of services that contribute to the prevention continuum.

COLORADO'S DIFFERENTIAL RESPONSE (DR) MODEL

Child safety is the focus of Colorado's Differential Response (DR) Model, and partnership with families is a goal for all of Colorado's child welfare practices. These outcomes are achieved by maximizing Colorado's values for transparent communication and collaborative engagement with families. As of January 1, 2015, administrative rules (Volume 7) require all Colorado counties to have implemented two of the organizational processes of the DR model: enhanced screening, to increase detail in referrals taken by screeners, and Review, Evaluate and Direct (RED) Teams, to increase focus on danger/harm versus risk/protective factors at the point of screening.

Colorado's DR Model includes organizational shifts that affect the way the county's Children, Youth, and Families Division operates. These include the following:

- A series of organizational infrastructure changes to embed processes to create family centered practices to occur (i.e. individual and group supervision and family engagement processes throughout involvement). These

include reviewing and modifying county-level policies, procedures, and practices.

- A strengthened and enhanced set of social work practices to promote direct actions, supervision and support, and ongoing CQI process for reflection. Practices include engaging families in assessments, solution-focused planning practices and building support networks for workers, children, youth and families.

DR systems seek to shift from adversarial and punitive methods found in traditional child protective services, by separating screened-in referrals into two response tracks- family assessment response (FAR) or High-Risk Assessment (HRA). In both cases, the assessment response to an allegation is individualized and comprehensive with each family throughout the life of their child welfare involvement. Colorado counties are encouraged to accept and use

an approach referred to as Family Assessment Response (FAR) with families with low to moderate risk. When there are immediate concerns for safety, a family receives a traditional High-Risk Assessment (HRA). HRA includes a determination of evidence that a maltreatment incident occurred (findings) and an identified perpetrator of abuse/neglect. FAR allows workers to have flexibility in interviewing children with parents present, and FARs do not have a finding at the close of the assessment. Currently fifty-three of Colorado's sixty-four counties have fully implemented or are in the process of implementing Colorado's DR Model, with a statewide goal set for all counties to practice DR by the year 2024.

DR and Family First. A FAR provides an opportunity for short term involvement to create a plan to mitigate or reduce risks through services and support network building to avoid further child welfare involvement.

Family First Planning

From the beginning, Colorado's approach to planning for Family First implementation has been an inclusive and integrated one that fully leverages the interest, experience and expertise of a broad-based and diverse group of state and county staff, Tribes and stakeholders, including families with lived experience.

Beginning in March 2018, Colorado mobilized a collaborative effort, with facilitation and support from Casey Family Programs, to create a Family First roadmap that identifies critical decisions, actions, time frames and recommendations around the state's initial implementation. In early 2019, a statewide Family First Implementation Team was launched with the responsibility of further defining and prioritizing areas of focus and developing and implementing a detailed action plan aligned with Colorado's Family First roadmap. The 27-member Implementation Team included representatives from multiple county departments of human services (reflecting diversity of regions and sizes across the state), CDHS, CDPHE, HCPF, judicial/ legal, providers, constituents and research/ evaluation.

The main challenge of the Implementation Team was to strive toward the visionary goal of system transformation, while simultaneously attending to the technical details of implementation requirements. To delve deeper into the details of Family First, the team initially prioritized six key implementation workgroups: Independent Assessment, Qualified Residential Treatment Programs (QRTP), Services Continuum, Child and Family Plans, Juvenile Justice and Communications. An American Indian/Alaska Native workgroup was added to ensure that all aspects of Family First implementation are culturally responsive and inclusive of community voice.

COLORADO'S FAMILY FIRST IMPLEMENTATION CORE VALUES

Development of the Road Map included a process of articulating a set of values that would ground Colorado's Family First discussion, decisions, and recommendations:

- Family and youth voices are the loudest heard, considered, and respected.

- Children, youth, and families are best served by a systemic and community-engaged, integrated approach to identify and meet their needs.

- Children, youth, and families are served through collaboration, partnership, and engagement with all parties and human services programs.

- Shared accountability and responsibility by an integrated community of care that surrounds youth and family to support success.

- Improved policy, practice, and quality of services based on scientific evidence.

- Strengthen and embrace natural supports.

Continued Engagement

To make bold and sustainable improvements to the larger child welfare system, deepening collaboration with sister agencies, providers, judicial/legal partners and community-based organizations will continue to be a high priority at the state and county levels. Collaboration and consultation with other state agencies responsible for administering mental health services, substance abuse prevention and treatment, in-home parenting services, and other public and private agencies, began early in Colorado's planning for Family First implementation. This will continue beyond initial implementation to ensure accessibility of services, avoid duplication and maximize and leverage resources.

DELIVERY OF CHILD WELFARE SERVICES TASK FORCE

In May 2018, Colorado's General Assembly showed significant support for Family First with the passage of the Child Welfare Reform Bill, which created the Delivery of Child Welfare Services Task Force. The Task Force includes representatives from CDHS, county departments of human services, HCPF, the Colorado Judicial Branch, and providers

of behavioral health services, prevention services and out-of-home placements. Among other things, the Task Force will be making recommendations on a child welfare funding model, incentives structure, and performance and outcome measures. It is also responsible for ensuring child welfare laws and rules align with Family First, and for determining methods through which the state can maximize federal revenue to support Colorado's children, youth and families. In addition, the Child Welfare Reform Bill created a cash fund that can be used by child welfare agencies to fund prevention and intervention services. Family First implementation efforts will continue to be a standing agenda item at all Task Force meetings.

BEHAVIORAL HEALTH TASK FORCE

In April 2019, Colorado Governor Jared Polis directed CDHS to spearhead the Governor's Behavioral Health Task Force (BH Task Force). The BH Task Force was charged with authoring a statewide strategic plan to transform Colorado's behavioral health system with the goal of enabling every Coloradan with a behavioral health condition or in crisis to receive the services and support they need to live safe, productive lives in their own communities. In September 2020, the BH Task Force released its "Behavioral Health Blueprint", which outlined detailed recommendations and goals established by the BH Task Force. A Children's Behavioral Health subcommittee developed recommendations specifically addressing how the state delivers and manages children's behavioral health. For Family First, substance use prevention and treatment efforts will be catalyzed by a new Behavioral Health Administration (BHA) and other behavioral health recovery efforts detailed in the Blueprint.

CHILD WELFARE PREVENTION TASK GROUP

In an effort to coordinate and streamline programs, services, and to develop processes for blending, and braiding funding sources, the Child Welfare Prevention Task Group (CW Task Group) was convened in Summer 2021. The purpose of the CW Task Group is to act as the child welfare prevention practice advisory group, to develop processes for expanding, implementing and identifying prevention programs and services, and to build a statewide cohesive prevention infrastructure.

Colorado utilizes a mix of state funds that can be used for services that prevent out-of-home placement and/or entry into the child welfare system. Family First and other funding processes make up a complex network of programs, services and funding streams to prevent entry into or deeper involvement with the child welfare and/or juvenile justice systems. For Family First specifically, the CW Task Group will be responsible for recommending updates to the five-year state prevention plan through the development of processes to equitably identify appropriate services and supports to be included

in future amendments. In addition, there are three subcommittees that have convened since June 2021 and are charged with making recommendations to streamline and align prevention processes, services and funding streams; inform prevention capacity-building, implementation and service delivery; and leverage data, research and evaluation in influencing prevention strategies. With nearly three years of prior planning for roll out of Family First, the Task Group is well positioned to build from a strong foundation of Colorado's established vision and many efforts to date, and will pave a path forward that takes Colorado's prevention efforts to the next level.

COLLABORATION WITH TRIBES

CDHS consults, collaborates and coordinates with both federally recognized Tribes within Colorado, as well as with Colorado-based organizations that serve the state's American Indian urban communities. There are two federally recognized Tribes with land bases in Colorado. The Southern Ute Indian Tribe (SUIT) is located primarily in La Plata County and includes approximately 1,510 enrolled members. The Ute Mountain Ute Tribe (UMUT) is located primarily in Montezuma County with another community in White Mesa, Utah, and includes approximately 2,143 enrolled members.

In addition to the two federally recognized tribes, CDHS partners with organizations such as the Colorado Commission of Indian Affairs, the Denver Indian Family Resource Center, Denver Indian Health and Family Services, Denver Indian Center, and Haseya Advocate Program to address ongoing and emerging human services concerns for the state's American Indian urban populations. To facilitate communication and collaboration, CDHS employs a County and Tribal Liaison, an Indian Child Welfare Specialist, and a Behavioral Health Tribal Liaison who are responsible for nurturing and strengthening the department's relationship with the Tribes and organizations that serve the state's American Indian urban communities.

To support both Tribes in providing direct services to children, youth and families, contracts are executed between the Tribes and CDHS to provide funding for service provision. Through these

contracts, the Tribes can provide services they feel best meet the needs of their communities. The implementation of Family First will not cause a change for Tribal Social Services and programs - both Tribes will continue forward with the Child Welfare contract as they have in previous years. Nonetheless, the State of Colorado and the Tribal governments within the state see Family First as an opportunity to further build on their relationships to support Tribal youth and families. SUIT and UMUT have had in the past and continue to have the option to opt into a State-Tribal IV-E agreement at any time, and continue to have the option to create a direct IV-E plan with the Federal government if they wish.

CDHS held a consultation with the Southern Ute Indian Tribe on the impacts of Family First and opportunities for future collaboration. CDHS will be delivering a second overview to Social Service and Behavioral Health staff later this fall, and is working to schedule a presentation to the Ute Mountain Ute Tribe as well.

JUVENILE JUSTICE IN COLORADO

The juvenile justice system in Colorado is unique. Youth are served in a trifurcated system between county government, the judicial branch, and multiple state executive branch agencies. This complex, multidisciplinary service network requires ongoing collaboration to effectively serve the state's youth who are involved in the juvenile justice system. Often, the same agencies surface at multiple intervention points while working with this population, causing a youth and his/her family to be simultaneously served by multiple systems/agencies.

Juvenile Justice Workgroup: Due to Colorado's unique system, a Juvenile Justice workgroup is explicitly included in Family First implementation planning. This group is providing recommendations on specific evidence-based placement prevention services that are well suited for this population. Colorado sees Family First as an important opportunity to ensure youth who are at risk of or involved with the juvenile justice system and their families have access to prevention services so youth can remain safely at home.

The Division of Youth Services (DYS) within CDHS, is responsible for juvenile detention, state delinquency institutions and juvenile parole. A youth who commits a delinquent act is first served by the pre-trial and detention services overseen and provided by DYS. However, if a youth in the juvenile justice system needs out-of-home placement, placement is coordinated by the local county department of human services; these youth are considered in "foster care."

Juvenile Justice Reform Act: The Juvenile Justice Reform Act (Senate Bill 108) was signed into law in May 2019 to help improve outcomes for youth, strengthen public safety and use resources more efficiently. Among other things, the legislation expands opportunities to divert youth from the juvenile justice system, and requires implementation of a validated risk and needs assessment tool to inform court decision-making and case planning.

CDHS is also working with partners to connect information across the child welfare and court systems to help inform policies and practices aimed at serving crossover youth. This data will help measure and ensure youth are not pushed into the juvenile justice system.

Data to Inform Decisions

As shown in the graph below, between 2014-2019, there has been a nearly 27% increase in the number of child welfare reports across Colorado, which appears to be driven both by the overall increase in population and by implementation of a statewide Child Abuse and Neglect Hotline. Despite increases in the number of reports, the number of out-of-home placements is slowly declining. Additionally, Colorado has decreased the length of stay in out-of-home care, decreased the number of children/youth in congregate care, and increased the percentage of children/ youth in family-like or kinship care.

This reflects an ongoing decline in the number of children/youth entering foster care as a result of Colorado's prevention foundations laid through previous initiatives implemented over the past several years. As additional prevention services are implemented and scaled through Family First, protective factors for Colorado families will increase and the well-being of children and youth will be reflected in a further decline in the need for foster care to ensure the safety of children and youth.

The table on the following pages includes some of the key characteristics describing families who may benefit from prevention services, along with state-level data describing the targeted population.
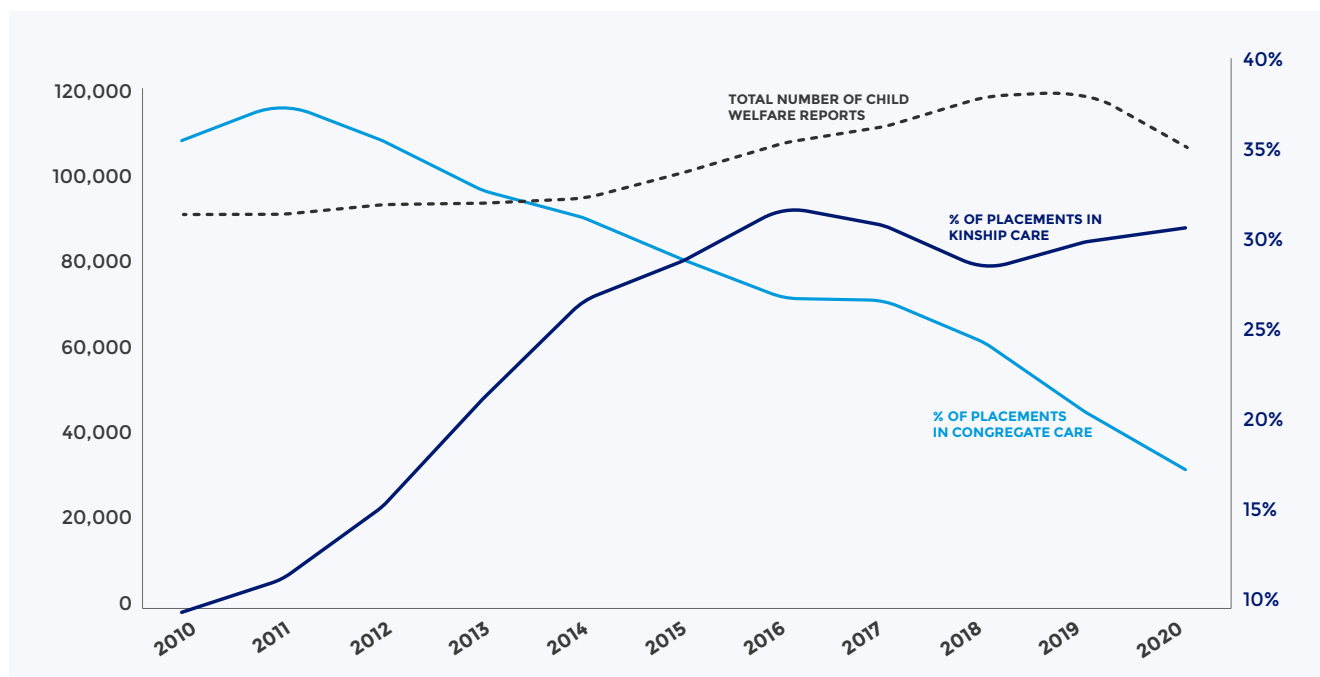

FIGURE 2: TRENDS IN REFERRALS, CONGREGATE CARE, AND KINSHIP

TABLE 1: CHARACTERISTICS AND DATA	
Characteristics	**Colorado Population–Level Data**

Substance Use – Parents	In Colorado, a sizable amount of the adult population is engaged in substance use behaviors that could put families at risk of becoming involved in the child welfare system.
	
	• It is estimated that almost one-fifth of the adult population engages in binge drinking, according to 2018 data ("BRFSS Prevalence & Trends Data," CDC).
	
	• From the 2016-2017 NSDUH State-Specific Tables (SAMSHA):
	
	  • An estimated 143,000 adults in Colorado had an illicit drug use disorder in 2016-2017.
	
	  • An estimated 13,000 adults in Colorado had past-year heroin use in 2016-2017.
	
	  • An estimated 39,000 adults in Colorado had past-year methamphetamine use in 2016-2017
	
	  • An estimated 210,000 adults in Colorado had past-year misuse of pain relievers in 2016-2017.

Substance Use – Infants Exposed	Parental substance use is impacting newborn development in Colorado as well. • According to Colorado Pregnancy Risk Assessment Monitoring System (PRAMS) data from 2018, an estimated 7.1% of mothers smoked during the last three months of pregnancy, an estimated 14.4% of mothers drank alcohol during the last three months of pregnancy, and an estimated 4.0% of mothers used marijuana or hashish during the last three months of pregnancy. • In Colorado in 2016, there were 290 cases of infants born with neonatal abstinence syndrome (NAS), which is a syndrome that occurs when a newborn was exposed to addictive opiate drugs while in the womb (Heroin in Colorado Report prepared by the Heroin Response Work Group (page 16). • In August 2019, CDHS began tracking infant exposure. From August 2019 through December 2019, there were 392 referrals that were flagged with an infant born exposed to one or more substances. Most of these referrals (272) included a concern that an infant was born exposed to marijuana. The second largest category of referrals (115) included a concern that the infant was born exposed to methamphetamines. The remaining largest categories of concern were heroin (37 referrals), other opiates (37 referrals), and stimulants/amphetamines (29 referrals).

Characteristics	Colorado Population-Level Data
Mental Health – Parents	Many Colorado adults report a mental illness, but many of these adults also report that they do not receive mental health services. · According to National Survey on Drug Use and Health data from 2016-2017, 838,000 adults in Colorado reported having a mental illness in the past year, but only 659,000 of adults reported receiving mental health services in that same year. · ·214,000 adults in Colorado reported experiencing a serious mental illness in the past year, and 325,000 reported experiencing a major depressive episode ("2016-2017 NSDUH State-Specific Tables," SAMSHA).
Mental Health – Children/Youth	Children and youth in the state are experiencing mental health issues as well, which may create parenting challenges for parents not yet trained in how to respond to mental health issues. · In 2016-2017, an estimated 59,000 youth ages 12-17 experienced a major depressive episode ("2016-2017 NSDUH State-Specific Tables," SAMSHA).
Lack of Parenting Skills	The following indicators provide information about the scope of the population in Colorado that may need parenting skills support ("2017-2018 National Survey of Children's Health", Data Resource Center for Child and Adolescent Health). · An estimated 10,640 parents in Colorado think that they handle the day-to-day demand of raising children "not very well" or "not very well at all." · An estimated 54,752 parents in Colorado felt aggravation "usually" or "always" in the past month from parenting in 2017-2018.
Limited Capacity to Function in Parenting Roles	· In CY 2018, there were 13,353 substantiated allegations of abuse/neglect in Colorado. · In CY 2018, there were 24,323 parents or caretakers in an open child welfare case for services or identified as the perpetrator of a founded allegation in a child welfare referral/assessment.
Youth involved in the juvenile justice/ delinquency system	CDHS operates detention and commitment centers for youth involved with the justice system. · In FY 2018-2019, there were 3,137 unique youth served in state-operated and contract secure detention. · In FY 2018-2019, there were 1,171 unique youth served in commitment.
Youth Beyond Control of the Parent	· In CY 2018, there were 1,408 youth who had Program Area 4, Youth in Conflict status during the year.
At Risk of Re-Entry	· In CY 2018, 2,699 children/youth exited foster care to reunification, guardianship, or adoption. · ·Of those children/youth, there were 580 instances of re-entry into out-of-home placement.

Characteristics	Colorado Population-Level Data
Substantiated Maltreatment –In-Home Services	In some cases of substantiated maltreatment, existing safety and risk factors can be mitigated by provision of in-home services. • In CY 2018, 14,222 children/youth received in-home services

By continuing to analyze the demographics and characteristics of children, youth and families in each of these categories, Colorado can understand more about those who may be at risk of entering the child welfare system and how to reach them prior to involvement. Colorado has invested in rigorous evaluation studies of the Core Services Program, the Collaborative Management Program, Title IV-E Waiver interventions, and specific PA3 services such as SafeCare® and has access to large amounts of data through these studies. Research partners, and sister agencies such as CDPHE, and will continue to utilize this information to guide implementation of its bold definition of candidacy. At the same time, Colorado is sensitive to the risks of furthering systemic disproportionality by using historical data to predict future needs. CDHS is committed to addressing these concerns by ensuring that communities participate in all levels of candidacy implementation and by including family and community stakeholder voice when using data to inform investments. Colorado strives to be a leader in equitable access to services for communities and families.

DESIRED OUTCOME

Over the next five years, Colorado will safely reduce the number of children/youth entering out-of-home care as measured by state data, starting with a baseline of 4,123 children/youth in out-of-home placement on October 1, 2021.

Bold Definition of Candidacy

A child/youth is a candidate to receive Title IV-E prevention services when they are at serious risk of entering or re-entering foster care and who can remain safely at home or with kin, with the support and provision of mental health, substance use treatment, or in-home parenting services for the child/youth, parent or kin caregiver. Youth in foster care who are pregnant or parenting are also candidates.

A child/youth may be at serious risk of entering foster care based on circumstances and characteristics of the family as a whole and/or circumstances and characteristics of individual parents or children/youth that may affect the parents' ability to safely care for and nurture their children/youth.

Colorado's proposed definition of candidacy includes the following circumstances and characteristics of the child/youth, parent or kin* caregiver that could put a child/youth at risk of entering or re-entering foster care:

- Substance use disorder or addiction

- Mental illness

- Lack of parenting skills

- Limited capacity or willingness to function in parenting roles

- Parents' inability, or need for additional support, to address serious needs of a child/youth or related to the child/youth's behavior or physical or intellectual disability

- Developmental delays

- Reunification, adoption or guardianship arrangements that are at risk of disruption

*For purposes of the provision of services, "Kin" is defined as a relative of the child/youth, a person ascribed by the family as having a family-like relationship with the child/youth, or a person that has a prior significant relationship with the child/youth. These relationships take into account cultural values and continuity of significant relationships with the child/youth.

The Indian Child Welfare Act (ICWA) Kin Caregiver as defined in 25 U.S.C. Sec. 1903 includes an "extended family member" as defined by the law or custom of the Indian child's tribe or, in the absence of such law or custom, is a person who has reached the age of 18 and who is the Indian child's grandparent, aunt or uncle, brother or sister, brother-in law or sister-in-law, niece or nephew, first or second cousin, or stepparent.

Colorado's vision is that all children, youth, parents or kin caregivers with these risk factors will be eligible for prevention services—both those who are involved in the child welfare system and those who have not been the subject of a child maltreatment report but share characteristics that deem them at serious risk of out-of-home placement.

CDHS is keenly aware that, with such a bold definition of candidacy, there is a risk of further stigmatizing and unintentionally increasing child welfare involvement based on systemic inequalities such as race and poverty factors. CDHS is committed to monitoring data statewide for increased impact on disproportionality because of identifying at-risk children, youth and families. To honor the range of needs and practices across the state, Colorado's candidacy definition is intentionally broad and flexible enough to capture a variety of approaches.

Colorado acknowledges that broad definitions of candidacy require greater intentionality in building systems and structures that allow the state and its component systems to successfully implement this definition. Accordingly, Colorado plans to ultimately achieve full implementation of this definition through an iterative approach, detailed below in the "Implementation" section. Of note, this entails initially operationalizing a narrower version of candidacy while working towards continuous breadth and improvement.

Prevention in Practice

To understand how Colorado's candidacy definition will be operationalized, it is important to recognize that Colorado is a county-administered, state-supervised system. This means that 64 unique counties and 22 judicial districts will be implementing Colorado's definition in ways that respond to the array of families, services, providers, partners and funding streams in their communities. Some county human services departments are already implementing prevention and early intervention services in the broadest manner and are closely aligned with Colorado's proposed definition of candidacy. Other counties are providing more traditional placement prevention services by focusing on families who are involved in the child welfare system.

Below are descriptions of three unique communities in Colorado and their current and planned approaches to placement prevention service.

ARAPAHOE COUNTY

Arapahoe County is the third most populous county in Colorado and part of the Denver metro area. Arapahoe County is already successfully connecting children, youth and families who meet the state's broad definition of candidacy with prevention services. For example:

1. The Family Resource Pavilion (FRP) was designed to offer support as early as possible to families struggling with adolescents who, without proper intervention, are not only at risk of child welfare involvement but juvenile justice involvement as well. The Arapahoe County Department of Human Services (ACDHS) has a liaison co-located at the FRP and, when a family either walks in seeking assistance or is referred by ACDHS, probation, schools, or another entity, the ACDHS liaison assists with determining what services are most appropriate for the family. This may or may not involve a formal referral to ACDHS.

2. ACDHS partners with the Arapahoe County Early Childhood Center (ACECC) for the provision of SafeCare® to families referred both by ACDHS and by the community without DHS involvement. SafeCare® is an evidence-based placement prevention service included in this plan.

3. Currently, about 55% of child abuse/neglect referrals reviewed in Arapahoe County are screened out due to not reaching the threshold defined by law as potential abuse or neglect. About 30% of screened out referrals are sent directly to ACDHS' Community Development and Prevention Team for response.

GARFIELD COUNTY

Garfield County is considered a medium-sized county located in Northwest Colorado. Garfield County utilizes Individual Services and Support Teams (ISST) as a collaborative, cross-systems approach to staffing cases for service provision.

There are three ISST groups — preschool, school-aged and delinquency involved — and the Garfield County Department of Human Services is a participant in each group. For the two age-based groups, under Family First, the goal will be for candidates to receive prevention services and not permeate further into child welfare involvement. For delinquency-involved cases, the goal will be for candidates to spend less time in detention, access prevention services in the community, and stay out of congregate care through the child welfare or juvenile justice system. In FY 2020, there were 41 ISST referrals and 65 clients who were served in Garfield County.

HUERFANO COUNTY

Huerfano County is in the Southeast region of Colorado and is one of the state's smaller counties in terms of population. Huerfano County Department of Human Services (HCDHS) plans to continue close collaboration with its Family Resource Center (FRC) in both identifying candidates and connecting them to prevention services. When a candidate for placement prevention services is identified, they will be referred to HCDHS for PA3 assistance. HCDHS can then develop short-term ongoing support through the FRC. When a service is needed, HCDHS follows up with the family and the provider every 60 to 90 days to determine whether the service is still needed and whether the child/youth/family is progressing.

Since May 2019, there have been 50 non-child welfare Applications for Services submitted to the Huerfano County FRC. These referrals have come from a community playgroup, probation and FRC walk-ins. The county plans to grow the FRC's relationship with the school districts, Head Start and child care centers in the community so they can also provide referrals to families in need of services.

Implementation

As the IV-E agency, CDHS is responsible for ensuring that all requirements for monitoring, implementing and reporting are met. CDHS is responsible for ensuring data accuracy and transferring data files to the Children's Bureau as required by the federal legislation. Annual updates will be included in the Annual Progress Services Report (APSR) or other reports as determined through federal program instructions. CDHS will be responsible for state level program implementation, fidelity and CQI. CDHS will update and amend Colorado's Family First Five Year Prevention Plan as necessary including any program, service additions, or changes in protocols. The following describes Colorado's implementation processes for required activities.

CDHS will report to the Secretary such information and data as the Secretary may require with respect to the Title IV-E prevention program, including information and data necessary to determine the performance measures (See the Attachment IV for the assurance).

PHASED APPROACH

Colorado will implement Family First Prevention in a phased approach.

Initial Implementation- phase one: To build and test reporting and claiming processes and structures, Colorado will define initial candidates for reimbursable Family First services as those families with open child welfare or juvenile justice involvement.

Expanding Implementation- phase two: To extend the ability for Colorado to claim IV-E prevention funds for non-child-welfare and juvenile justice involved families in future plans, Colorado is developing coordinated systems, data sharing related to the identification of candidates and determining eligibility, and robust processes to monitor safety of candidates while receiving an individualized child-specific prevention plan. Colorado and partner agencies will continue exploring the systems and processes to extend services to families without open child welfare or juvenile justice involvement, while simultaneously working with youth, families, counties, Tribes and other stakeholders to identify resources needed in order to fully realize Colorado's bold vision.

Adding Evidence-Based Services and Programs- phase three: Colorado will continuously evaluate community needs, service gaps and opportunities, and service capacity to add programs and services to the prevention plan. Colorado will continue to make technical modifications to support appropriate data collection as new services, sub-populations, and programs are incorporated. The CW Task group is developing processes to recommend additions which will be submitted through a Plan amendment request.

Evidence-Based Service Array

One of the key workgroups of the Colorado Family First Implementation Team was the Services Continuum workgroup, made up of diverse members representing CDHS, counties, service providers and community partners. The primary purpose of the workgroup was focused on understanding and identifying opportunities for Colorado to access IV-E reimbursement for current and future prevention services. Colorado's criteria for selecting services to propose for Colorado's initial five-year plan, it was important to look at these services collectively as part of a broader continuum of care. The state prioritized the evidence-based services that are currently in place and being implemented successfully in Colorado. This strategy allows Colorado to build upon existing capacity, continue to assess program efficacy, make efforts to scale where appropriate, and minimize start-up costs for initial implementation. Colorado's proposed prevention services are currently being implemented in communities across the state, although to varying degrees.

CDHS contracted with the Colorado Evaluation and Action Lab (CO Lab) to provide recommendations for short- and long-term strategies for implementing and scaling evidence-based practices that both meet the unique needs of Colorado communities and maximize Title IV-E

reimbursement. The report utilized a data-driven, community-informed approach, the final report recommends a phased strategy to implementation and capacity-building to move Colorado closer to a comprehensive prevention services continuum. The report also highlights geographic priorities for expansion, as Colorado's goal is to ensure that all children, youth and families have access to the services they need regardless of where they live in the state.

Colorado's proposed service array of evidence based practices for initial implementation, focuses on the early critical years and mental health services. Colorado acknowledges that evidence-based prevention services are needed at every life stage for families and must address other critical needs including substance use treatment services for parents and youth and expanded services for the juvenile justice population. Considerations for service expansions and partnering with other agencies will continue as the prevention infrastructure is further developed.

Colorado is certain that the current landscape will continue to change as services are added to the Clearinghouse, Family First is implemented across the state, and the makeup and needs of children, youth and families evolve.

Colorado is formally proposing the following ten services for implementation in this five-year plan. The following section summarizes the services being proposed with more detailed information on each service in Appendix A.

CHILDREN AGES ZERO TO FIVE

Colorado identifies and understands the specific risk factors that increase vulnerability to maltreatment and subsequent removal for children 5 and under, including: parental challenges (substance abuse, mental health issues, intimate partner violence), parental characteristics (young age, low income, low education) and social isolation

child behavioral and developmental challenges, and lack of parenting knowledge and skills. Nationally, children in their first year of life have the highest rate of victimization at 24.8 per 1,000 children. In comparison, the national rate of child maltreatment victimization across all ages is 9 per 1,000 children.[1] Children who die from abuse and neglect are overwhelmingly young. For SFY 2019-2020 in Colorado, 42.3% of maltreatment fatalities were under the age of one and 65.4% were under the age of five; 42.3% of near fatalities were under the age of one and 84.6% under the age of five.[2]

Based on the data referenced above, it is vital to proactively identify and support families with infants and young children who are at the greatest risk of maltreatment leading to out-of-home placement. Meeting the prevention needs of families with young children requires a suite of in-home parent programs in each county and tribal community across Colorado. The broader continuum of prevention services is enhanced through Family First programs Colorado is proposing five services in this area:

Nurse-Family Partnership (NFP) is a home visiting program that serves young, first-time, low-income mothers/birthing parents. NFP is currently available in all 64 Colorado counties as well as both recognized tribal communities and is supported by Invest in Kids as the state program intermediary. NFP is a Clearinghouse-rated well-supported practice that aims to improve the health, relationships and economic well-being of the parent and child.

SafeCare® is an in-home behavioral parenting program that targets risk factors for maltreatment by teaching parents/caregivers skills in three topic areas: home safety, child health and parent-child/parent-infant interaction. SafeCare® is a Clearinghouse-rated supported practice, and Colorado has included its well-designed and rigorous evaluation plan in Appendix A. The service

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1 U.S. Department of Health & Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau. (2018). Child maltreatment 2016. Available from https://www.acf.hhs.gov/cb/research-data-technology/statistics-research/child-maltreatment

2 Extracted from the CDHS Child Fatality Review Team data, September 2021.

is being implemented in Colorado through a partnership between the Office of Early Childhood and county departments of human services, with support from the Kempe Center as the state program intermediary. Thirty-eight counties and one Tribe in Colorado currently provide SafeCare® as a resource for families. In Colorado, SafeCare® was specifically designed to serve screened out referrals and closed child welfare cases. While the program currently serves a broader population, about 50% of SafeCare® clients have prior child welfare history, with referral data already captured in Trails. The program also serves families with open child welfare involvement without court oversight.

Parents as Teachers (PAT) is a home visiting parent education program that teaches new and expectant family's skills to promote positive child development and prevent child maltreatment. PAT is currently available in 38 counties in Colorado as well as both recognized tribal communities and is supported by Parent Possible as the state program intermediary. PAT is a Clearinghouse-rated well-supported practice that has demonstrated positive effects on child safety, child social functioning, and child cognitive functions and abilities. PAT provides

additional support to families and is often an extension of services provided through the Nurse-Family Partnership.

Child First is a two-generation mental health intervention offered in the home to serve young children and families who are most impacted by systemic and structural inequities. Child First is currently being launched across seven communities in Colorado with support from Invest in Kids as the state program intermediary. The practice aims to promote child and parent emotional health, improve child development and learning, enhance parent and child executive capacity, and prevent child maltreatment. Child First targets children from the prenatal stage through five years of age who have experienced disruption in secure attachment with their parent. Child First is a Clearinghouse-rated supported practice, and a rigorous evaluation plan is included in this submission.

Healthy Families America (HFA) is a home visiting program for new and expectant families designed to build and strengthen nurturing parent-child relationships, promote healthy child development, and enhance family functioning. Healthy Families

America is a Clearinghouse-rated well-supported practice that targets families with children who are at risk for child maltreatment or other adverse childhood experiences, and hits multiple target outcomes to holistically address child and family needs early in the life course. Currently, only two Colorado counties are implementing this program, but plans for expansion are underway with support by Illuminate Colorado as the state program intermediary and endorsement by Colorado's Home Visiting Investment Task Force.

PROMOTING MENTAL HEALTH WELL-BEING

There is growing evidence that children and youth across Colorado are reporting higher levels of emotional distress. Among children ages 3 to 17 years, 22.6 percent have a mental, emotional, developmental or behavioral problem in Colorado. At the same time, Colorado ranked 33rd in the US for youth mental health access to care, suggesting Colorado has a higher prevalence of mental illness and lower rates of access to care.[3]

Among subgroups of children with complex needs, it is estimated that nearly 80 percent of foster children in the US have a significant mental health issue, which is four to five times the incidence found within the general population.[4] In Colorado, during CYs 2014-2018, there were 15,874 removals related to substance use, and this represents a specific area Colorado intends to target through prevention services. Colorado has further identified runaway youth as a subcategory of youth at high risk of entry into the child welfare or juvenile justice system. Through an analysis of a statistically significant random sample of runaway youth between the ages of 10 and 17, Colorado found that approximately 55% of youth who run away are not system involved at the time of the run. However, of those "non-system"-involved youth, half go on to formally enter the child welfare or juvenile justice system within 18 months.

The OBH and partners have developed a continuum of programs and services to address mental health needs of Colorado's children, youth and families. The programs identified in this plan are one small example of those initiatives.

To build out Colorado's mental health services array, two service tracks have been identified:

1. Services designed to meet the mental health needs of the child or youth.

2. Services designed to improve family functioning,

MENTAL HEALTH NEEDS OF THE CHILD OR YOUTH

Colorado is proposing four services to address the mental health needs of children and youth. Note that Child First (discussed above) is an eligible practice under both the mental health and the in-home parent skill-based domains.

Parent-Child Interaction Therapy (PCIT) is a parent coaching program that aims to decrease externalizing child behavior problems, increase positive parenting behaviors, and improve the parent-child relationship. Currently, there are 13 agencies across Colorado offering PCIT International with 21 providers. There are also six within-agency trainers and one regional trainer available to scale the service. Because this model uses an individual therapy approach, there is no current state program intermediary. CDHS is exploring designating a state program intermediary responsible for this service. PCIT is a Clearinghouse-rated well-supported practice that has been researched with culturally diverse families. In PCIT, parents are coached by a trained therapist in behavior management and relationship skills, using "bug-in-the-ear" technology to provide live coaching and allow parents/caregivers to master specific competencies across the treatment duration. PCIT targets families with children who are two to seven years of age and experiencing

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3 2020 Statewide Behavioral Health Needs Assessment: Children and Youth with Complex Behavioral Needs. https://drive.google.com/file/d/1-RPGkZCoIxJsmzZjc9tniSlYcnGxUYrg/view

4 Howard, A. Mental Health Among Children in Foster Care. SAFY. https://www.safy.org/mental-health-among-children-in-foster-care/

frequent, intense emotional and behavioral problems.

***Fostering Healthy Futures for Preteens (FHF-P*)** is a mentoring and skills group program for preadolescent children (ages nine -11) who have current or previous child welfare involvement due to one or more adverse childhood experiences (ACEs). These ACEs may include the experience of maltreatment, out-of-home placement, housing, caregiver or school instability, violence exposure and/or parental substance use, mental illness, or incarceration. FHF-P uses a combination of structured individual mentoring and group-based skills training to promote prosocial development and to ameliorate the consequences of ACEs. FHF-P is currently available in several metro area counties and is supported by the Kempe Center as the state program intermediary for training and implementation support. FHF-P has not yet been rated by the Clearinghouse. Colorado conducted an independent systematic review, with a determination of FHF Preteen as a well-supported practice. Additional information about the rigorous evaluation plan is included (see the Attachment).

Fostering Healthy Futures for Teens (FHF-T) is a mentoring and skills training program for 8th and 9th graders with current or previous child welfare involvement due to one or more adverse childhood experiences (ACEs). These ACEs may include the experience of maltreatment, out-of-home placement, housing, caregiver or school instability, violence exposure and/or parental substance use, mental illness, or incarceration. FHF-T has not yet been rated by the Clearinghouse. Colorado conducted an independent systematic review, with a determination of FHF-T as a supported practice. FHF-T's outcomes are being examined in an ongoing randomized controlled trial, but effects on permanency have already been demonstrated in a published paper. Additional information about the rigorous evaluation plan is included in this submission (see the Attachment).

IMPROVING FAMILY FUNCTIONING

Colorado is proposing two services in the mental health domain that are designed to improve family functioning:

Multisystemic Therapy (MST) is an intensive community-based, family-driven treatment for addressing antisocial/delinquent behavior in youth. MST is currently available in 27 counties in Colorado. Implementation is supported by the Rocky Mountain MST Network located at the Kempe Center, which serves as the state program intermediary. MST is a Clearinghouse-rated well-supported practice that has been researched with culturally diverse families. MST focuses on the "ecology" of the youth during service delivery to address the core causes of delinquent and antisocial behaviors, with a focus on substance use, gang affiliation, truancy, excessive tardiness, verbal and physical aggression, and legal issues. The target age range is 12 to 17, and the service can be delivered in multiple settings by therapists with 24/7 crisis management. Colorado will be able to leverage an MST pilot and related evaluation that was launched in 2019 to expand the availability of the intervention to underserved regions of Colorado.

Functional Family Therapy (FFT) is a short-term program designed to address risk and protective factors to promote healthy development for youth experiencing behavioral or emotional problems. FFT is a Clearinghouse-rated well-supported practice that uses a strengths-based model and focuses on the adolescent and the family system during service delivery. The model uses assessment and intervention to improve parenting skills and communication while reducing conflict. FFT has a strong focus on engagement and motivation within each family member. As such, the program can be particularly helpful when a caregiver is initially reluctant to participate in any kind of service, and the first phase addresses low motivation for change as well as reduces blame for delinquent behavior. FFT targets youth ages 11 to 18 who have been referred by juvenile justice, school, child welfare or mental health systems for behavioral or emotional issues. This service is currently implemented in five Colorado counties. CDHS will identify a designated state program intermediary responsible for this service.

Target Population

Colorado's child welfare system has provided services and support to children, youth and families in three different categories (called Program Areas):

- **Program Area 4 (PA4):** Youth in conflict services are provided to reduce or eliminate conflicts between a child/youth and their family members, which may include the community, when those conflicts affect the child/youth's well-being, the normal functioning of the family, or the well-being of the community. This is the program area that most juvenile justice youth fall into.

- **Program Area 5 (PA5):** Child protection services are provided to protect children/youth whose physical, mental, or emotional well-being is threatened by the actions or omissions of parents, legal guardians or custodians, or persons responsible for providing out-of-home care.

- **Program Area 6 (PA6):** Services to children, youth and families in need of adoption assistance, relative guardianship assistance, or Medicaid-only services, or to children/youth for whom the goal is no longer reunification, and for older youth in transition (18-21) who reenter care to receive services..

As previously described, Colorado has a strong foundation and history of providing prevention and early intervention services using federal, state and local funds and implemented through Core Services, IV-E Waiver interventions, CMPs and integrated human services delivery practices. Children/youth in any of the program areas may be eligible for an individualized prevention plan and Family First prevention services if they meet the candidacy requirements.

INITIAL PLAN-PHASE ONE

The pathways for determining IV-E prevention candidates for the purpose of claiming include open cases within the child welfare system and in the juvenile justice system.

Open Child Welfare Involvement: Candidacy determinations may be made in all case types- PA4, PA5 or PA6- including the following open involvements:

- In home cases (court involved)

- Voluntary cases child/youth in the home (non court involved)

- Child/youth placed with kin (without removal; court involved or non-court involved)

- Child/youth in an open case after reunification (court involved)

- Adoption case with imminent risk of child entering OOH

- Relative Guardianship Assistance case with imminent risk of child entering OOH

- Parenting teen in foster care

- DR FAR open for services with identified risk of out-of-home placement

- Youth in Transition cases

Open Juvenile Justice Involvement: Services identified in this prevention plan can be accessed in juvenile justice cases to prevent out-of-home placement or re-entry into placement for delinquent youth.

Statewide Monitoring and Oversight

PROGRAM FIDELITY

For services and programs included in Colorado's Prevention Plan, CDHS will ensure that the statewide model being implemented is consistent with the approved model on the Clearinghouse. The state will partner with the state program intermediaries, for each service, to monitor fidelity for promising, supported, and well-supported programs included in the plan. State intermediaries will upload data on adherence to a statewide platform, so that CDHS can monitor trends in adherence across services and geographic areas and identify targeted areas for continuous quality improvement (CQI).

This statewide platform will serve as the central mechanism for meeting federal Family First fidelity monitoring requirements. The platform design is complete, and development will begin in March of 2022. The site is expected to be ready for state program intermediaries to begin uploading adherence data in summer of 2022.

The statewide fidelity platform design has been informed by a series of design sessions with providers, counties, state intermediaries, and state-level partners, as well as national guidance opportunities from the Family First Learning Collaboratives hosted by Casey Family Programs Examples of the design are linked here.

To ensure meaningful and comparable data, service-specific measures (as described in Appendix A) will be translated to a standardized scale for state-level adherence monitoring, allowing CDHS to quickly identify trends. The standardized scale will be a three-point scale of "not met, approaching, and met" fidelity for the service.

Colorado has already begun the process of working with state intermediaries and developers of each service to establish business rules for translating program-specific measures to this standardized scale for example, Multisystemic Therapy uses TAM scores as their fidelity measure, and cut-scores are being established that translate the TAM scores into "not met, approaching, and met" fidelity. Service-specific business rules will also be created

for how frequently adherence will be reported up to the state platform, timing of adherence tracking relative to service delivery start dates, and sampling strategies.

In addition, the statewide platform can be used by state intermediaries and providers of services that do not have existing infrastructure and capacity to monitor fidelity. The state platform will allow these services to systematize processes for collecting fidelity data and develop reports that can help the sites, counties and state take a data- informed approach to continuous quality improvement and shoring up fidelity to the evidence-based models.

CONTINUOUS QUALITY IMPROVEMENT

Robust Continuous quality improvement (CQI) process and fidelity monitoring ensures that Colorado children, youth and families are receiving the services that have been shown to drive positive outcomes. CQI processes use qualitative and quantitative data to determine the program

efficacy and provide support to ensure that adherence to the model is sustained.

CDHS, as the IV-E agency, will take a high-level approach to monitoring adherence across all services included in this plan and across geographic areas as well as child/youth and caregiver characteristics (see fidelity monitoring section above). The goal of state-level CQI is to (1) identify strengths and weaknesses in program delivery utilizing actionable fidelity data and program feedback; and (2) make adjustments and inform state-level investments that promote high-quality delivery of services and performance-based contracting decisions. CDHS will also leverage its existing performance management system to monitor outcomes of children, youth and families at the county and state levels.

The ongoing CQI work will contribute to the development of services expansion and additions to the plan. The Child Welfare Prevention Task Group is a vehicle to develop processes and protocols for identifying areas of expansion or scaling of programs/services and adding new services to Colorado's plan. As described previously, the Child Welfare Prevention Task Group is a multidisciplinary task group that includes stakeholders from local community providers, county and state government including child welfare, evaluators/researchers, and constituents representing family voices.

TRAUMA-INFORMED PRACTICE

Colorado is committed to ensuring a trauma-informed and trauma-responsive child welfare system. A cross-disciplinary team has created a multi-year curriculum specifically for Title IV-E prevention service providers targeted at all levels of agency employment, from board members and administrators to direct care staff. In the first year of implementation, Colorado will be focused on building a robust foundation with agencies expected to have a trauma-informed vision and meet basic training requirements through Colorado's child welfare training gateway to live and virtual training resources., Learning Management System (LMS).

Colorado is fully committed to ensuring that children, youth and their families not only receive the highest quality evidence-based prevention services, but also that these services are delivered in a manner that addresses trauma's consequences and facilitates healing. Colorado's trauma-informed definition comes from the National Child Traumatic Stress Network (NCTSN):

> *"A trauma-informed service system is one in which all parties involved recognize and respond to the impact of traumatic stress on those who have contact with the system including children, adolescents and adults, caregivers and service providers. Programs and agencies within such a system infuse and sustain trauma awareness, knowledge, and skills into their organizational cultures, practices, and policies. They act in collaboration with all those who are involved with their clients, using the best available science, applied in a culturally sensitive manner, to facilitate and support recovery, developmental growth, and resiliency."*

Through the Office of Behavioral Health (OBH) within CDHS, Colorado has the infrastructure and expertise to ensure that Title IV-E prevention services are provided under a trauma informed organizational structure and treatment framework:

- **COACT Colorado**, Colorado's Trauma-Informed System of Care, is an initiative of OBH and is federally sponsored by grants from the Substance Abuse and Mental Health Services Administration (SAMHSA). Under the leadership of COACT Colorado, a Statewide Trauma-Responsive Theory of Change was developed by a diverse team of stakeholders from state agencies, individuals with lived experience, and multiple systems, including behavioral health, child welfare, juvenile justice, medicine, education and early childhood. COACT Colorado developed a toolkit that provides an action-oriented guide for all systems in the community that serve children, youth and families to apply the Statewide Trauma-Responsive Theory of Change and meet evidence-based practice standards in creating trauma-responsive systems. The toolkit aims to integrate knowledge about trauma into policies, procedures and practices, as well as to avoid re-traumatization.

- **The Colorado Cross-Systems Training Institute (CSTI)** is a partnership between OBH/COACT and the University of Colorado Denver,

in collaboration with the Kempe Center Trauma Informed Practice Team and Partners for Children's Mental Health. CSTI was developed to better address the professional development needs of those who work with families with complex needs across systems, with a particular focus on being trauma-informed. CSTI currently manages the training, coaching and credentialing for the High Fidelity Wraparound workforce in Colorado and has developed approximately 50 hours of training curricula on trauma-informed care. CSTI also maintains a trauma informed care clinical consultation group, which provides coaching and technical assistance to providers across the state.

CDHS will provide assurance that programs are incorporating trauma informed service delivery (see the Attachment III).

STATE PROGRAM INTERMEDIARIES

To promote consistent service and program delivery within Colorado's decentralized county-administered, state-supervised system, CDHS will identify state program intermediaries for each service in this prevention plan.

Program Fidelity: CDHS will enter into a contract with each state program intermediary with a clear scope of work detailing the expectations for oversight and supervision. The state program intermediary will be responsible for program implementation and monitoring including: selection of local sites and providers; readiness assessments for expansion sites; and, program fidelity utilizing program specific instruments and processes.

Trauma-Informed Training and Service Delivery: The state program intermediaries will ensure that local provider staff are trained in trauma-informed practice aligned with the expectations outlined in the trauma-informed section of this plan.

Program Level Child Safety Monitoring: The state program intermediaries will monitor and attest that local service providers/sites have safety monitoring protocols, are trained in mandatory reporting, and that programs include safety monitoring

in program delivery. Any concerns or suspicion of abuse and neglect identified by the program intermediary or local providers, will be reported to the Colorado statewide child abuse and neglect hotline.

Continuous Quality Improvement: State program intermediaries will gather data and feedback to conduct regular analysis for ongoing, continuous quality improvement processes to quickly identify areas of needed support for quality service delivery at the local or programmatic level. The state program intermediaries will be the liaison between the Colorado IV-E agency and the local providers. They will contribute valuable input into the development of the infrastructure and analysis for program efficacy and service delivery as detailed in Appendix A, for each service proposed in this initial five-year prevention plan.

LOCAL PROGRAM PROVIDERS

Program Delivery and Continuous Quality Improvement: Programs will be delivered at the local level and will be supervised by the state program intermediary. Local providers are responsible for delivering services in adherence to the approved model on the clearinghouse, attest that staff are trained in trauma informed practices, coordinate, as needed, with the county caseworker, keep appropriate records for tracking progress, and develop processes for continuous quality improvement including gathering feedback and other information, analyzing and improving practices.

Local Child Safety Monitoring: Service providers are responsible for ensuring that all staff participate in training to recognize signs of possible abuse and/or neglect, mandated reporter responsibilities, and access to the statewide child abuse and neglect reporting hotline. Each individual service proposed in this plan includes program-specific training, assessment tools, and/or processes in place to monitor child safety (Appendix A.). If there are concerns for a child or youth's safety, providers will notify the child/youth caseworker and file a report through the Colorado statewide child abuse and neglect hotline. If a child or youth is in imminent danger, providers will call 911.

COUNTY CASEWORKER

Assessing for Imminent Risk of Out-of-home Placement: County caseworkers will complete the safety and risk assessments as required in administrative rules, to determine if a child/youth meets the criteria for "imminent risk of out-of-home placement". The case worker will determine if the level of risk can be mitigated through the provision of in-home services.

County caseworkers will be responsible for: working with the family to complete the child-specific individualized prevention plan and make referrals to services. Services will be documented in Colorado's statewide database (Trails) and through open service authorizations. An individualized prevention plan should be designed to meet the needs of the family and may include services that are not included as reimbursable through Colorado's Family First Prevention Plan.

Individualized Prevention Plans/Data Collection: The child-specific prevention plan will be one piece of the broader Family Services Plan (FSP). An FSP is developed in any open case when services are warranted. Under Family First, the FSP will include an individualized prevention plan section that details placement prevention strategies to allow the child/youth to remain safely at home or with kin. Since the child-specific prevention plan will be integrated within the larger FSP, it will also link to other levels of case plans. This will allow caseworkers to align or incorporate the individualized prevention plan with broader case and service planning efforts.

The county caseworker will continue reassessment of the child-specific prevention plan and progress toward meeting the child, youth and families' stated goals every 90 days using information gathered from the family, their supports, collaterals and involved service providers. If there is a significant change in need, a redetermination of eligibility and/or a reassessment of services will occur and the plan will be amended.

The individual prevention plan will be reviewed in a family engagement conference with the family, the caseworker and supervisor, and service providers and others as necessary to address the following:

- The safety needs of the child/youth, including if a new referral was received and if it was accepted for assessment;

- Identification of family strengths and protective factors that move the family forward and away from systems involvement.

- The appropriateness of the child/youth's current residence and how it meets the child/youth's needs;

- The stated needs/goals of the child, youth and/or family;

- Review of specific services included in the individual prevention plan provided to child/youth and family; and,

- Evaluation of progress to meeting goals and the service(s) to determine if they remain appropriate.

Child Safety Monitoring: The child-specific individualized plans within open child welfare involvement will include strong casework practices to ensure child/youth safety and well-being and move the case toward achieving stated goals. The county department is responsible for:

- Completing the Colorado Safety Assessment as required by rule;

- Making face-to-face contact with the children/youth on at least a monthly basis;

- Visiting the child/youth in the home;

- Making face-to face contact with parents/caregiver as often as needed (while meeting the minimum monthly expectation); and,

- Contacting collaterals, as appropriate, to reasonably ensure safety, permanency and well-being of the child/youth.

When a safety concern is identified, the caseworker will make a referral to the statewide child abuse and neglect hotline. The county responsible for the open involvement is responsible for ongoing safety monitoring.

Evaluation Strategy

Colorado will continue to approach the rigorous evaluation process as an ongoing, continuous effort. Colorado is committed to building the evidence base for strategically selected programs that do not currently meet Clearinghouse standards in order to expand the service array to further meet the needs of Colorado's diverse communities throughout all regions of the state. Formal evaluations will also be conducted to meet the ongoing rigorous evaluation requirements of services included in Colorado's Five Year Prevention Plan that are rated as promising and supported or where a waiver for rigorous evaluation is not yet granted. The Colorado Lab report contains recommendations for Colorado's short and long-term priorities for evaluation.

Below is a description of Colorado's evaluation capacity and general approach to evaluation design for promising and supported practices. Each program write up (Appendix A) provides detailed descriptions of fidelity monitoring specific to each prevention service being proposed in this initial plan, and the service-specific evaluation plans for promising and supported practices. For services that have been rated as well-supported in the Title IV-E Prevention Services Clearinghouse, Colorado is seeking an evaluation waiver for these services and, upon approval, will assess program implementation and fidelity through a robust CQI process rather than through formal, independent evaluation.

EVALUATION CAPACITY

Colorado will use the following internal and external resources for completing rigorous evaluations of programs as part of Family First.

CDHS Family First Evaluation Team (Formal Evaluation and Evaluation Waiver): CDHS's internal Family First evaluation team will consist of the following roles and responsibilities:

- Designated leadership within CDHS to prioritize research and evaluation efforts and serve as a liaison with counties, Tribes and providers for participation in ongoing evaluation.

- Designated leadership to serve as the agency point of contact for external partners coordinating the rigorous evaluations and providing CQI support.

- Develop a master data-sharing agreement for Family First evaluation.

- Provide timely access to administrative data for external evaluation teams. Colorado has built a standard child welfare extract that can be routinely generated by internal research and evaluation staff. Internal leadership will need to coordinate with external teams to prioritize data requests for Family First evaluations.

- Manage evaluations that are already underway with contracts established for independent research.

Partnership for formal evaluation with the Colorado Evaluation and Action Lab (CO Lab): The CO Lab is a strategic research partner to the Colorado government and works under the Governor's priorities to perform policy and program evaluations. CDHS will partner with the CO Lab to function as a coordinating hub for rigorous evaluations of promising and supported practices. The CO Lab will do the following in supporting Colorado's Prevention Plan:

- Build capacity within the Colorado research community to conduct rigorous evaluation studies to move promising or supported programs along the evidence continuum toward the well-supported criteria outlined in the Prevention Services Clearinghouse Standards Handbook.

- Facilitate the design of rigorous evaluations for each promising or supported practice that does not already have a study underway. Evaluation designs will:

  - Be developed in accordance with ACF guidance on evaluation planning and rigorous design standards set forth by the Clearinghouse;

  - Build on the existing evidence base for a given intervention;

- Prioritize opportunities to understand cultural relevance to Colorado communities;

- Leverage administrative data to minimize the burden on providers and minimize costs;

- Consider the potential for cross-system benefit; and

- Be pre-registered to ensure transparency.

- Convene research teams to conduct the program or service specific rigorous process and outcome studies by:

  - Leveraging the expertise of the state first (e.g., the Social Work Research Center, Kempe Center, Colorado Applied Research and Action Network fellows) and national organizations second; and

  - Creating efficiencies across individual program evaluations and research teams.

- Provide secure data infrastructure to research teams.

- Ensure IRB approval and ethical human subjects research;

- Coordinate with designated CDHS leadership to manage the intersection of implementation science, CQI work, and rigorous outcome evaluations.

- Develop and implement communication plans that ensure the findings are well positioned to inform policy and practice.

The CO Lab's staff are experts in evaluation design and methodology, and its approach is to serve as a bridge between the decision-making goals of the government and the academic and scientific community. As the coordinating hub, the CO Lab will function as the umbrella for rigorous evaluations and facilitate subcontracts for specific projects and scopes of work to organizations throughout Colorado. The volume of rigorous evaluation can be scaled up or down throughout the first five years of the prevention plan to meet readiness factors, emergent opportunities, and state needs.

Program or Service-Specific Rigorous Evaluation Teams: As noted above, the CO Lab will convene program- or service-specific evaluation teams. These teams will be developed in response to where the program or service is currently on the evidence continuum, the current Clearinghouse designation, and the unique capacity of individuals or organizations to support movement toward a well-supported practice and/or better understand implementation in the context of unique Colorado communities.

EVALUATION DESIGN

Following a building period, the evaluation of each supported and promising practice will consist of two studies: a process evaluation and an outcomes evaluation. Descriptions of both are provided below.

Building Period: The building period is service-specific and intended to (1) assess the type of evaluation design that is most appropriate; (2) identify Colorado's learning and decision-making goals associated with the evaluation (e.g., cultural responsiveness for unique populations, scaling to new geographic areas); and (3) ensure sites/providers are delivering the models to fidelity before launching a causal study. The research questions and designs will be fully scoped out

during the building period and address the relevant components of the Administration for Children and Families' Evaluation Plan Development Tip Sheet, as well as be cross-walked with the Clearinghouse evaluation design and execution standards.

The outcome of the building period will be a program- or service-specific rigorous evaluation plan that is publicly registered and reviewed by ACF. CDHS and the CO Lab will ensure that there is coordination across the multitude of rigorous evaluations so that counties, Tribes and providers are clear about expectations, and the requirements are reasonable.

Process Evaluation: For each supported and promising program, a process evaluation will be conducted. The research questions will be tailored to specific services and Colorado's learning and decision-making goals for each service.

Findings from research questions will be used to inform training and supervision to ensure that the proven benefits of the model are realized through faithful implementation, and to ensure that outcomes can accurately be attributed to the model

Outcomes Evaluation: The outcomes evaluation will assess the degree to which the supported and promising programs achieve the intended outcomes for children, youth and families targeted for each individual program model, as well as distal outcomes related to reduced repeat maltreatment and reduced foster care entry and re-entry. The outcomes measured will be informed by:

- The context in which the service is being implemented in Colorado (i.e., what are the goals of serving a given target audience, within a given promising or supported practice);

- The theory of change and/or logic model underpinnings of the program or service, as articulated by developers in books, manuals, or writings; and,

- Prior evidence and what is expected to be realized that is relevant to Family First eligible outcomes and Colorado's overarching vision for healthy families.

The evaluations will use a rigorous approach that is practical, ethical and actionable. It is anticipated that some designs will be quasi-experimental designs and randomized controlled trials that align fully to the Prevention Services Clearinghouse Standards. It is also anticipated that some evaluations, particularly as Colorado begins to learn what is promising when delivered in unique cultural contexts, may not have a control group or may have an alternative practice as the comparison condition. All causal studies will be pre-registered on the Open Science Framework to ensure transparency. All descriptive or inferential research designs will be made publicly available on a Colorado website or clearinghouse.

Evaluation Waiver Requests & Ongoing Rigorous Evaluation Plans

As described in section 471(e)(5)(C)(ii) of the Act, Colorado is requesting evaluation waivers for the well-supported programs in this plan. Please see the Attachment II for Colorado's Request for Waiver of Evaluation Requirements for each well-supported practice in this plan. Appendix A has service-specific justifications for each waiver request.

Rigorous evaluation plans are included for the following programs: SafeCare®; Child First; Fostering Healthy Futures -Preteen; and, Fostering Health Futures-Teens, Colorado's ongoing rigorous evaluation plans are also included in the Attachment.

Child Welfare Workforce Training & Support

The CDHS Division of Child Welfare (DCW)'s Learning and Development (L&D) team represents DCW's philosophy and approach to developing a competent, skilled and professional child welfare workforce with a priority focus on equity and inclusion. The L&D team's goal is not just information sharing, but rather creating true learning opportunities that lead to long-term behavior change.

Colorado has a robust workforce development infrastructure, and the L&D team collaborates with multiple stakeholders to integrate additional learning and development opportunities that will translate the values and vision of Colorado's Family First approach into day-to-day child welfare practices.

The L&D team is responsible for the training and certification of caseworkers, casework supervisors and hotline workers. Each type of certification has requirements for minimum education, initial training, and annual continuing education. The L&D team also provides training opportunities to both the Southern Ute Indian and Ute Mountain Ute Tribes.

Colorado's training for caseworkers, supervisors and other staff is provided through the Child Welfare Training System (CWTS). The CWTS is delivered through a contracted agreement with the Kempe Center for the Prevention and Treatment of Child Abuse and Neglect (Kempe) at the University of Colorado Denver. CWTS provides training to over 8,000 child welfare professionals, service providers, and foster and kin families each year. Standardized training provided by CWTS includes pre-service training for new caseworkers and supervisors; an online Learning Management System (LMS); practice and organizational coaching services; and an extensive selection of in-service training. All training is reviewed using an established matrix to ensure that it is in alignment with trauma-informed practices, inclusive of sexual orientation, gender identity, and gender expression language and best practices, and representative of diverse cultural perspectives.

FAMILY FIRST-RELATED TRAINING PLAN AND STRATEGY

Colorado currently offers specific learning opportunities that are in alignment with Family First requirements. In addition, the L&D team has been working with the Family First Implementation Team and workgroups and with CWTS to both revise existing offerings and design new learning opportunities for those across the child welfare system, including mandatory reporters, those who screen referrals of child abuse and neglect, child welfare supervisors/managers/administrators, and those whose role will be primarily focused on prevention casework.

Due to the significance of Family First and the transformational change that Colorado is moving toward, CDHS hired a Family First-dedicated Training & Development Specialist. Training and communications products released in the last year include the following:

- Family First 101 web-based training for all child welfare professionals;

- Candidacy Tipsheet (described in more detail below);

- A comprehensive Family First Implementation Guide for County Directors, which was developed in partnership by CDHS and the Colorado Human Services Directors Association (CHSDA);

- A series of four Lunch & Learn sessions hosted in partnership by CDHS and CHSDA on Understanding Financial Claiming for Prevention Services under Family First;

- Colorado's Family First Implementation Dashboard;

- Family First Implementation Digest, which is a bi-monthly email with updates from the Family First Prevention Services Implementation Team; and

- A multitude of county conversations, town halls and trainings with key stakeholders around Family First and the role of prevention services.

Identifying candidates and developing child-specific prevention plans. Colorado has developed Family First 101 web-based training as a learning activity for workers and supervisors to understand the purpose of prevention candidacy, how to identify candidates, and what is required for prevention candidacy. Live presentations covering candidacy with opportunity for question & answer discussion have been offered to supplement and support understanding of candidacy criteria. A Candidacy Tipsheet has been designed to support and guide all county staff with accurate identification and entry of prevention candidates within the Trails system.

Colorado is choosing to use its existing treatment plan as the format for the child-specific prevention plan. A tipsheet is being developed as a reference guide for child welfare staff on how to create a new prevention plan for each child within Trails.

A prevention specific training and reference guide will be created to ensure county staff have been provided all the minimum requirements to support a youth and family receiving prevention services and how to properly document this into Trails. This will be recorded, and county staff will be able to view it at any time to answer questions which arise. DCW will monitor county data entry and service utilization to assess if additional resources need to be created and displayed.

Engaging families in the assessment of strengths, needs and the identification of appropriate services. Engaging children, youth and families to comprehensively assess their unique strengths and needs is included in the Fundamentals (pre-service) classroom training for all caseworkers.

Linking families with appropriate, trauma-informed, evidence based services to mitigate risk and promote family stability and well-being. These topics are included in the Fundamentals (pre-service) classroom training for all caseworkers. In addition, numerous in-service trainings are available that focus on supporting families when specific issues are present, such as substance use, housing insecurity, domestic violence and sexual abuse. The L&D team is exploring ways to further

bolster current training offerings to ensure effective family-centered prevention planning, appropriate referrals to evidence-based services, and coordination with other child and family services.

CDHS and the CO Lab recently hosted a series of informational sessions on the mental health services proposed in this five-year plan for all counties and providers in the state. These sessions were recorded and aimed to provide foundational information on each service, including the model approach, target population, intended outcomes, and how various services differ and complement each other. CDHS is exploring compiling this information in a written guidebook. To further ensure that all child welfare professionals have a base level of knowledge around evidence-based prevention services and how best to match them with specific child, youth and family needs. In addition to general knowledge about Family

First-eligible services, CDHS and CHSDA have encouraged and supported individual counties in cataloging and communicating the prevention services available in their communities. As more and more counties engage in community planning around Colorado's Child Maltreatment Prevention Framework for Action (discussed above), this will become more formalized and comprehensive.

Oversight and evaluation of the continuing appropriateness of the services. This topic is included in the Fundamentals (pre-service) classroom training for all caseworkers. The L&D team will build upon existing training to ensure caseworkers are evaluating the ongoing appropriateness of fit of the referral, assessing ongoing safety and risk, determining if modification to a child's prevention plan is warranted to support child and caregiver well-being, and determining if the child/youth/family are meeting the goals they identified and meeting their full potential.

Judicial and Court Partners: The Court Improvement Program (CIP) is working collaboratively with CDHS, the Colorado County Attorney Association, the Office of Respondent Parents Counsel, and the Office of the Child's Representative to maintain alignment and consistent messaging with Family First requirements.

CIP has partnered with local and national level subject matter experts to offer live and recorded training/informational videos to educate judicial officers, attorneys and county partners, utilizing the multidisciplinary team members who participate on a Best Practice Court Team (BPCT) to help share information. The first video released provided information on what Family First is, why it is important, and how to prepare for implementation in Colorado. Since then, the CIP has offered content for all professional roles on the QRTP process within the courtroom and has partnered with the American Bar Association (ABA) to provide information specific to judicial officers on how to translate the law into courtroom practice. Additionally, the CIP developed a training series for judges and attorneys on specific content

relevant to each phase of a case (Before a Petition is Filed, After a Petition is Filed and a Child or Youth Enters Foster Care, and During a Child or Youth's Transition from Foster Care) to be delivered in September 2021. Lastly, the CIP has encouraged and supported local level conversations and information gathering, again using the BPCT infrastructure, to prepare for the implementation changes ahead. Colorado created a website specifically for judicial/legal resources, training and messaging (see co4kids.org/family-first/legal).

EVIDENCE-BASED PRACTICE (EBP) PROVIDER WORKFORCE

Colorado's EBPs are provided by community-based agencies that receive training either from the developer of the EBP or someone officially trained as a trainer. Although CDHS is not the direct purveyor of training to providers, CDHS will continue partnering with state program intermediaries to ensure that all local EBP providers for Family First have the skills and capacities necessary to deliver the selected EBPs with fidelity to the model.

Each EBP selected for this five-year plan has its own staff qualifications and training requirements specific to the intervention's service delivery model (see Appendix A for service-specific details). The state-wide platform described above will also help ensure that there is state infrastructure and capacity for providers to access clinical supervision through telehealth platforms where needed and systematize processes for collecting and monitoring fidelity data to promote high-quality delivery of services. Additionally, CDHS will provide guidance to county departments on how to hold all EBP service providers accountable through contracts to implement each intervention to fidelity, including requirements of staff training.

EBP workforce development and capacity building. Colorado understands that to expand the availability of and access to prevention services across the state, an investment in the EBP workforce is needed to build capacity. Colorado will be strategically investing a portion of the state's Family First transition funds in prevention service capacity building based on the recommendations.

Ensuring the provider workforce is trauma-informed. As described above, Colorado has developed a multi-year required curriculum around trauma-informed service delivery for all Title IV-E prevention service providers. As part of the procurement process, county departments will specify the requirement to incorporate trauma-informed service delivery into all Family First EBP services.

Prevention Caseloads

In August 2014, Colorado's Office of the State Auditor (OSA) released the Colorado Child Welfare County Workload Study. The purpose of the study was "to establish a comprehensive picture of the state's county child welfare workload, case management, and staffing levels and identify estimated workload and staffing levels to accomplish child welfare goals." It focused on actual time spent by case aides, caseworkers, and supervisors on tasks to evaluate efficiencies, develop workload standards, and determine the need for additional resources. The study concluded that counties would need 610 additional child welfare staff to meet program goals and achieve outcomes. The Colorado legislature has worked to address this shortage of child welfare staff over the last five years. To date, 418.5 new full-time equivalent (FTE) county child welfare positions have been appropriated and funded.

In 2016, the state contracted with ICF International to conduct a study concerning the child welfare caseload by county, as opposed to the OSA workload study, which provided estimated hours per case by service for county child welfare caseworkers. The 2016 Child Welfare Caseload Study built upon the workload study results by further supporting the need for additional child welfare staff, creating a framework for requesting additional resources, and providing suggested caseload ratios. This study created the Colorado Division of Child Welfare Caseworker Allocation Tool (DCAT). The DCAT tool provides a framework for determining the allocation of appropriated funds to the counties and for county child welfare positions based upon allocation formula factors such as referrals, assessments, out-of-home placements, and in-home services.

The 2016 caseload study also recommended specific ratios of supervisor to caseworker (1:5) and caseworker to case (1:10). CDHS uses these ratios to justify funding requests and allocate new child welfare staff to counties. Colorado believes that these ratios will continue to support effective and engaging casework practice moving forward under Family First, and therefore intends to use this established caseload ratio for prevention cases unless otherwise specified by the evidenced-based service provider. During the 2021 legislative session, SB21-277 required an updated workload study, which will help identify any significant shifts that would warrant adjusted ratios. For the purposes of this five-year plan, all caseworkers are considered prevention caseworkers and may work with Family First prevention-eligible children, youth and caregivers. Counties may determine how to assign prevention caseloads. Based on data analyzed, approximately 60% of all children with a child welfare involvement remain at home or with kin and the average number of cases per caseworker is 14. Half of all in-home cases may be eligible for one or more prevention services.

Prevention Reinvestment and Capacity Building

Colorado has designed a process to capture IV-E prevention reimbursement funds into a pool to build capacity and expand programs in Colorado's prevention plan. The Colorado Child Abuse Prevention Trust Fund (Colorado Trust) will manager and oversee processes for distribution of funds in the pool and monitor the implementation of services. The Child Welfare Prevention Task Group will create recommendations for processes and protocols for the Colorado Trust to align with the prevention task group's plan for expansion and program additions.

CDHS contracted with the Colorado Evaluation and Action Lab (CO Lab) to provide recommendations for short- and long-term strategies for implementing and scaling evidence-based practices that both meet the unique needs of Colorado communities and maximize Title IV-E reimbursement. The report utilized a data-driven, community-informed approach, the final report recommends a phased strategy to implementation and capacity-building to move Colorado closer to a comprehensive prevention services continuum.

The report also highlights geographic priorities for expansion, as Colorado's goal is to ensure that all children, youth and families have access to the services they need regardless of where they live in the state.

Moving forward, Colorado will utilize the CW Task Group, to develop processes and make recommendations for the expansion and addition of services. The expansion and program additions will utilize the CO Lab's report, site level and program level data, child welfare data and community assessments as well as the annual reports that counties and Tribes submit as part of Colorado's Core Services Program and the Collaborative Management Program. This data is helpful for identifying gaps in services, inequities in access, and opportunities for expansion. Once a new program/service has gone through the defined process to be added to Colorado's Prevention Plan, a service write up will be drafted and CDHS will submit amendments to the initial prevention plan to add services as they are selected for inclusion in Colorado's plan.

Building Community Pathways Capacity

As Colorado continues to build a prevention infrastructure that incorporates community partners, programs and providers and expands to include those families who are no longer involved in child welfare (closed cases) or who have had minimal involvement (i.e. screened out referrals or closed assessments), CDHS will work to develop processes and pathways to maximize Family First reimbursements.

One strategy is to reimagine and build out the PA3, prevention program area, allowing for soft-touch involvement of county workers to meet the basic requirements of Family First IV-E oversight while not compromising the child/youth and families who are not involved in child welfare or the juvenile justice systems. This involves an investment of resources to modify technology, and funds to counties to expand a pool of workers.

PROGRAM AREA 3 (PA3)

During Colorado's 2011 legislative session, House Bill 11-1196: Flexible Funding for Families, was signed into law. The bill redefined family preservation services to serve "appropriate families who are involved in, *or who are at risk of being involved in* the child welfare, mental health, and juvenile justice systems." This created a program area 3 that allows county departments to provide prevention and early intervention services with existing state funding sources, such as the State Child Welfare Block and Core Services allocations.

Program Area 3 (PA3) services can be provided after a referral has been screened out, when an assessment does not require child protection services, or when a child welfare case is closed but additional supports are needed to improve a family's protective factors, reduce the possibility of recurrence of abuse or neglect, and prevent the family's deeper involvement in the child welfare system. PA3 services are optional, offered as 100% voluntary to a family, and based on county-by-county available funding and ability to provide preventive services. While the legislation was similar to Family First in its approach, no additional funds were allocated by the state legislature so the impact of PA3 has been limited and inconsistent across the state.

In state fiscal year (SYF) 2018, 6,518 children, youth and families received PA3 services in Colorado. Within this context of successfully serving PA3 children, youth and families, and a history of providing prevention and early intervention services, Colorado sees Family First as one opportunity to extend services even further upstream through a bold definition of candidacy to rethink the structures in place to not only prevent out-of-home placement but to build a system that reduces all child maltreatment.

In Colorado, the intent of placement prevention services is to proactively strengthen and support families as early as possible, before they are in crisis. To achieve true change and improve outcomes, the existing system cannot just be modified; rather, a fundamental shift in service delivery and support to families must occur. Colorado is committed to working closely with partner agencies and community providers to ensure robust monitoring processes and reporting, as child/youth safety is of utmost importance.

Conclusion

Colorado is committed to developing a broad infrastructure to support families, prevent circumstances that lead to child maltreatment, and to intervene when maltreatment has been identified to ensure that children and youth remain safely in their homes or with kinship caregivers whenever possible. Family First is one component of the plan.

Appendix A

Healthy Families America

Healthy Families America (HFA) is a home visiting program for new and expectant families with children who are at-risk for maltreatment or adverse childhood experiences. The overall goals of the program are to cultivate and strengthen nurturing parent-child relationships, promote healthy childhood growth and development, and enhance family functioning by reducing risk and building protective factors. HFA includes screening and assessments to identify families most in need of services, offering intensive, long-term and culturally responsive services to both parent(s) and children, and linking families to a medical provider and other community services as needed.

The HFA model is based upon 12 Critical Elements. These Critical Elements are operationalized through a series of standards that provide a solid structure for quality, yet offer programs the flexibility to design services specifically to meet the unique needs of families and communities.

The HFA program begins at birth and enrolls families through the first three-months postpartum. Families initially receive weekly home visits, and the frequency of home visits may change depending on their needs and progress. Most families are offered services for a minimum of three years, or until the child turns five years of age.

PROGRAM SELECTION AND OUTCOMES

Healthy Families America was selected as a model program to address the lack of home visiting resources for families living in poverty in non-metro Colorado communities. The program was also recently endorsed by Colorado's Home Visiting Investment Task Force. A recent Colorado study, specific to infants affected by substance use, found that removal risk was higher when mothers had less than adequate prenatal care, did not participate in Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), and a lower household income, resulting in an increase in medical fragility of the newborn.

The Colorado Home Visiting Coalition indicates that there is a compelling need for expanding the array of home visiting services - currently only 19% of families living in poverty with children under the age of six are participating in a home visiting program.

The three overarching domains for HFA in Colorado are:

- Child Well-Being: Behavioral and emotional functioning

- Adult Well-Being: Positive parenting practices

- Adult Well-Being: Parent/caregiver mental or emotional health

Child Well-Being: Behavioral and emotional functioning

Colorado will be targeting and tracking increased developmental progress and social-emotional health in this domain. This outcome is measured by providers using the Ages and Stages Questionnaires (ASQ), administered twice per year for children under the age of three and annually for children ages three through five years, and the ASQ-Social Emotional, administered once per year for children birth through age five. Statistically significant positive effect sizes were found for this domain in Clearinghouse "highly rated" studies.[1]

This outcome specifically links back to Colorado's candidacy definition by targeting

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1   Duggan, A., Caldera, D. Rodriguez, K., Burrell, L., Shea, S., & Rohde, C. (2005). Evaluation of the Healthy Families Alaska program: Final report. Juneau, AK: Alaska State Department of Health and Social Services.

Caldera, D., Burrell, L., Rodriguez, K., Crowne, S. S., Rohde, C., & Duggan, A. (2007). Impact of a statewide home visiting program on parenting and on child health and development. Child Abuse & Neglect, 31(8), 829-852. doi:http://dx.doi.org/10.1016/j.chiabu.2007.02.008

developmental delays and parents' inability, or need for additional support, to address serious needs of a child/youth or related to the child/youth's behavior or physical or intellectual disability.

Adult Well-Being: Positive parenting practices

Colorado will be targeting and tracking improved praise and decreased criticism in this domain. This outcome is measured by providers using the HFA CHEERS Check-In Tool, which assesses parent-child interaction and is administered twice annually from birth through 36 months of age. Statistically significant positive effect sizes were found in Clearinghouse "highly rated" studies.[2]

This outcome targeted through HFA specifically links back to Colorado's candidacy definition by targeting parents' lack of parenting skills.

Adult Well-Being: Parent/caregiver mental or emotional health

Colorado will be targeting and tracking maternal depression in this domain. This outcome is measured by providers using a depression screening tool (sites are able to choose a standardized tool) at least once prenatally, at least once postnatally within three months of the baby's birth, and at least once postnatally within three months of any subsequent births. Statistically significant positive effect sizes were found in Clearinghouse "highly rated" studies.[3]

This outcome targeted through HFA specifically links back to Colorado's candidacy definition by targeting caregiver mental illness.

SERVICE DESCRIPTION AND OVERSIGHT

a. Implementation Manual:

Healthy Families America. (2018) Best practice standards. Prevent Child Abuse America.

b. Implementation of HFA

Service providers receive intensive training specific to their role to understand the essential components of family assessment, home visiting and supervision. HFA Core training is required for all Family Support Specialists, Family Resource Specialists, supervisors and program managers within six months of hire. This training must be provided by a nationally certified HFA Core trainer.

Supplemental wrap-around training occurs within three months, six months, and 12 months of hire. There is annual training on child abuse and neglect and cultural humility. Family Support Specialists receive weekly reflective supervision as ongoing support.

While all training is provided by certified HFA trainers, Illuminate Colorado, as the state office/state intermediary for HFA, provides additional support and follow-up as needed for local sites. At the time a provider seeks to affiliate with HFA, they are required to submit an implementation plan that discusses how they intend to carry out model requirements. There is an accreditation guide for potential affiliates.

c. Target Population in Colorado

Child welfare involved families and non-child welfare involved families are eligible to access

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2 DuMont, K. A., Mitchell-Herzfeld, S. D., Kirkland, K., Rodriguez, M., Walden, N., Greene, R., et al. (2008).Effects of Healthy Families New York on maternal behaviors: Observational assessments of positive and negative parenting. Rensselaer, New York: New York State Office of Children and Family Services.

3 Duggan, A., Fuddy, L., Burrell, L., Higman, S. M., McFarlane, E., Windham, A., & Sia, C. (2004). Randomized trial of a statewide home visiting program to prevent child abuse: Impact in reducing parental risk factors. Child Abuse & Neglect, 28(6), 623-643. doi:http://dx.doi.org/10.1016/j.chiabu.2003.08.008

Duggan, A., Caldera, D., Rodriguez, K., Burrell, L., Rohde, C., & Crowne, S. S. (2007). Impact of a statewide home visiting program to prevent child abuse. Child Abuse & Neglect, 31(8), 801-827. doi:http://dx.doi.org/10.1016/j.chiabu.2006.06.011

McFarlane, E., Burrell, L., Crowne, S., Cluxton-Keller, F., Fuddy, L., Leaf, P., & Duggan, A. (2013). Maternal relationship security as a moderator of home visiting impacts on maternal psychosocial functioning.Prevention Science, 14(1), 25-39.

HFA. For families currently involved in child welfare, referrals often come from the county child welfare agency. Families may also self-refer to HFA, and other referral sources may include community agencies and hospitals.

Standardized screening and assessment tools are used to systematically identify and assess families most in need. The Parent Survey (formerly the Kempe Family Stress Checklist), or another HFA-approved tool is used prior to or within four visits after enrollment to assess the presence of various factors associated with increased risk for child maltreatment or other adverse childhood experiences. New parents are eligible for the HFA program if they have been screened and/or assessed as moderate to high risk for child maltreatment and/or poor early childhood outcomes (e.g., mental health issues, domestic violence, substance abuse, poverty, housing, lack of education, lack of social support, etc.). Sites will be moving towards the HFA Family Resilience and Opportunities for Growth (FROG) Scale in 2022. The FROG scale is a one-time assessment used to create a family service plan, which is monitored and updated throughout the course of services.

Based on the results of the Parent Survey (or another HFA-approved tool), families can screen into the signature HFA program or qualify for accelerated services. Families are eligible for accelerated services if they score as "low-risk" on their initial assessment. Instead of serving families for a minimum of three years, families in HFA Accelerated can move through the program at their own pace and graduate sooner. For families involved with child welfare, there are additional protocols related to enrollment, caseload management, and establishing a formal MOU with child welfare in order to best serve families. If a family is not eligible for HFA, reduced services may be provided, or they may be referred to other services or programs.

d. Sites in Colorado

As of March 2021, Illuminate Colorado became the state office/state program intermediary for Healthy Families America.

HFA is implemented by the Healthy Families Aspen to Parachute program, as well as by the Genesis Program (an HFA affiliate) in Boulder County.

FIDELITY MONITORING

HFA requires implementing sites to utilize the HFA Best Practice Standards and to demonstrate fidelity to the standards through periodic accreditation site visits. The HFA Best Practice Standards serve as both the guide to model implementation and as the tool used to measure adherence to model requirements. There are 153 standards and each is coupled with a set of rating indicators to assess the site's current degree of fidelity to the model. The HFA site must meet a minimum of 85% threshold of adherence to the HFA Best Practice Standards.

All HFA affiliated sites are required to complete a self-study that illustrates current site policy and practice. An outside, objective peer review team uses this in conjunction with a multi-day site visit every four years to determine the site's rating for each standard.

During the accreditation on-site visit, the team reviews participant records and supervision notes, and conducts interviews with clients, staff and board of directors. Feedback is provided directly to site leadership daily, covering the site's strengths and areas of improvement identified through the review.

Additionally, quarterly and annual site reviews are conducted to inform the improvement process and make adjustments or corrections as needed. A full re-accreditation is required by the site every four years.[4]

CDHS will coordinate with Illuminate to receive relevant fidelity data which will then be translated into the standardized statewide metrics of fidelity and moved into the Colorado Fidelity Monitoring Platform. See the Colorado 5-year Prevention Plan for more details on the Platform.

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4 Healthy Families America Site Development Guide (revised 2014). Chicago, IL: Prevent Child Abuse America.

CONTINUOUS QUALITY IMPROVEMENT (CQI)

Quarterly learning calls are conducted with each site to:

- Review, strategize and support progress toward addressing recommendations made by the site team and challenges identified by the sites; and

- Review child safety performance management data that are routinely collected and opportunities to build capacity for routinely collecting and using child and adult well-being data.

As part of the CQI process, HFA sites collect and monitor data such as:

- Number of referrals and eligibility status

- Timeframes for initial engagement of families referred

- Age of the focus child at the time of the first home visit

- Acceptance rates

- Retention rates

- Home visit completion rates

- Children connected with a pediatrician

- Immunization rates

- Well-child visits

- Caseload monitoring

- Staff retention

- Adherence with staff training requirements

- Frequency and duration of supervision

ELIGIBILITY FOR FEDERAL CLAIMING

For Family First IV-E claiming purposes, only children and families in an open child welfare case are eligible for federal reimbursement to Colorado's Children's Trust Fund.

REQUEST FOR EVALUATION WAIVER

Colorado is seeking an evaluation waiver for HFA and, upon approval, will assess program implementation and fidelity through a robust continuous quality improvement (CQI) process rather than through formal, independent evaluation.

HFA is rated well-supported by the Title IV-E Prevention Services Clearinghouse. It has extensive and rigorous research behind it, with 22 studies qualifying as eligible for review by the Clearinghouse.

CHILD SAFETY AND INDIVIDUAL PREVENTION PLANS

As described in Colorado's five-year prevention plan, child safety is an important component of the implementation plan. With all open child welfare cases, the county department is responsible for ongoing safety monitoring.

After enrollment, all sites complete the following screens/assessments at the minimum frequency indicated below:

- HFA CHEERS Check-In Tool (assesses parent-child interaction) – twice annually from birth through 36 months of age

- ASQ – twice per year for children under the age of three and annually for children ages three through five years

- ASQ-SE –once per year for children birth through age five

- Depression screening (sites are able to choose a standardized tool) – at least once prenatally, at least once postnatally within three months of the baby's birth, and at least once postnatally within three months of any subsequent births.

One of the foundational principles of HFA is to prevent child abuse and neglect. Within the HFA Best Practice Standards, all Safety standards must be met in order to be accredited, as they impact the safety of the families being served and the staff serving them. Safety standards include personnel background checks (9-3.B), orienting staff on child abuse and neglect indicators, role as a mandated reporter and reporting requirements (10-2.D), supervision of direct service staff (12-1.B), and child abuse and neglect policy and procedures that include reporting criteria, definitions and practice (GA-6.A, GA-6.B).

WORKFORCE SUPPORT AND TRAINING

There are standard requirements for training in HFA and training logs are kept to track training for the workforce. All staff receive HFA core training plus intensive role-specific training. There are two core trainings that direct hires must complete within 6 months of hire: Foundations for Family Support (FFS), which is required for family support specialists (who conduct home visits), and Parent Survey for Community Outreach (PSCO), which is required for family resource specialists (who conduct the initial assessment/parent surveys). Supervisors must complete both FFS and PSCO core training, and stay for one additional day of core training, within 6 months of employment. Program managers must complete FFS and PSCO core training, as well as an Implementation Training, within the first 18 months of employment.

All HFA site staff will be held to the trauma-informed care prevention service provider requirements designed by the Colorado Department of Human Services and included in Colorado's 5-year Prevention Plan. Individual sites will be responsible for ensuring compliance with the standards.

PREVENTION CASELOADS

The Best Practice Manual provides guidance on caseload sizes. The importance of a manageable caseload size ensures families will be afforded the time, energy and resources necessary to help build protective factors, reduce risk and impact positive change. Caseload size provides the maximum number of families and maximum case weight that can be carried by a full-time Family Support Specialist. HFA allows sites to factor in circumstances that will weigh more heavily for many families, including high risk issues, extensive travel, multiple births, translation needs, etc. Guidance regarding assigning case weights based on level of service (frequency of home visits) can be referenced in standard 4-2.A, and in HFA's Level Change forms.

A site's policy and procedures regarding caseload size cannot exceed 15 families at the most intensive level, and no more than 25 families at any combination of service levels, and a maximum case weight of 30 points, per full-time (40 hours/week) Family Support Specialist.

Nurse-Family Partnership

Nurse-Family Partnership (NFP) is a program of intensive prenatal and postnatal home visitation by nurses, designed to empower mothers experiencing poverty and their first-borns. NFP has three goals: (1) to improve pregnancy outcomes by helping women improve their prenatal health, (2) to improve child health and development by helping parents provide more sensitive and competent care, and (3) to improve parental life-course by helping parents plan future pregnancies, complete their educations, and find work. By design, NFP helps parents to understand how their behaviors influence their own health and their child's health and development. It supports them in choosing to change their lives in ways that protect themselves and their children more effectively.

The expectant moms benefit by getting the care and support they need to have a healthy pregnancy. At the same time, new mothers develop a close relationship with a nurse who becomes a trusted resource they can rely on for advice on everything from safely caring for their child to taking steps to provide a stable, secure future for them both. Through the partnership, the nurse provides new moms with the confidence and the tools they need not only to assure a healthy start for their babies, but to envision a life of stability and opportunities for success for both mom and child.

NFP is delivered within a 1:1 therapeutic relationship with a personal nurse. Visits occur at the client's home or at an alternative location based on the needs of the client and may include virtually through telehealth. Nurses use their judgment to apply the NFP visit guidelines across 6 domains: Personal Health, Environmental Health, Life Course Development, Maternal Role, Family and Friends, and Health and Human Services.

▎PROGRAM SELECTION AND OUTCOMES

Much of the national research demonstrating NFP's efficacy has included samples from Colorado. The Pacific Institute for Research and Evaluation (PIRE) published a fact sheet in 2019, titled "Life status and

financial outcomes of Nurse-Family Partnership in Colorado", using a published systematic review of more than 30 NFP evaluations. Based on statistically significant life status and financial

Table 1. Expected Life Status and Financial Outcomes When First-Time Low-Income Mothers Receive Nurse-Family Partnership Home Visitation Services in Colorado

Outcome	Change
Smoking During Pregnancy	25% reduction in tobacco smoked
Complications of Pregnancy	33% reduction in pregnancy-induced hypertension
Preterm First Births	15% reduction in births below 37 weeks gestation (17 fewer preterm births per 1,000 families served)
Infant Deaths	48% reduction in risk of infant death (3.0 fewer deaths per 1,000 families served)
Closely Spaced, High-Risk Pregnancies	37% reduction in closely spaced, high-risk pregnancies within 15 months postpartum during 4 years after the first birth
Very Closely Spaced Births	25% reduction in second births within 15 months postpartum
Subsequent Preterm Births	28.6 fewer subsequent preterm births per 1,000 families served
Breastfeeding	12% increase in mothers who attempt to breastfeed
Intimate Partner Violence	17% reduction in assaults, prenatal to child age 5
Child Maltreatment	33% reduction in child maltreatment through age 15
Childhood Injuries	34% reduction in injuries treated in emergency departments, ages 0-2
Language Development	41% reduction in language delay; 0.14 fewer remedial services by age 6
Youth Criminal Offenses	25% reduction in crimes and arrests, ages 11-17
Youth Substance Abuse	56% reduction in alcohol, tobacco, & marijuana use, ages 12-15
Immunizations	14% increase in full immunization, ages 0-2
TANF Payments	7% reduction through year 13 post-partum; no effect thereafter
Food Stamp Payments	10% reduction through at least year 15 post-partum
Person-months of Medicaid Coverage Needed	8% reduction through at least year 15 post-partum due to reduced births and increased program graduation
Costs if on Medicaid	12% reduction through age 18
Subsidized Child Care	Caseload reduced by 3.0 children per 1,000 families served

changes it documented, the fact sheet estimates NFP outcomes as implemented in Colorado.

The Colorado Evaluation and Action Lab engaged in an extensive review of Colorado needs assessment to inform the selection of services. NFP was selected as a prevention service because the national literature on NFP creates a compelling case for meeting local needs. In addition to living in poverty, NFP moms are also often experiencing, or at risk of experiencing, addiction or substance misuse; involvement with child welfare or juvenile or criminal justice systems; intimate partner violence; severe developmental disabilities; and/or behavioral or mental health needs. All of these risk factors are closely aligned with Colorado's proposed definition of candidacy.

For Family First, the overarching domain for NFP in Colorado is:

- Child Safety: Child welfare administrative reports.

Colorado will be targeting and tracking subsequent referrals made regarding suspected child abuse

and neglect. This outcome will be measured by the assigned caseworker analyzing Trails data within a minimum of 6 months after the family's last NFP visit. Statistically significant positive effect sizes were found for child safety in Clearinghouse-rated studies.[1]

SERVICE DESCRIPTION AND OVERSIGHT

Implementation Manual

Nurse Family Partnership. (2020). Visit-to-visit guidelines.

Implementation of Nurse-Family Partnership

All of Colorado's NFP staff and home visitors receive the same training on the NFP model elements. The Community Planning Guide provides a 5-chapter series as a resource for implementing NFP: Building Partnerships, Based in Evidence, Funding & Financing, Your Staff, and What to Expect in Your First 6 Months.

NFP requires highly skilled NFP Nurses and Supervisors so that they may work effectively with the families participating in the program, many of whom are experiencing multiple complex issues. All NFP nurses participate in a comprehensive program of education designed to support them in developing: (1) strong communication, personal relationship building and problem-solving skills; (2) a deep understanding of all facets of the NFP program model; (3) skill in delivering all components the NFP program with fidelity; and (4) the ability to adapt the program as necessary to "make it work" for each client and family.

The NFP National Service Office (NSO) develops and delivers initial education for nurse home visitors and nurse supervisors. Initial education is required as part of model fidelity as outlined in agency contracts. The initial education training policy can be found here.

One-on-one weekly clinical supervision occurs for each nurse with the nurse supervisor. NFP nursing teams meet regularly for team meetings and case conferences at least twice per month, where they receive guidance from supervisors and colleagues to help them deliver the best possible care to their clients. Reflective supervision (RS) in NFP is based on a collaborative relationship between NFP nurses and their supervisors. Effective RS is also a protective factor in preventing burnout or compassion-fatigue for the NFP nurse, and is encapsulated in model element #14. The use of RS in NFP implementation has also been shown in several studies to significantly increase program retention, reduce attrition and provide nurses with a positive modeling framework that ultimately cascades down to the client and her baby. Nurse supervisors conduct joint home visits with each nurse three times a year.

Target Population in Colorado

Nurse-Family Partnership focuses on first-time mothers experiencing poverty — a population disproportionately impacted by systemic barriers that sometimes has limited access to role-models. Women voluntarily enroll as early as possible with nurse home visits, ideally beginning at birth through two years of age. In Colorado, NFP will serve pregnant and parenting teens in foster care. This population has been identified to need additional prenatal and parenting support. Family First will claim post-birth program delivery costs.

Per C.R.S § 26-6.4-104 (2), "A mother shall be eligible to receive services through the program if she is pregnant with her first child, or her first child is less than one month old, and her gross annual income does not exceed two hundred percent of the federal poverty level".

Sites in Colorado

Currently, NFP is implemented in 21 sites across 64 counties, including service provision to the two Federally recognized tribal communities in Colorado.

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1   Mejdoubi, J., van den Heijkant, S. C. C. M., van Leerdam, F. J. M., Heymans, M. W., Crijnen, A., & Hirasing, R. A. (2015). The effect of VoorZorg, the Dutch Nurse-Family Partnership, on child maltreatment and development: A randomized controlled trial. PLoS ONE, 10(4), e0120182. doi:10.1371/journal.pone.0120182

FIDELITY

Fidelity is the extent to which there is adherence to the model elements. Applying the model elements in practice provides a high level of confidence that the outcomes achieved by families who enroll in the program will be comparable to those achieved by families in the three randomized, controlled trials and outcomes from ongoing research on the program. In addition to applying the model elements to implementation, fidelity includes agency and nurse uptake and application of new research findings and new innovations, as well as adjusting NFP practice to the changing context and demographics of NFP clientele.

C.R.S § 26-6.4-102 details how the University of Colorado is responsible for the programmatic and clinical support, evaluation and monitoring for the program. The Colorado Coordination Team (CCT) is a partnership between the NFP NSO, the University of Colorado, Invest in Kids (IIK), and the Colorado Department of Human Services (CDHS). The CCT has well-established processes for monitoring fidelity and engaging in continuous quality improvement in urban, rural, and frontier counties. IIK is charged with ensuring all 21 NFP implementing agencies accurately input data from every home visit into a national data-collection system. Once the data are collected, IIK assists NFP teams in using the data to assess their program fidelity according to 19 model elements and to track progress toward outcome achievement. IIK employs a full-time data analyst to oversee this work. IIK also employs a program director and two nurse consultants to work with NFP teams daily on all aspects of implementation, including using the data to guide nursing practice given individual NFP site context.

As statutorily required in C.R.S § 26-6.4-106 (e), all NFP teams submit a progress report to the CCT for review annually. This review results in a feedback letter to every NFP team detailing their successes on maintaining fidelity and achieving outcomes, as well as guidance to improve areas of fidelity and progress toward outcomes that IIK will support them with throughout the following year. IIK's work to support fidelity is financed through two contracts with the University of Colorado, with the funding coming from the administrative portion of the Master Tobacco Settlement to the Nurse Home Visitor Program and a smaller portion from the administrative portion for Colorado's Maternal Infant and Early Childhood Home Visitation funding.

CDHS will coordinate with IIK to receive relevant fidelity data which will then be translated into the standardized statewide metrics of fidelity and moved into the Colorado Fidelity Monitoring Platform. See the Colorado 5-year Prevention Plan for more details on the Platform.

CONTINUOUS QUALITY IMPROVEMENT (CQI)

Fidelity data for every site is monitored by the CCT annually, formally in the progress report mentioned above. Monthly nursing consultation by IIK with every site also is focused on using data to improve practice specific to each site.

ELIGIBILITY FOR FEDERAL CLAIMING

Colorado has determined that due to the parameters of Family First legislation, and NFP model design, the target population for Family First is narrow. Parenting teens, who are in an open child welfare case, and in foster care, will be eligible for Colorado to claim federal IV-E reimbursement. As NFP can be provided up until the child is the age of two, Colorado will work with NFP and the Children's Bureau to create a waiver extending services for this population.

REQUEST FOR EVALUATION WAIVER

Colorado is seeking an evaluation waiver for NFP and, upon approval, will assess program implementation and fidelity through a robust continuous quality improvement (CQI) process rather than through formal, independent evaluation.

NFP is rated well-supported by the Title IV-E Prevention Services Clearinghouse. It has extensive and rigorous research behind it, with 10 studies qualifying as eligible for review by the Clearinghouse.

CHILD SAFETY AND INDIVIDUAL PREVENTION PLANS

As described in Colorado's five-year prevention plan, child safety is an important component of the implementation plan. With all open child welfare

cases, the county department is responsible for developing individualized, child-specific prevention plans and ongoing safety monitoring.

During home visits, the NFP nurse provides structured support and guidance across the six program domains: personal health, environmental health, life course development, maternal role, family and friends, and health and human services.

The NFP Strengths and Risks (STAR) Framework is designed to help NFP nurses and supervisors systematically characterize levels of strength and risk exhibited by the mothers and families they serve. STAR is intended to inform and support consistent clinical decisions made by NFP nurses and supervisors regarding visit content and dosage (time spent on the six domains). In addition, STAR promotes identifying stages of behavioral change and appropriate corresponding actions and intervention to improve maternal and child health. By attending to specific strengths that mothers and family members bring to the program, STAR helps the NFP nurse to identify families who are doing so well on their own that they may not need to be visited as frequently as called for in the current program guidelines and to identify those that need more visits due to greater risk or need. Information organized within the STAR informs NFP nurses' ways of working with families and helps them align the program content and frequency with mothers' (and other family members') abilities and interests in engaging in the program.

In addition, all NFP nurses and supervisors are mandatory reporters. If there are concerns for a child's safety, they will file a report through the Colorado statewide child abuse and neglect hotline. If a child is in imminent danger, providers will call 911.

WORKFORCE SUPPORT & TRAINING

[Detailed information on NFP's initial education policy can be found here](#).

Nurses and supervisors participate in a 9-month comprehensive training program to learn how to conduct in-home visits.The training incorporates a combination of a self-study workbook, web-based training activities, and two onsite training sessions at the NFP NSO in Denver. Ongoing education and training occurs for both new nurse home visitors and supervisors hired to implement the program. Supervisors receive ongoing consultation to help them develop strong skills with respect to reflective supervision, along with coaching from experienced program consultants.

All NFP site staff will be held to the trauma-informed care prevention service provider requirements designed by CDHS and included in Colorado's 5-year Prevention Plan. Individual sites will be responsible for ensuring compliance with the standards.

PREVENTION CASELOADS

NFP Model Element 12 states that a full-time nurse home visitor carries a caseload of 25 or more active clients. Colorado limits nurse home visitor caseload sizes to up to 25. Nurses must be at least half-time employed in order for nurses to be proficient in the delivery of the program model. Caseload size may vary, but may not exceed 30 clients without approval from the NSO.

SafeCare

SafeCare® is an internationally recognized, evidence-based in-home parent support program that provides direct skills training to parents and caregivers. The parenting model was developed in 1979 and is currently being provided at more than 177 sites across 19 states in the United States. In 2007, the National SafeCare® Training and Research Center (NSTRC) was created through Georgia State University, where it remains today. Although SafeCare® Colorado uses a local intermediary for implementation, NSTRC is responsible for helping sites throughout the United States and other countries implement SafeCare® effectively.

SafeCare® Colorado is a flexible, free and voluntary parent support program for parents and caregivers with children ages five and under who need extra support to keep their families safe and healthy. Parent support providers use a proven process to help at-risk parents and caregivers build on their existing skills in three topic areas: home safety, child health and parent-child interactions. The home safety topic targets risk factors for environmental neglect and unintentional injury by teaching parents and caregivers how to identify and remove common household hazards. This topic also emphasizes the importance of proper supervision. The child health topic teaches parents and caregivers how to prevent, identify, and respond to common childhood illness and injuries. This topic also promotes keeping sound medical records and the importance of preventative care including routine vaccines and wellness checks, which will help reduce incidences of medical neglect. During the parent-child interaction topic, parent support providers teach parents and caregivers ways to increase positive behaviors, prevent difficult behaviors and have a stronger relationship with their children. Parents and caregivers learn ways to help their children make good decisions and develop routines so family time can be more enjoyable and less stressful.

PROGRAM SELECTION AND OUTCOMES

SafeCare® was implemented in Colorado in 2013 as part of Governor Hickenlooper's Child Welfare Plan, "Keeping Kids Safe and Families Healthy 2.0". The Colorado Office of Early Childhood (OEC) partnered with the Kempe Center for the Prevention and Treatment of Child Abuse and Neglect (Kempe) to support the implementation of SafeCare® Colorado through the three-year pilot period (2013-2016).

SafeCare® has a long history of success, and the program's effectiveness has been evaluated in numerous studies during the past 40 years. SafeCare® has high child welfare relevance, and is rated as a supported practice in the Title IV-E Prevention Services Clearinghouse.

For Family First, the overarching domain for SafeCare in Colorado is:

- Child Permanency: Out-of-home placement

Colorado will be targeting and tracking subsequent out-of-home placement for families engaged in this service. This outcome will be measured by analyzing Trails data within a minimum of 6 months after the family's last SafeCare visit. Statistically significant positive effect sizes were found for out-of-home placement in Clearinghouse-rated studies.[1]

SERVICE DESCRIPTION AND TRAINING

a. **SafeCare® Colorado Implementation**

   Casillas, K.L., & Mencin, L. (2021). SafeCare Colorado Implementation Manual. Unpublished guide. University of Colorado, School of Medicine, The Kempe Center.

b. **Implementation of SafeCare® Curriculum & Training**

   i. **SafeCare® Orientation**
       All SafeCare® provider trainees are required to attend an Orientation, prior to the SafeCare® Provider Workshop. The orientation provides

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1   Quick-Beachy, K., Lee, C., McConnell, L., Orsi, R., Timpe, Z., & Winokur, M. (2018). SafeCare Colorado program evaluation report 2014-2017. Colorado Office of Early Childhood.

an overview of the SafeCare® model and implementation process.

Provider Workshop and Coaching

The purpose of the Provider Workshop is to provide foundational knowledge of the SafeCare® curriculum, delivery to families, and assessing and training parents in the skills modules. Participation in the four-day Provider Workshop is mandatory and trainees must complete all workshop activities, including quizzes, by the end of the workshop and before working with families.

Following completion of the workshop, providers begin delivering SafeCare® with families. Providers work closely with a coach to build proficiency and competency in delivering the SafeCare® model. The provider records all sessions with the family and the recordings are uploaded to the SafeCare® Portal within 48 hours of session completion for observation by the coach. The coach listens to the audio and provides feedback during a coaching session before the next appointment with the family.

SafeCare® Coach

The role of a provider's coach is to support them as a provider and conduct quality assurance, a requirement for SafeCare® delivery. Coaches observe provider's sessions, score fidelity and provide feedback. They also convene team meetings with providers to provide an opportunity to support and learn from each other.

Provider Certification and Maintenance

To achieve Provider Certification, providers must demonstrate strong fidelity to the model in three sessions for each of the three modules (Parent-Infant/Child Interaction, Home Safety, and Health) with families — nine sessions total (with a combination of assessment and training sessions).

Once certified, providers will maintain certification through monthly fidelity checks and coaching sessions, to document ongoing quality of services. This data is shared with CDHS on a quarterly basis for review. If fidelity is low, additional sessions will be reviewed with coaching until strong fidelity is achieved in two consecutive sessions.

Multilingual SafeCare Providers

If a provider delivers SafeCare® in multiple languages, they must achieve fidelity in at least one session in each module per language to be considered proficient in that language as part of their SafeCare® provider certification.

c. Target Population in Colorado

Families referred to SafeCare® are at risk of becoming, or already have been, involved in the child welfare system. SafeCare® Colorado serves families with children ages five and under who reside in one of the 40 counties or two tribal nations currently offering the program in Colorado.

SafeCare® depends on partners in the community to help identify at-risk families in need of parent support services. Referrals to SafeCare® Colorado are received from multiple pathways, such as from child welfare staff, community organizations, and self-referring parents and caregivers. SafeCare® has increased service opportunities for families who have non-court involvement child welfare involvements, thereby increasing the availability of voluntary services for Colorado children and families. Counties also have the opportunity to offer SafeCare® Colorado services to at-risk families in need of support before they are ever referred to the child welfare system, or after child welfare involvement has closed to prevent future child welfare involvement. Therefore, the program has the potential to impact more families along the entire prevention continuum in local communities across Colorado.

Families must meet at least three of the following high-risk eligibility criteria:

- Being a single parent;

- Multiple children ages five and under in the home;

- Be receiving public assistance (i.e. TANF, WIC, SNAP, Medicaid etc.);

- Child with special needs;

- Parental/caregiver mental health issues;

- Parental/caregiver substance abuse;

- Parent/caregiver less than a high school education;

- Parent/caregiver under the age of 20;

- Unstable or hazardous housing;

- Stepfather or other unrelated male caregiver in the home;

- Prior reports on the parent or caregiver to child welfare;

- Parental/caregiver history of of abuse or neglect as a child; or,

- History of violence in the home.

d. Sites in Colorado

SafeCare® Colorado sites are currently housed within community-based and county public health agencies. SafeCare® Colorado site locations are identified by targeting communities with the highest need for SafeCare® services, as well as community and organizational readiness for implementation.

Site expansion is determined by the OEC's Request for Proposal process. New sites must submit a proposal that demonstrates: organizational capacity and readiness to implement a new program; fit the scope and intent of the program; and, are perceived to have the ability to provide the greatest impact and verifiable return on available funds. Through the proposal, sites are also expected to demonstrate prior experience implementing evidence-based programs, existing relationships with possible referral sources in the community, a strong leadership structure, and adequate infrastructure (e.g., physical, and technological resources).

Although the OEC may also issue a RFP to

expand existing sites, a site may make a request to the OEC to expand their services into other counties. If statistical data in that county demonstrates characteristics of families with high need and/or that meet SafeCare® eligibility criteria, the site's capacity and readiness is deemed appropriate, relationships are established with possible referral sources including child welfare departments, and funding is available, the OEC may grant the expansion request.

The OEC has supported multiple rounds of site/county expansions in the implementation of SafeCare® Colorado, in partnership with SCC's intermediary, The Kempe Center. Currently, SCC services are provided at a total of 14 sites across 40 counties, and also serves two tribal nations, constituting a diverse program community (i.e. frontier, rural, urban, and tribal). Many of these areas are home to families with some of the state's highest resource needs and, in some areas, no previous access to home-based parent support services existed.

▌FIDELITY MONITORING

a. Coaching

In the eight years since SafeCare® was introduced to Colorado, SCC's intermediary, the Kempe Center has built a monthly coaching program that includes coaches at both Kempe and select sites. SafeCare® Colorado has six sites with trained coaches who monitor fidelity and provide coaching to providers. The cadre of coaches includes two sites with Spanish coaches who also serve state-wide bilingual/Spanish speaking providers. Kempe provides coaching to providers at sites without a trained coach.

As the program intermediary, Kempe employs SafeCare® certified trainers to train and coach SafeCare® coaches, and provides ongoing coaching and fidelity monitoring to site coaches for maintenance of their certification.

SafeCare® Colorado coaches participate in monthly coaching meetings to share information, collaborate, and identify trends in fidelity delivery of the SafeCare® model. Coaches connect with their peers throughout the state

and have been able to develop an ongoing working relationship to address the changing needs of providers in the state.

b. Addressing Fidelity Concerns

Coaching focuses heavily on the monitoring of each provider's fidelity to the SafeCare® model. To complete fidelity monitoring, each provider is asked to audio record (with the family's permission) their visits. As part of each coaching session, a provider's recording is listened to and scored by his/her coach in advance, and issues concerning fidelity are addressed in the coaching session. Each provider is required to pass fidelity by a minimum of 85%, as determined by the National SafeCare Training and Research Center (NSTRC), on any submitted and scored visit.

Should a provider not achieve 85% or higher fidelity ratings, they will need to submit additional recordings until they meet that threshold for two consecutive recordings. If the provider does not meet the minimum fidelity benchmarks or struggles in other areas of fidelity monitoring (e.g., timely recording uploads) coaches implement a provider support plan that identifies Specific, Measurable, Achievable, Relevant, Time-bound (SMART) goals to address the fidelity or coaching concerns and increase coaching frequency. The provider support plans are designed to be supportive in nature to improve provider performance and participation in the coaching process and are not intended to be punitive. Once a provider completes the parameters of a support plan, they resume regular monthly coaching.

c. Fidelity Reports

The Kempe Center utilizes an internal Coaching Tracking Form as well as the NSTRC Portal to collate quarterly and annual fidelity outcomes. These resources provide information on outcomes and percentages for individual providers, sites and SafeCare® Colorado as a whole, in a fidelity graphs document. The graphs also denote the previous year's composite data for comparison.

CDHS will coordinate with Kempe to receive relevant fidelity data which will then be translated into the standardized statewide metrics of fidelity and moved into the Colorado Fidelity Monitoring Platform. See the Colorado 5-year Prevention Plan for more details on the Platform.

CONTINUOUS QUALITY IMPROVEMENT (CQI)

The current CQI process includes three steps. First, data is obtained from sites and entered into the Salesforce data system. The second step in the CQI process is assisting sites in transforming collected data in a way that allows a site to compare and interpret their performance in several different areas to establish benchmarks. The third step in the current CQI process involves reviewing reports with site supervisors and leadership to devise strategies for improving a site's and provider's performance toward their contract benchmarks.

This process occurs monthly with Kempe site managers and site supervisors, and on a quarterly basis with the OEC SafeCare® Program Manager, Kempe staff and site leadership. Additionally, it is the role of the Kempe site managers to communicate with their individual sites on a regular basis and to be available for real time technical assistance. During the at-least-monthly contact, Kempe site managers help sites synthesize and make sense of data and performance trends at their sites. Finally, a monthly site supervisor conference call between all site supervisors, Kempe and the OEC is facilitated by a different site supervisor per conference call. This call offers a forum for sharing updates, ideas and solutions to frequently arising concerns from all participants including site supervisors, OEC and Kempe.

ELIGIBILITY FOR FEDERAL CLAIMING

For Family First IV-E claiming purposes, only children and families in an open child welfare case, and are not court-involved, are eligible for federal reimbursement to the Colorado's Children's Trust Fund.

RESEARCH AND ONGOING RIGOROUS EVALUATION

The Social Work Research Center in the School

of Social Work at Colorado State University (CSU) has been the independent evaluator of the SafeCare® program since 2013, measuring the implementation process, program outcomes and service delivery costs from 2014 to 2019. Previous evaluation findings include rates of children placed into foster care during one year following program completion were lower for families who completed SafeCare® (0%) than for families in the comparison group who did not complete SafeCare® (7%), which is a statistically significant difference. Overall findings have shown a decrease in home safety hazards and an increase in knowledge of child health and parent infant/child interaction for participating families.

After an intentional pause in SFY20 to integrate the wealth of findings from six years of evaluation and to translate research into practice, CSU created a rigorous two-year evaluation plan, which reflects Family First requirements and includes two components. A descriptive evaluation will assess implementation activities, proximal impacts, and participant populations reached for families served by SafeCare® in SFY 2019, SFY 2020, and SFY 2021. The second component, a quasi-experimental study, will rigorously evaluate the program's effectiveness at improving outcomes in four broad domains: child well-being, adult well-being, parenting practices, and protective factors. In partnership with all SafeCare® stakeholders, including the families SafeCare® serves, the current rigorous evaluation will further build the evidence-base for SafeCare® , comprehensively demonstrate the holistic impact of SafeCare® for Colorado families, and pioneer new directions in child maltreatment prevention.

See Appendix B for the SafeCare® Colorado Evaluation Plan, for FYs 2021-2023.

CHILD SAFETY AND INDIVIDUAL PREVENTION PLANS

As described in Colorado's five-year prevention plan, child safety is an important component of the implementation plan. With all open child welfare cases, the county department is responsible for ongoing safety monitoring.

During the intake phase, SafeCare® providers utilize an assessment form to gather information on child health, home safety, parent-infant/child interaction, identify parenting goals, and challenges with the target child. This initial assessment helps providers determine which focus area to target, as well as screen for the families needs.

A key component of the SafeCare® program is the proven session structure for each topic, which includes a baseline assessment, training sessions, and follow-up assessments to monitor change. Throughout the training, providers use a set of observation checklists for each topic and conduct observational assessments to gauge current skills and areas in need of improvement. SafeCare® also utilizes a change score tool as part of the individual prevention plan. Providers look for a decrease in hazards and changes in behavior as part of their monitoring. Outcomes are measured based on improvements in change scores.

WORKFORCE SUPPORT & TRAINING

SafeCare® Colorado Coach/Trainer/Site Managers (SMs) complete extensive SafeCare® Training through the National SafeCare® Training and Research Center (NSTRC). Site Managers provide training for, and continuous fidelity monitoring of all providers, keeping them up to date on topics such as barriers to delivery and needs for further training. To maintain their certification as Trainers, SMs are required to actively participate in an annual accreditation process through NSTRC by attending training workshops and having their training and coaching services observed for fidelity monitoring and feedback.

Not only do the current SafeCare® Colorado SMs have extensive experience with the delivery of the standard SafeCare® training, they also develop supplemental training to help meet identified training needs of providers and supervisors. Development of these trainings are requested from the OEC, in response to data collected through CSU's evaluation as well as requests from the sites. These trainings include:

- General SafeCare® Colorado Orientation

- Safety and Boundaries for Home Visitation Training

- Site Kickoff and Onboarding

- Various outreach trainings tailored to current and changing marketing plans for SafeCare® Colorado

- Continuous Quality Improvement

- Supervision

- SafeCare® Curriculum Booster Training

- Child Development Learning Series

- New Site Coach Workshops with Certification & Ongoing Support

- Mandated Reporting ECHO Series

- SafeCare® Support and Empowerment Series

- Creation of, and enhancement to, in-person and virtual outreach toolkits

- Site Supervisor Training and Support

- Diversity trainings

All SafeCare® Colorado site staff will be held to the trauma-informed care prevention service provider requirements designed by CDHS and included in Colorado's Five Year Prevention Plan. Site Managers will assist individual sites with ensuring compliance with the standards.

PREVENTION CASELOADS

Providers are encouraged to start with two to four families to build proficiency and competency before expanding their caseload. Once fully trained it is recommended that providers hold a caseload of 12-20 families, with an average of 15, depending on the family service need and level of intensity.

Parents as Teachers

The Parents as Teachers (PAT) program is an evidence-based early childhood home visiting model that builds strong communities, thriving families, and children who are healthy, safe, and ready to learn. Certified parent educators implement the PAT model, using its fundamental approach: partner, facilitate and reflect. There are four integrated components to the PAT model: personal visits, group connections, screening and resource network. Parent educators emphasize parent-child interaction, development-centered parenting and family well-being across all four components.

The PAT model is designed to achieve four primary goals:

- Increase parent knowledge of early childhood development and improve parenting practices;

- Provide early detection of developmental delays and health issues;

- Prevent child abuse and neglect; and

- Increase children's school readiness and school success.

Personal visits of approximately 60 minutes take place at a minimum once per month, depending on family needs. Parents engage in at least 12 group connections (or meetings) annually, and screenings are conducted annually for developmental, health, hearing, and vision issues.

▎PROGRAM SELECTION AND OUTCOMES

The Parents as Teachers (PAT) program is currently being provided in over 50% of Colorado's counties and in both of Colorado's Tribes. As a model program that provides a soft touch for families and has positive, measurable outcomes, PAT was selected as a service in Colorado's plan. Additionally, Colorado's Office of State Budgeting

and Planning and the General Assembly partnered with the Pew-MacArthur Results First Initiative to implement the Results First Initiative in Colorado. The Pew-MacArthur Results First Initiative works with jurisdictions to implement an innovative benefit-cost model. The Colorado Results First report examined PAT and described a positive cost-benefit of continuing to implement this service in Colorado. The research on PAT is compelling and relevant to Colorado because the positive effects on preventing child maltreatment occur with a staffing model that is feasible in rural areas and culturally relevant in Tribal communities. Parent educators are practical to recruit and retain in some areas of Colorado and this is particularly true in our Tribal communities, which is essential in addressing the disproportional representation of American Indian/Alaskan Native children in child welfare. PAT is used in multiple Tribal communities across the country and at both the Ute Mountain Ute and Southern Ute Indian Tribes in Colorado.

The overarching domain for PAT in Colorado is:

- Child Well-Being: Cognitive functions and abilities.

The specific outcome Colorado will be targeting and tracking in this domain is school readiness. This outcome is measured by providers using a school readiness assessment for all children over 3 years old. Statistically significant positive effect sizes were found for this domain in Clearinghouse "highly rated" studies.[1]

This outcome specifically links back to Colorado's candidacy definition by targeting developmental delays and parents' inability, or need for additional support, to address serious needs of a child/youth or related to the child/youth's behavior or physical or intellectual disability.

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1 Neuhauser, A., Ramseier, E., Schaub, S., Burkhardt, S. C. A., & Lanfranchi, A. (2018). Mediating role of maternal sensitivity: Enhancing language development in at?risk families. Infant Mental Health Journal, 39(5), 522-536. doi:http://dx.doi.org/10.1002/imhj.21738

Wagner, M. M., & Clayton, S. L. (1999). The Parents as Teachers program: Results from two demonstrations. The Future of Children, 9(1), 91-115.

SERVICE DESCRIPTION AND OVERSIGHT

a. Implementation Manual:

Parents as Teachers National Center, Inc. (August 2020). 2020 Parents as Teachers Affiliate Implementation Manual.

b. Implementation of PAT:

The Affiliate Implementation Manual (AIM) outlines how to design and deliver the PAT model with fidelity and quality, incorporating both the PAT Essential Requirements and the PAT Quality Standards.

All new parent educators and supervisors attend the Foundational and Model Implementation Trainings before delivering Parents as Teachers. Only nationally certified PAT trainers are allowed to train others in the PAT model. There is not a train-the-trainer option.

The main components of Parents as Teachers include:

Personal Visits

Home visitation is a key component of the Parents as Teachers model, with personal visits of approximately 60 minutes delivered at a minimum once a month, depending on family needs. Parent educators share research-based information and use evidence-based practices by partnering, facilitating, and reflecting with families. Parent educators use the Parent as Teachers curriculum in culturally sensitive ways to deliver services that emphasize parent-child interaction, development-centered parenting, goal setting and family well-being.

Group Connections

Another component of the Parents as Teachers model is monthly or more frequent group connections, which parents can attend with their child to obtain information and social support and share experiences with their peers. Group connections formats include family activities, presentations, community events, parent cafes, and ongoing groups.

Screenings

Annual child health, hearing, vision, and developmental screenings, beginning within 90 days of enrollment, are a component of the model. Many programs also carry out adult screenings to identify parental depression, and intimate partner violence.

Resource Network

Additionally, Parents as Teachers maintains ongoing relationships with institutions and community organizations that serve families. Parent educators help families identify needs, set goals, connect with appropriate resources, and overcome barriers to accessing services.

Each month, full-time parent educators participate in a minimum of two hours of individual reflective supervision and a minimum of two hours of staff meetings. Part-time parent educators are required to have one hour of individual reflective supervision per month. All parent educators are observed delivering a personal visit at least once during the program year, conducted by a supervisor or lead parent educator using a structured observation tool. Observations occur more often for new parent educators. In addition, the supervisor observes at least one group connection at least every six months using a structured observation tool, and reviews the planning and delivery documentation for each.

Parent educators obtain competency-based professional development and renew their certification with the National Center annually. 20 hours of annual professional development is required for all parent educators.

c. Target Population in Colorado:

PAT offers services to new and expectant parents, starting prenatally and continuing until their child reaches kindergarten. Child welfare involved families and non-child welfare involved families are eligible to access PAT. The referral process may differ between local sites, but most referrals come from community partners such as family resource centers, schools, preschools, hospitals, and family community events.

The PAT affiliates select the eligibility criteria for the target population they serve. This may include children with special needs, families

at risk for child abuse, teen parents, first time parents, immigrant parents, low-income families, parents with mental health or substance abuse issues, or families experiencing unstable housing or homelessness.

PAT affiliates may include usage of Colorado's Family Support Assessment (CFSA) tool[2], the Ages and Stages Questionnaires (ASQ)[3], as well as an assessment of housing, food, mental health, substance use, and income factors to determine eligibility.

The Parents as Teachers model is designed to serve families from pregnancy through kindergarten entry. Families can enroll at any point along this continuum. Curriculum materials provide resources to continue services through the kindergarten year if an affiliate chooses to do so.

d. Sites in Colorado

There are currently 26 PAT program sites in 36 counties across Colorado. Parent Possible serves as the Colorado state program intermediary for PAT.

FIDELITY MONITORING

Parent Possible, the state intermediary for PAT, has a well-established process for monitoring fidelity and ensuring sites engage in continuous quality improvement throughout the state. Parent Possible ensures that all 26 implementing agencies accurately input data from every home visit into the statewide data collection system. Once the data is collected, Parent Possible uses the data along with each site's Annual Performance Report and in-person site visits to assess program fidelity and adherence to PAT's 21 Essential Requirements. An organization must adhere to these Essential Requirements to become and remain a PAT affiliate. Data that addresses these requirements are reported annually on the Affiliate Performance Report (APR) to determine model

fidelity. Additional resources such as the Model Implementation Guide, the Quality Standards, and TA Briefs provide guidance and best practices recommendations for high-quality replication of the Parents as Teachers model.

Affiliates are also expected to participate in the Quality Endorsement and Improvement Process (QEIP) in their fourth year of implementation, and every fifth year thereafter. This process consists of four main steps:

1. Essential Requirements Review (front-end): Parents as Teachers National Center reviews whether the affiliate is meeting the Essential Requirements

2. The Affiliate Self-Study: the affiliate prepares and submits a written self-study describing how they meet the quality standards

3. Review of the Affiliate Self-Study: Parents as Teachers National Center reviews family files, conducts a supervisor interview and assesses the affiliate's self-study

4. Essential Requirements Review (back-end): Parents as Teachers National Center reviews whether the affiliate has continued to meet the Essential Requirements.

CDHS will coordinate with Parent Possible to receive relevant fidelity data which will then be translated into the standardized statewide metrics of fidelity and moved into the Colorado Fidelity Monitoring Platform. See the Colorado 5-year Prevention Plan for more details on the Platform.

CONTINUOUS QUALITY IMPROVEMENT (CQI)

In addition to fidelity monitoring, Parent Possible has a well-established evaluation process that tracks parent growth, literacy, school readiness, and parent-child interaction. As part of Essential Requirement 18, affiliates gather and summarize feedback from families at least annually to inform program improvements.

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2 Permission must be obtained from Family Resource Center Association before using or distributing the CFSA 2.0 matrix: info@cofamilycenters.org.

3 https://agesandstages.com/

Parent Possible employs a Director of Reporting and Evaluation, a Data & Reporting Specialist, and a Program Director to work with PAT sites on a daily basis on all aspects of implementation, data collection, and evaluation.

All PAT sites set CQI goals annually and those not meeting all of the PAT Essential Requirements are required to create Success Plans that formally lay out their goals and plans for meeting the goals.

ELIGIBILITY FOR FEDERAL CLAIMING

For Family First IV-E claiming purposes, only children and families in an open child welfare case are eligible for federal reimbursement to Colorado's Children's Trust Fund.

REQUEST FOR EVALUATION WAIVER

Colorado is seeking an evaluation waiver for PAT and, upon approval, will assess program implementation and fidelity through a robust continuous quality improvement (CQI) process rather than through formal, independent evaluation.

PAT is rated well-supported by the Title IV-E Prevention Services Clearinghouse. It has extensive and rigorous research behind it, with 6 studies qualifying as eligible for review by the Clearinghouse.

CHILD SAFETY AND INDIVIDUAL PREVENTION PLANS

As described in Colorado's five-year prevention plan, child safety is an important component of the implementation plan. With all open child welfare cases, the county department is responsible for ongoing safety monitoring.

Local sites are responsible for ensuring that staff have completed mandatory reporter training, and are required to provide their child safety policies to the PAT national site as part of the quality endorsement process every five years. If a provider identifies a safety concern, the concern will be reported to the child abuse and neglect hotline. In addition, all parent educators and supervisors are mandated reporters. If there are concerns of child abuse or neglect, they will file a report through the Colorado statewide child abuse and neglect hotline. If a child is in imminent danger, providers will call 911.

As part of Essential Requirement 14, a child health screening must be completed within 90 days of family enrollment or child's birth, and at least annually thereafter. The Child Health Record contains safety elements that must be completed as part of the review, such as: health status, safety, vision, and hearing elements. Essential Requirement 15 requires a child developmental screening for all children within 90 days of family enrollment or birth, and at least annually thereafter. This screening encompasses developmental domains such as: language, cognitive, social-emotional, and motor development. Essential Requirement 20 asks affiliates to select two outcomes to measure with eligible families. One outcome will be from a list of approved tools that measure parenting skills, practices, capacity or stress. The second outcome will be from an approved list of measures.

Additionally, some affiliates use the Colorado Family Support Assessment (CFSA) tool as part of their process in determining eligibility, and looks at the many domains in a family's life to help determine needed resources and to set family goals. One-time training is required for the CFSA tool; this is completed on an agency by agency basis. During virtual service delivery, affiliates should outline safety practices in their policies, procedures and protocols which apply during virtual visits as well.

PAT affiliates are required to use the Visit Tracker to collect specific data as required by PAT (and MIECHV, if this funding source is used). The visit tracker will be used to document the individualized prevention plan to record goals, progress and barriers to progress. This data can be accessed by the Program Intermediary for PAT, Parent Possible.

WORKFORCE SUPPORT AND TRAINING

Per Essential Requirement 2, the minimum qualifications for parent educators are a high school diploma or equivalency and two years' previous supervised work experience with young children and/or parents. All new parent educators who will deliver PAT services will attend the Foundational and Model Implementation Training before service delivery begins. These trainings are now available as a 40-hour virtual certification training. Only nationally certified PAT trainers are allowed to train others in the PAT model.

Essential Requirement 7 also states that parent educators must obtain competency-based professional development and training, and must renew their certification with the national office on an annual basis. To renew certification, the PAT National Center requires that parent educators complete a minimum of 20 hours of professional development annually.

All PAT site staff will be held to the trauma-informed care prevention service provider requirements designed by the Colorado Department of Human Services and included in Colorado's 5-year Prevention Plan. Individual sites will be responsible for ensuring compliance with the standards.

PREVENTION CASELOADS

PAT does not have a minimum or maximum caseload size, as it depends on factors that make the optimal caseload size different for each individual affiliate, as well as each parent educator. Instead, the PAT Essential Requirements set the maximum number of visits per month. Essential Requirement 13 regulates that "full-time first year parent educators complete no more than 48 visits per month during their first year and full-time parent educators in their second year and beyond

complete no more than 60 visits per month. The number of visits completed monthly is decreased proportionately when a parent educator is part-time." Factors that must be considered when determining the maximum number of visits completed monthly include:

- Parent educator responsibilities.

- Frequency of visits.

- The families the affiliate serves and their family experiences and stressors.

- Number of children per family.

- Travel time and geography.

- Languages spoken.

One way that affiliates can determine parent educator caseload size is by a point system. Supervisors can assign point values for each family on a caseload based on the above considerations, and the point total should be 50 or less.

The maximum number of parent educators that can be assigned to each supervisor is 12, regardless of whether the parent educators being supervised are full-time or part-time employees.

Parent-Child Interaction Therapy

Colorado is utilizing the Parent-Child Interaction Therapy International model. Parent-Child Interaction Therapy (PCIT) is a parent coaching program that aims to decrease externalizing child behavior problems, increase positive parenting behaviors, and improve the parent-child relationship. PCIT targets families with children who are two to seven years of age and experiencing frequent, intense emotional and behavioral problems.

PCIT is conducted through coaching sessions during which the parent(s) and child are together in a playroom while the therapist is in an observation room watching through a one-way mirror and/or live video feed. The parent wears a "bug-in-the-ear" device through which the therapist provides in-the-moment coaching.

There are two treatment phases. The first phase of treatment focuses on establishing warmth in the parent-child relationship through learning and applying skills proven to help children feel calm, secure in their relationships with their parents, and good about themselves.

The second phase of treatment equips the parent in managing the most challenging of the child's behaviors while remaining confident, calm and consistent in the approach to discipline.

Sessions can be completed in the home, at outpatient clinics, via telehealth or at a community-based agency/provider. Treatment is not session-limited, and averages three to five months (12 to 20 weekly sessions total) in duration. Treatment length varies to ensure parental attainment of goal competencies.

▌**PROGRAM SELECTION AND OUTCOMES**

PCIT is rated well-supported by the Title IV-E Prevention Services Clearinghouse. It has extensive and rigorous research behind it, with 21 studies qualifying as eligible for review by the Clearinghouse. For more information about existing research around PCIT, please see the Research and Evaluation Waiver Request section.

PCIT was selected as a prevention service in Colorado because the national literature on PCIT creates a compelling case for meeting local needs. Traditional out-patient service delivery is impractical in some parts of the state, and Colorado has identified a need for services that families can access without having to travel to a service provider. Furthermore, as of September 25, 2021, 38 percent of children/youth in out-of-home care were Hispanic, and PCIT research has shown that this intervention is culturally responsive and effective for this population.

The two overarching domains for PCIT in Colorado are:

- Child Well-Being: Behavioral and emotional functioning

- Adult Well-Being: Positive parenting practices.

Child Well-Being: Behavioral and emotional functioning

The specific outcome Colorado will be targeting and tracking in this domain is decreased oppositional and conduct problems. This outcome is measured weekly by providers using the Eyberg Child Behavior Inventory (ECBI). Statistically significant effect sizes were found in Clearinghouse "highly rated" studies[12], as measured by the ECBI Intensity Scale and Problems Scale.

This outcome specifically links back to Colorado's candidacy definition by targeting parents' inability, or need for additional support, to address serious needs of a child/youth or related to the child/youth's behavior or physical or intellectual disability.

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1 Leung, C., Tsang, S., Sin, T. C. S., & Choi, S. Y. (2015). The efficacy of Parent-Child Interaction Therapy with Chinese families: Randomized controlled trial. Research on Social Work Practice, 25(1), 117-128.

2 Leung, C., Tsang, S., Ng, G. S. H., & Choi, S. Y. (2017). Efficacy of Parent-Child Interaction Therapy with Chinese ADHD children: Randomized controlled trial. Research on Social Work Practice, 27(1), 36-47.

Adult Well-Being: Positive parenting practices

The specific outcome Colorado will be targeting and tracking in this domain is improved praise and decreased criticism. This outcome is measured weekly by providers using the Dyadic Parent-Child Interaction Coding System (DPICS). Statistically significant effect sizes were found in Clearinghouse "highly rated" studies, as measured by DPICS "Don't" Skills, DPICS Positive Practices and DPICS Command/Question/Negative Talk[345].

This outcome targeted through PCIT specifically links back to Colorado's candidacy definition by targeting parents' lack of parenting skills.

SERVICE DESCRIPTION AND OVERSIGHT

a. Implementation Manual

Eyberg, S.M. & Funderburk, B.W. (2011) Parent-child interaction therapy protocol. Gainesville, FL, PCIT International.

b. Implementation of PCIT

PCIT International works with Colorado-based agencies and providers to follow an extensive protocol to launch and sustain PCIT-certified therapists. Components of the protocol are as follows:

Training Requirements for Certified PCIT Therapists

In order to apply for certification as a PCIT therapist, therapists must document applicable graduate education, basic PCIT training, and consultation training which includes completing two cases as described below.

Graduate Education requirements

Therapists must have a master's degree or higher in a mental health field, and be a licensed mental health service provider (for example, licensed psychologist, psychiatrist, licensed clinical social worker, etc.) or be working under the supervision of a licensed mental health service provider. Psychology doctoral students who have completed the third year of training and are conducting clinical work under the supervision of a licensed mental health service provider also meet this requirement.

Basic Training

40-hours of face-to-face training with a PCIT Regional or Global Trainer is required. This basic training includes an overview of the theoretical foundations of PCIT, Dyadic Parent-Child Interaction Coding System (DPICS) coding practice, case observations and coaching with families, with a focus on mastery of child-directed interaction (CDI) and parent-directed interaction (PDI) skills, and a review of the 2011 PCIT Protocol.

Consultation Training

The applicant must serve as a therapist for a minimum of two PCIT cases to meet graduation criteria as defined by the 2011 PCIT Protocol. Until the two PCIT cases meet graduation criteria, the applicant must remain in contact via real-time consultation (e.g., telephone conference or live, online, or telehealth observation) or video review with a certified PCIT Trainer at least twice a month.

Skill Review

Applicants must have their treatment sessions observed by a certified PCIT Trainer. Observations may be conducted in real time (e.g., live or online/telehealth) or through video recording. The PCIT Trainer reviews a variety of sessions and determines whether the applicant has demonstrated mastery of each skillset. By the end of the training process, the applicant should be able to: 1) Administer, score, and interpret the required standardized measures for use in assessment and treatment planning; 2) Administer behavioral observations from

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3 Bjorseth, A., & Wichstrom, L. (2016). Effectiveness of Parent-Child Interaction Therapy (PCIT) in the treatment of young children's behavior problems. A randomized controlled study. PLoS ONE, 11(9), e0159845. doi:10.1371/journal.pone.0159845

4 Leung, C., Tsang, S., Sin, T. C. S., & Choi, S. Y. (2015). The efficacy of Parent-Child Interaction Therapy with Chinese families: Randomized controlled trial. Research on Social Work Practice, 25(1), 117-128.

5 Leung, C., Tsang, S., Ng, G. S. H., & Choi, S. Y. (2017). Efficacy of Parent-Child Interaction Therapy with Chinese ADHD children: Randomized controlled trial. Research on Social Work Practice, 27(1), 36-47.

the DPICS-IV Coding System; and 3) Achieve a minimum of 80% agreement with a PCIT Trainer using the DPICS-IV during five minutes of either live coding or continuous coding with a criterion video recording.

Final decisions about certification of PCIT Therapists will be made by PCIT. International. Certified PCIT Therapists are required to obtain at least three hours of PCIT Continuing Education credit every two years through educational activities sponsored by the PCIT International Task Force on Continuing Education.

Additional information on training requirements for initial certification can be found here: http://www.pcit.org/therapist-requirements.html

c. Target Population in Colorado

The target population for PCIT is families with children who are between two and seven years old with challenging behaviors and experiencing conflict in the caregiver-child relationship.

For families involved with child welfare, referral sources may include child welfare caseworkers and case managers.

For families not involved with child welfare, referral sources may include but are not limited to pediatricians, psychological assessments, and self–referrals.

Child-focused referrals
Children ages two to seven with frequent temper tantrums, aggressive behavior, or oppositional behavior that impacts caregiver-child functioning and/or school functioning; children with co-morbid diagnoses of intellectual disability, autism spectrum disorder, attention-deficit/hyperactivity disorder (ADHD), callous and unemotional traits, anxiety disorders and/or depressive disorders.

Parent-caregiver-focused referrals
Kinship caregivers, foster caregivers, adoptive parents, and biological parents are appropriate referrals; parents or caregivers at-risk or with histories of physical abuse towards a child or coercive parenting interactions; parents that

need help with behavior management. PCIT currently excludes families where the primary caregiver has allegations of sexual abuse, or if the parent is actively engaging in substance abuse.

d. Sites in Colorado

Currently, there are 13 agencies across Colorado offering PCIT International with 21 providers. There are also six agency trainers and one regional trainer available to scale the service. Because this model uses an individual therapy approach, there is no state intermediary at this time.

FIDELITY MONITORING

Each session type (CDI Teach, CDI Coach, PDI Teach and PDI Coach) has an associated PCIT International Protocol Treatment Integrity checklist that is used to assess teaching and coaching competencies and fidelity to the model during the rigorous certification process.

PCIT is an assessment-driven treatment, guided by weekly data from the ECBI and DPICS (described below). These standardized instruments are supplemented by additional measures the clinician may select for careful tracking of individual presenting complaints of families during treatment.

PCIT trainers may also use checklists, case-consultation logs, and other fidelity-tracking instruments to ensure standardization within their agency and fidelity to the PCIT model.

CDHS will coordinate with PCIT International to receive relevant fidelity data which will then be translated into the standardized statewide metrics of fidelity and moved into the Colorado Fidelity Monitoring Platform. See the Colorado 5-year Prevention Plan for more details on the Platform.

CONTINUOUS QUALITY IMPROVEMENT (CQI)

The Colorado Fidelity Monitoring Platform will allow PCIT to systematize processes for collecting fidelity data, ensure all therapists can access ongoing clinical supervision through telehealth platforms, and develop reports that can help sites, counties and the state take a data informed approach to

continuous quality improvement and shoring up fidelity to the PCIT model.

ELIGIBILITY FOR FEDERAL CLAIMING

For Family First IV-E claiming purposes, only children and families in an open child welfare case are eligible for federal reimbursement to Colorado's Children's Trust Fund.

RESEARCH AND EVALUATION WAIVER REQUEST

Colorado is seeking an evaluation waiver for PCIT and, upon approval, will assess program implementation and fidelity through a robust continuous quality improvement (CQI) process rather than through formal, independent evaluation.

PCIT is rated well-supported by the Title IV-E Prevention Services Clearinghouse. It has extensive and rigorous research behind it, with 21 studies qualifying as eligible for review by the Clearinghouse.

The most comprehensive review of PCIT to date can be found in the Lieneman, Brabson, Highlander, Wallace & McNeil (2017) article Parent-Child Interaction Therapy: Current Perspectives. In this article, they summarize treatment effectiveness research with the following:

"As the efficacy of PCIT has been well established,11,14 research over the past decade has focused on testing the effectiveness of PCIT within various community treatment settings. This substantive body of literature is summarized in Table 1. Several studies have demonstrated improvements in child behavior as well as increases in positive parenting skills and decreases in negative parenting skills for families receiving standard PCIT for disruptive child behaviors in community treatment settings in the US.15–18 Similar positive outcomes have been noted with PCIT delivered in child welfare settings 19–22 and with in-home delivery.23,24 More novel treatment settings for PCIT have included a time-limited modified version delivered in a managed care company,25 a PCIT-based parenting program for incarcerated women,26 PCIT delivered in a domestic violence shelter,27 and

group-based PCIT delivered by a community outreach agency.28 Each of these studies noted similar decreases in child behavior problems and increases in positive parenting skills. It is interesting to note that several studies have also shown PCIT to be effective with nonparental caregivers such as foster parents 29,30 and participants in a kinship care program.31"

In addition, PCIT has demonstrated effectiveness with a variety of cultures and countries including Mexican-American (McCabe & Yeh, 2009; McCabe, Yeh, Lau, & Argote, 2012), African-American (Butler & Eyberg, 2006; Fernandez, Butler, & Eyberg, 2011); Puerto Rican (Matos et al., 2006, 2009); Australian (Nixon, et al., 2003; Phillips, et al., 2008); Dutch (Abrahamse et al., 2012), and Chinese (Leung et al., 2009; Yu et al., 2011) families; and PCIT was culturally adapted for American Indian and Alaska Native families (Bigfoot & Funderburk, 2011).

CHILD SAFETY AND INDIVIDUAL PREVENTION PLANS

As described in Colorado's five-year prevention plan, child safety is an important component of the implementation plan. With all open child welfare cases, the county department is responsible for ongoing safety monitoring.

PCIT therapists are trained to observe behaviors that may be indicative or linked to child abuse and neglect. These observations occur during treatment sessions, where the therapist works with the parent on safe parenting skills. If a therapist observes negative parenting behaviors during treatment sessions, the therapist will interrupt the behavior and proceed with safety planning. In the event that a child is observed with signs of abuse or neglect, or if parents attend sessions with signs of intoxication, PCIT therapists will shift to safety assessment protocols, also known as crisis sessions. The therapist may talk to the parent and child individually to determine whether there are safety concerns. The therapist will make a report to the child abuse and neglect hotline if the therapists observes or learns of alleged abuse or neglect. If a child is in imminent danger, or reports feeling unsafe at home, the therapist may call the PCIT crisis hotline as well as 911 to request police reinforcement.

PCIT is an assessment-driven treatment, guided by weekly assessment data which contributes to the monitoring of safety. The ECBI is a validated measure administered weekly to monitor treatment gains. DPICS observational coding is also used and completed weekly. As part of the certification process, all therapists are required to achieve a minimum of 80% agreement with a PCIT Trainer to DPICS.

Eyberg Child Behavior Inventory (ECBI)[6]

The ECBI is a 36-item parent report instrument used to assess common child behavior problems that occur with high frequency among children with disruptive behavior disorders. It is sensitive to changes with treatment and used to monitor weekly progress in PCIT. The ECBI manual and scoring sheets may be purchased online from Psychological Assessment Resources, Inc. Sites may also use the Weekly Assessment of Child Behavior (WACB) as an alternative to the ECBI. The WACB is a valid alternative to the ECBI, as described in Bennet's 2019 article.

Dyadic Parent-Child Interaction Coding System (DPICS)[7]

The DPICS is a behavioral coding system that measures the quality of parent-child social interactions. It is used to monitor progress in parenting skills during treatment and provides an objective, well-validated measure of changes in child compliance after treatment. The manual presents many studies documenting the reliability and validity of individual DPICS categories. The DPICS (4th edition) is available in the PCIT Store.

Other key assessments tools often used in PCIT include Sutter-Eyberg Student Behavior Inventory-Revised (SESBI-R), Therapy Attitude Inventory (TAI),

Revised Edition of the School Observation Coding System (REDSOCS), and Child Rearing Inventory (CRI).

WORKFORCE SUPPORT & TRAINING

In order to apply for certification as a PCIT therapist, therapists must document applicable graduate education, attend basic PCIT training, and complete consultation training. To maintain certification, therapists are required to obtain at least 3 hours of PCIT Continuing Education credit every 2 years through educational activities sponsored by the PCIT International Task Force on Continuing Education.

All PCIT therapists and agency staff (if applicable) will be held to the trauma-informed care prevention service provider requirements designed by CDHS, as described in the five-year prevention plan.

See the Implementation of PCIT for further details on training requirements for certified PCIT therapists.

PREVENTION CASELOADS

There are no limitations for the number of cases that a clinician can carry for PCIT. It is most common that ⅓ of a clinicians caseload consists of PCIT cases, but this depends on the agency and individual preferences of the clinician.

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6 Eyberg, S.M., & Pincus, D. (1999). Eyberg Child Behavior Inventory and Sutter-Eyberg Student Behavior Inventory-Revised: Professional Manual. Odessa, FL: Psychological Assessment Resources.

Funderburk, B.W., Eyberg, S.M., Rich, B.A., & Behar, L. (2003). Further psychometric evaluation of the Eyberg and Behar rating scales for parents and teachers of preschoolers. Early Education and Development, 14, 67-81.

Rich, B.A., & Eyberg, S.M. (2001). Accuracy of assessment: The discriminative and predictive power of the Eyberg Child Behavior Inventory. Ambulatory Child Health, 7, 249-257.

7 Eyberg, S.M., Nelson, M.,M., Ginn, N.C., Bhuiyan, N., & Boggs, S.R. (2013). Dyadic Parent-Child Interaction Coding System: Comprehensive Manual for Research and Training (4th ed.). Gainesville, FL: PCIT International.

Fostering Healthy Futures - Preteen

Fostering Healthy Futures - Preteen (FHF-P) is a mentoring and skills group program for pre-adolescent children with current or previous child welfare involvement due to one or more adverse childhood experiences (ACEs). These ACEs may include the experience of maltreatment, out-of-home placement, housing, caregiver or school instability, violence exposure and/or parental substance use, mental illness, or incarceration. FHF-P uses a combination of structured individual mentoring and group-based skills training to promote prosocial development and to address the consequences of ACEs.

PROGRAM SELECTION AND OUTCOMES

Colorado conducted an independent systematic review, with a determination of FHF-P as a well-supported practice in a review by the CO Lab (see the Attachment for full documentation of this review), and found that FHF-P has a medium positive effect on child well-being outcomes (behavioral and emotional functioning) and a large positive effect on child permanency in Colorado.

For Family First, the eligible target outcome domain for FHF-P in Colorado is:

- Permanency

Colorado will be tracking the stability of and any changes in each youth's living situation both throughout the service period and 12 months following the service end date. Statistically significant effect sizes for this domain were found in Colorado's independent systematic review.

This domain specifically links back to Colorado's overall goals for Family First prevention services by decreasing the number of children/youth entering out-of-home care as measured by state data.

SERVICE DESCRIPTION AND OVERSIGHT

a. Implementation Manuals

Taussig, H.N., Wertheimer, R., Corvinus, J, & Malen, A. (2021). Fostering Healthy Futures - Preteen Pre-Implementation Documents.

Taussig, H.N., Wertheimer, R., Raviv, T., Fireman, O., Malen, A., & Culhane, S. (2021). Fostering

Healthy Futures - Preteen Implementation and Mentor Orientation Manual.

Hettleman, D., Wertheimer, R., Holmberg, J., Gennerman-Schroeder, R., Hambrick, E., Malen, A., & Taussig, H.N. (2021). Fostering Healthy Futures - Preteen Skills Group Manual.

b. Implementation

The Kempe Center for the Prevention and Treatment of Child Abuse and Neglect (Kempe) serves as the state intermediary to help scale the program, select sites and providers, provide training and ongoing technical assistance, and monitor fidelity to the models.

Kempe follows an extensive protocol to launch and sustain FHF partner agencies. Each agency that is considering implementing the FHF programming completes an FHF Readiness Assessment. After completing the assessment, agencies will discuss the ratings with the FHF Program Developers to see if their agency is a good fit for the program.

FHF-P consists of two main components:

- Skills Groups: Skills groups consist of eight children each and meet for 1.5 hours/week. The groups follow a manualized curriculum and are facilitated by mental health clinicians and graduate trainees. Topics addressed include emotion recognition, problem solving, anger management, cultural identity, change and loss, and peer pressure.

- Mentoring: Children are paired with graduate student mentors and receive 3-4 hours per week of 1:1 mentoring. Mentors help youth generalize the skills learned in a skills group to real-world settings. They focus on engaging children in their communities and teaching them advocacy skills. Mentors also interface with other adults in the child's life and create a network of support.

c. Target Population in Colorado

FHF-Preteen enrolls children ages 9 - 11 who have previous or current child welfare

involvement due to one or more adverse childhood experiences

Referral sources may include schools, child welfare and juvenile justice agencies, as well as community agencies.

Children must meet the following enrollment criteria in order to participate in FHF Preteen programming:

- Children are at least 9 and not more than 11 years of age by the first week of group

- Children and their families have current or past child welfare involvement (defined broadly) due to maltreatment

- Children's involvement with child welfare must be a result of maltreatment prevention/ intervention and not due solely to their own emotional/behavioral issues.

- Children have one or more of the following adverse childhood experiences (ACEs):

    - Maltreatment

    - Placement in out-of-home care

    - Exposure to violence

    - Parent/caregiver with severe mental illness, substance use, and/or incarceration

    - Parental death or abandonment

    - Multiple caregiver changes, moves and/or homelessness

    - Multiple school changes

- Children live less than 35 minutes away from location of skills groups at the start of program

- Children have behavioral control to be safe during transport to, and participation in, group and mentoring activities

- Children are cognitively able to participate in, and benefit from, group

- Children with sexual behavior problems, those in residential placements, and those with very mild developmental delays can be enrolled,

assuming they meet all other criteria

- Children have age-appropriate adaptive and self-care skills. Children with physical disabilities are eligible for participation provided that they do not have to be lifted in and out of a wheelchair, are not incontinent, can feed themselves, and can otherwise fully benefit from participation in the program. Eligibility for children with visual and hearing impairments, as well as those with chronic illnesses, is evaluated on a case-by-case basis.

- Children speak enough English to benefit from group (caregivers can be monolingual speakers in another language as long as there are mentors and program staff who speak their language)

- Child can continue in the program for the full duration even if they change living situations (e.g., reunify, are placed in out-of-home care), or have a change in child welfare case status (open/closed)

d. Sites in Colorado

In September 2019, FHF hired a Director of Dissemination to identify the need for FHF-Preteen across the state and to increase the reach of programming. Part of this dissemination work is to enhance Kempe's role as an intermediary—to train local agencies in the program model and provide ongoing coaching and technical assistance. The FHF-P program was offered by the Kempe Center from 2002-2012 and 2018-2021 and by Aurora Mental Health Center from 2013-2018. In 2021-22 FHF-P is being implemented by Lutheran Family Services, Ariel Clinical Services and Adoption Options in four geographic areas (Denver Metro, El Paso County, Larimer County, and Mesa County).

e. Fidelity Monitoring

Kempe, as the FHF intermediary, in conjunction with agencies implementing the FHF-P program, track multiple fidelity indices including children's program attendance, engagement and satisfaction, and implementing staff's adherence to the program model components. Program activities, including skills groups

and mentor supervision are videotaped, and Kempe reviews the videotapes and provides feedback on a regular basis. Kempe also talks with the Agency Administrative Lead on a monthly basis to discuss program implementation strengths and challenges. See Appendix 22 (Implementation Consultation and Fidelity Tracking Materials) in the Preteen Implementation and Mentor Orientation Manual[1] for the fidelity tracking instruments and a schedule of training consultation activities.

CDHS will coordinate with Kempe to receive relevant fidelity data which will then be translated into the standardized statewide metrics of fidelity and moved into the Colorado Fidelity Monitoring Platform. See the Colorado 5-year Prevention Plan for more details on the Platform.

f. Continuous Quality Improvement (CQI)

Satisfaction measures are administered to children, parents, mentors, agency staff and administrators on a regular basis. In addition, Kempe trainers rate program staff adherence to and quality of implementing program standards based upon video monitoring and consultation. When there are concerns with an agency's practice, Kempe Trainers talk with program staff and Agency Administrative Leads and also increase the frequency of video monitoring and consultation with program staff and administrators.

ELIGIBILITY FOR FEDERAL CLAIMING

For Family First IV-E claiming purposes, only preteens in an open child welfare case are eligible for federal reimbursement to the Colorado's Children's Trust Fund. In order to receive FHF-P services, preteens may not be in current out-of-home placement.

EVALUATION PLAN

Colorado is working with Dr. Heather Taussig at the University of Denver and Kempe Center at the University of Colorado to complete an evaluation for the Fostering Healthy Futures-Preteen Program.

Colorado conducted an independent systematic review, with a determination of FHF-P as a well-supported practice (see the Attachment for full documentation of this review). All of this research was conducted in Colorado; as such, the findings that FHF-P positively affects child well-being outcomes and permanency are relevant to Colorado youth, and there is a track record of driving these outcomes in Colorado.

Furthermore, based on the needs assessment data in Colorado, it is clear that there is a need for this particular intervention. For example, Colorado's state department of public health does an annual survey of kids and found that only 3.4% of school-aged children and adolescents would go to a teacher or other adult within schools for help, which suggests there is a need for mentoring programs.

At least until FHF-P is rated by the Title IV-E Clearinghouse, ongoing rigorous evaluation will continue and will consist of evaluating the program's potential impact on suicide rates, substance use, and educational success. Dr. Taussig will conduct this ongoing rigorous evaluation as a follow-up to the RCT, with a clinical trial registry found here. This research has been reviewed and approved by the University of Colorado and the University of Denver's Institutional Review Boards. The rigorous evaluation plan can be found in Appendix B.

CHILD SAFETY AND INDIVIDUAL PREVENTION PLANS

As described in Colorado's five-year prevention plan, child safety is an important component of the implementation plan. With all open child welfare cases, the county department is responsible for ongoing safety monitoring.

FHF works to build relationships with all professionals involved in the preteen's life to support preteens and their families. Throughout the program delivery, mentors are meeting with youth two times per week. Mentors are trained to observe behaviors and assess verbal responses, as safety protocols are embedded in program

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1   https://drive.google.com/file/d/1BCEblxYh39asJrsAyxYFgaxWmxQbeNNV/view?usp=sharing

activities. All interactions are documented in progress notes, and FHF collects data through a HIPAA-compliant web-based system (REDCAP) that tracks data as part of the individualized prevention plans for youth. Program staff and Kempe intermediaries capture data such as demographic data, children's, mentors' and program staff's attendance at program activities, and and permanency indices throughout the duration of FHF service delivery. Monthly summary of interactions and progress are shared with the assigned caseworker in open child welfare involvements. Mentors also meet with the youth's supportive/involved adults, such as parents/ caregivers, teachers, coaches and therapists, on a regular basis.

Concerns that do not raise suspicion of abuse or neglect are often discussed with the family and caseworker to focus on constructive solutions. In cases where abuse or neglect is suspected, reports are made both to the caseworker (in open child welfare involvements) and to the child abuse and neglect statewide hotline.

WORKFORCE SUPPORT & TRAINING

FHF has implementation manuals, in-person training, and weekly ongoing training and coaching throughout the implementation year. Pre-implementation training is a 3-day in-person training. Ongoing training and consultation during the program year ranges from 1-3 hours/week depending on the staff position in the first year of program implementation.

Mentors complete 24 hours of training and orientation before meeting with children. Mentors receive one hour of individual supervision, one hour of group supervision (during their mentees' skills group), and one hour of didactic seminar per week. Mentors also participate in a team meeting for one hour every other week.

All FHF site staff will be held to the trauma-informed care prevention service provider requirements designed by the Colorado Department of Human Services and included in Colorado's 5-year Prevention Plan. Individual sites will be responsible for ensuring compliance with the standards.

PREVENTION CASELOADS

Each mentor is assigned no more than two to four preteens, and prevention caseloads are tracked and monitored by Kempe staff.

Fostering Healthy Futures - Teen

Fostering Healthy Futures-Teen (FHF-T) is a mentoring and skills training program for 8th and 9th graders with current or previous child welfare involvement due to one or more adverse childhood experiences (ACEs). These ACEs may include the experience of maltreatment, out-of-home placement, housing, caregiver or school instability, violence exposure and/or parental substance use, mental illness, or incarceration. FHF-T's outcomes are being examined in an ongoing randomized controlled trial, but effects on permanency have already been demonstrated in a published paper.[1]

▍PROGRAM SELECTION AND OUTCOMES

Colorado conducted an independent systematic review, with a determination of FHF-P as a well-supported practice in a review by the CO Lab (see the Attachment for full documentation of this review), and found that FHF-T has a large positive effect on child permanency in Colorado.

For Family First, the eligible target outcome domain for FHF-T in Colorado is:

- Permanency

Colorado will be tracking the stability of and any changes in each youth's living situation both throughout the service period and 12 months following the service end date. Statistically significant effect sizes for this domain were found in Colorado's independent review.

This domain specifically links back to Colorado's overall goals for Family First prevention services by decreasing the number of children/youth entering out-of -home care as measured by state data.

▍SERVICE DESCRIPTION AND OVERSIGHT

a. Implementation Manuals

Taussig, H.N., Wertheimer, R., Corvinus, J., Fireman, O., & Malen, A. (2021). Fostering Healthy Futures for Teens Pre-Implementation Documents.

Fireman, O., Bender, K., Wertheimer, R., Malen, A., & Taussig, H.N. (2021). Fostering Healthy Futures for Teens Training and Mentor Orientation Manual.

b. Implementation

The Kempe Center for the Prevention and Treatment of Child Abuse and Neglect (Kempe) serves as the state intermediary to help scale the program, select sites and providers, provide training and ongoing technical assistance, and monitor fidelity to the models.

Kempe follows an extensive protocol to launch and sustain FHF partner agencies. Each agency that is considering implementing the FHF programming completes an FHF Readiness Assessment. After completing the assessment, agencies will discuss the ratings with the FHF Program Developers to see if their agency is a good fit for the program.

FHF-T consists of 1:1 mentoring by graduate students and a series of 6 teen workshops. FHF-T builds on youth's strengths and interests by engaging teens in visioning and goal-setting exercises, skills training, and workshops to build on their competencies and reduce adverse outcomes.

c. Target Population in Colorado

FHF-Teens enrolls youth entering or in 8th or 9th grade, who have previous or current child welfare involvement due to one or more adverse childhood experiences.

Referral sources may include schools, child welfare and juvenile justice agencies, as well as community agencies.

Children must meet the following enrollment criteria in order to participate in FHF-T programming:

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1   Taussig, H.N., Bender, K., Bennett, R., Combs, K.M., Fireman, O., Wertheimer, R. (2019). Mentoring for Teens with Child Welfare Involvement: Permanency Outcomes from a Randomized Controlled Trial of the Fostering Healthy Futures for Teens Program. Child Welfare 97(5), 1-24.

- Teens are entering or in 8th or 9th grade (they are also eligible if repeating one of these grades)

- Teens and their families have current or past child welfare involvement due to maltreatment

- Teens have had one or more of the following adverse childhood experiences (ACEs)

  - Abuse (physical, sexual, emotional)

  - Neglect

  - Exposure to violence

  - Exposure to adult substance use

  - Parent/caregiver with severe mental illness

  - Parent/caregiver with history of incarceration

  - History of parental death or abandonment

  - Multiple caregiver changes, moves and/or homelessness

  - Multiple school changes

  - Dependency and neglect petition and/or placement in out-of-home care

- Teens have age-appropriate adaptive and self-care skills

- Teens with child welfare involvement solely due to their own emotional/behavioral issues are not eligible

- Because of the preventive nature of the FHF-T program, youth with significant developmental delays, those who had been adjudicated for a sexual or violent offense, and those who were parenting/expecting a child are not eligible

- Teens have behavioral control to be safe during transport to, and participation in, mentoring and workshop activities

- Teens in residential placements, and those with very mild developmental delays can be enrolled, assuming they meet the above criteria

- Teens are able to commit to the 30-week program and have no plans to move out of the area during the 30-week program

- Teens live less than 35 minutes away from the workshop locations at the start of the program

- Teens are cognitively able to participate in, and benefit from, mentoring and workshops

- Teens can continue in the program even if they are placed in out-of-home care, change living situations, or have a change in child welfare case status (open/closed).

d. Sites in Colorado

In September 2019, FHF hired a Director of Dissemination to identify the need for FHF-Teen across the state and increase the reach of programming. Part of this dissemination work is to enhance Kempe's role as an intermediary—to train local agencies in the program model and provide ongoing coaching and technical assistance. The FHF-T program was offered by the Kempe Center in 2012-2014 and by the University of Denver from 2015-2019. Current implementing agencies have expressed interest in running FHF-T in 2022-23 and beyond.

e. Fidelity Monitoring

Kempe, as the FHF intermediary, in conjunction with agencies implementing the FHF-T program, tracks multiple fidelity indices including youth's program attendance, engagement and satisfaction, and implementing staff's adherence to the program model components. Program activities, including workshops and mentor supervision are videotaped, and Kempe reviews the videotapes and provides feedback on a regular basis. Kempe also talks with the Agency Administrative Lead on a monthly basis to discuss program implementation strengths and challenges.

Intern Supervisors ensure that the program is being implemented with fidelity and serve as a liaison between the agency and the program developers/consultation team. They are responsible for completing program fidelity forms and tracking outcomes at the agency.

CDHS will coordinate with Kempe to receive relevant fidelity data which will then be translated into the standardized statewide metrics of fidelity and moved into the Colorado Fidelity Monitoring Platform. See the Colorado 5-year Prevention Plan for more details on the Platform.

f. Continuous Quality Improvement (CQI)

Satisfaction measures are administered to children, parents, mentors, agency staff and administrators on a regular basis. In addition, Kempe trainers rate program staff adherence to and quality of implementing program standards based upon video monitoring and consultation. When there are concerns with an agency's practice, Kempe Trainers talk with program staff and Agency Administrative Leads and also increase the frequency of video monitoring and consultation with program staff and administrators.

ELIGIBILITY FOR FEDERAL CLAIMING

For Family First IV-E claiming purposes, only teens in an open child welfare case are eligible for federal reimbursement to Colorado's Children's Trust Fund. In order to receive FHF-T services, teens may not be in current out-of-home placement.

EVALUATION PLAN

Colorado is working with Dr. Heather Taussig at the University of Denver and Kempe Center at the University of Colorado to complete an evaluation for the Fostering Healthy Futures-Teen Program.

Fostering Healthy Futures for Teens was rated as supported practice through Colorado's Independent Systematic Review and an associated request for transitional payments. As such, it will require ongoing rigorous evaluation to continue building evidence toward the goal of meeting criteria for a well-supported practice. The Colorado-based Kempe Center, under the leadership of Dr. Heather Taussig, has conducted a rigorously designed randomized controlled trial to evaluate the efficacy of FHF-T.

Arnold Ventures funded an ongoing rigorous evaluation of the teen program, with a focus on delinquency outcomes. The pre-analysis plan is linked here: https://osf.io/n28ws/. Upon conclusion of the Arnold Ventures resourced rigorous evaluation, resources have been identified to continue this same study, with an additional focus in FFY22-24 on the program's potential impact on permanency, mental health and trauma symptoms. The continuation of this study and pre-registration of these additional Family First Relevant Outcomes can be found here (see tabular view for details). This research has been reviewed and approved by the University of Colorado and University of Denver's Institutional Review Boards.

Longer term, once new sites are on-boarded to deliver FHF-T in Colorado and it is confirmed that these sites are oversubscribed (i.e., waitlist for enrollment), Colorado will explore modeling a continued ongoing rigorous evaluation after Dr. Taussig's previous and current work. Colorado anticipates replicating measuring sustained effects on child permanency and will consider the additional inclusion of measuring child well-being as well. The rigorous evaluation plan can be found in Appendix B.

CHILD SAFETY AND INDIVIDUAL PREVENTION PLANS

As described in Colorado's five-year prevention plan, child safety is an important component of the implementation plan. With all open child welfare cases, the county department is responsible for ongoing safety monitoring.

Throughout the program delivery, mentors are meeting with youth weekly. Mentors are trained to observe behaviors and assess verbal responses. All interactions are documented in progress notes, and FHF collects data through a HIPAA-compliant web-based system (REDCAP) that tracks data as part of the individualized prevention plans for youth. Program staff and Kempe intermediaries collect demographic data, children's, mentors' and program staff's attendance at program activities, and permanency indices throughout the duration of FHF service delivery. Monthly summary of interactions and progress are shared with the assigned caseworker in open child welfare involvements. Mentors also meet with the youth's supportive/involved adults, such as parents/caregivers, teachers, coaches and therapists on a regular basis.

In cases where abuse or neglect is suspected, reports are made both to the caseworker (in open child welfare involvements) and to the child abuse and neglect statewide hotline.

Concerns that do not raise suspicion of abuse or neglect are often discussed with the family and caseworker and outline strengths as well as areas of concerns, and focus on constructive solutions.

Workforce Support & Training

FHF has implementation manuals, in-person training, and weekly ongoing training and coaching throughout the implementation year. Pre-implementation training is a 3-day in-person training. Ongoing training and consultation during the program year ranges from 1-3 hours/week in the first year of program implementation.

Mentors complete 24 hours of training and orientation before meeting with children. Mentors receive one hour of individual supervision, one hour of group supervision, and two hours of didactic seminar per week.

All FHF site staff will be held to the trauma-informed care prevention service provider requirements designed by the Colorado Department of Human Services and included in Colorado's 5-year Prevention Plan. Individual sites will be responsible for ensuring compliance with the standards.

Prevention Caseloads

Each mentor is assigned no more than three to six teens, and prevention caseloads are tracked and monitored by Kempe staff.

Functional Family Therapy

Functional Family Therapy (FFT) is a short-term prevention program for at-risk youth and their families. FFT aims to address risk and protective factors that impact the adaptive development of youth between the ages of 11 to 18, who have been referred for behavioral or emotional problems. The program is organized in multiple phases and focuses on developing a positive relationship between the therapist and the family, increasing motivation for change, identifying specific needs of the family, supporting individual skill-building of youth and family, and generalizing changes to a broader context. Typically, therapists will meet weekly with families face-to-face for 60 to 90 minutes and by phone for up to 30 minutes, over three to six months. Typically Master's level therapists provide FFT. They work as a part of a FFT-supervised unit and receive ongoing support from their local unit and FFT training organization.[1]

The FFT model consists of 5 major components, each has its own goals, focus and intervention strategies and techniques.

1. Engagement: The goals of this phase involve enhancing family members' perceptions of therapist responsiveness and credibility.

2. Motivation: The goals of this phase include creating a positive motivational context by decreasing family hostility, conflict and blame, increasing hope and building balanced alliances with family members.

3. Relational Assessment: The goal of this phase is to identify the patterns of interaction within the family to understand the relational "functions" or interpersonal payoffs for individual family members' behaviors.

4. Behavior Change: The goal of this phase is to reduce or eliminate referral problems by improving family functioning and individual skill development.

5. Generalization: The primary goals in this phase are to extend the improvements made during Behavior Change into multiple areas and to plan for future challenges.[2]

PROGRAM SELECTION AND OUTCOMES

Research partners at the Colorado Evaluation and Action Lab engaged in an extensive review of Colorado needs assessment to inform the selection of services. FFT was selected as a prevention service because the national literature on FFT creates a compelling case for meeting local needs. For example, delinquent behavior, including academic failure, is a common issue with children and adolescents across Colorado. Research shows that 46.2% of children and adolescents indicate a low commitment to school, with 37.4% reporting academic failure.[3] Healthy family functioning is a protective factor for managing delinquent behavior. Yet, 24.6% of children and adolescents indicate poor family management, with 12.9% indicating their parents would not know if they came home on time.[4] Multiple studies referenced in the research table indicate improvements in defensive communication and externalizing behaviors.

The national literature also indicates that FFT drives outcomes related to youth mental health and family functioning for individuals and families that meet Colorado's candidacy definition. The family-based model addresses the whole family. The specific outcome to be tracked and measured for this service in Colorado is youth will remain home

1 Administration for Children and Families (ACF). "Functional Family Therapy." Title IV-E Clearinghouse, Dec. 2020, preventionservices.abtsites.com/programs/252/show.

2 Functional Family Therapy LLC. "Clinical Model." Clinical Model - About FFT Training - Functional Family Therapy, fftllc.com/about-fft-training/clinical-model.html.

3   Colorado Department of Public Health & Environment. (2018). 2017 Colorado Healthy Kids Survey. Retrieved from https://cdphe.colorado.gov/healthy-kids-colorado-survey-archive.

4 Colorado Department of Public Health & Environment. (2018). 2017 Colorado Healthy Kids Survey. Retrieved from https://cdphe.colorado.gov/healthy-kids-colorado-survey-archive.

and family functioning will improve based on the Family Functioning Assessment scale.

The two overarching domains for FFT in Colorado are:

- Child Well-Being: Behavioral and emotional functioning

- Adult Well-Being: Family functioning

Child Well-Being: Behavioral and emotional functioning

The specific outcome Colorado will be targeting and tracking in this domain is decreased depression symptomatology. This outcome is measured by providers using the following pre/post assessments: OQ®-45.2 Outcome Questionnaire, Y-OQ® 2.01 Youth Outcome Questionnaire, and Y-OQ® SR 2.0 Youth Outcome Questionnaire. Statistically significant positive effect sizes were found in Clearinghouse "highly rated" studies.[5]

This outcome specifically links back to Colorado's candidacy definition by targeting the youth's mental health.

Adult Well-Being: Family functioning

The specific outcome Colorado will be targeting and tracking in this domain is improved family conflict management. This outcome is measured by providers using the Family Risk and Protective Factors assessment. Statistically significant effect sizes were found in Clearinghouse "highly rated" studies.[6]

This outcome targeted through FFT specifically links back to Colorado's candidacy definition by targeting parents' lack of parenting skills and parents' inability, or need for additional support, to address serious needs of a child/youth or related to the child/youth's behavior or physical or intellectual disability.

❚ SERVICE DESCRIPTION AND OVERSIGHT

a. Implementation Manual:

Alexander, J. F., Waldron, H. B., Robbins, M. S., & Neeb, A. A. (2013). Functional Family Therapy for adolescent behavioral problems. American Psychological Association.

b. Implementation of FFT:

FFT LLC utilizes a multi-phased approach to implementation. Sites must purchase three clinical assessments licenses utilized during FFT: the Outcome Questionnaire (OQ), the Youth Outcome Questionnaire (YOQ), and the Youth Outcome Questionnaire Self Report (YOQ SR); these must be purchased outside of the standard costs of implementation through FFT LLC.

Phase I - Clinical Training

The initial goal of the first phase of FFT implementation is to impact the service delivery context so that the local program builds a lasting infrastructure that supports clinicians to take maximum advantage of FFT training/consultation. The secondary objective of Phase I is for local clinicians to demonstrate strong adherence and high competence in the FFT model. Assessment of adherence and competence is based on data gathered through the FFT Clinical Service System (CSS) and through weekly consultations during Phase I FFT training activities. Periodically during Phase I, FFT LLC personnel provide the implementation site with feedback to identify progress toward Phase I implementation goals and steps toward beginning Phase II. Phase I includes a two-day initial clinical training, three two-day follow up trainings and a second two-day clinical training for the full team and an externship training series for the person identified to become the site supervisor in Phase II.

Phase II - Supervision Training

The objective of the second phase of implementation is to assist the site in creating greater self-sufficiency in FFT, while also maintaining and enhancing site adherence/

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5 Slesnick, N., & Prestopnik, J. L. (2009). Comparison of family therapy outcome with alcohol-abusing, runaway adolescents. Journal of Marital and Family Therapy, 35(3), 255-277. doi:10.1111/j.1752-0606.2009.00121.x

6 Slesnick, N., & Prestopnik, J. L. (2009). Comparison of family therapy outcome with alcohol-abusing, runaway adolescents. Journal of Marital and Family Therapy, 35(3), 255-277. doi:10.1111/j.1752-0606.2009.00121.x

competence in the model. Primary in this phase is developing competent onsite/virtual FFT supervision. During Phase II, FFT LLC trains a site's extern to become the onsite/virtual supervisor. This supervisor will attend two supervisor trainings, then is supported by FFT LLC during monthly phone consultations. FFT LLC provides a one-day onsite/virtual training during Phase II for the full team. In addition, FFT LLC provides ongoing consultation as necessary and reviews the site's CSS database to measure site/therapist adherence, service delivery trends and outcomes. Phase II is a year-long process.

Phase III - Maintenance Phase

The objective of the third phase of FFT implementation is to move into a partnering relationship to assure on-going model fidelity and impact issues of staff development, interagency linking and program expansion. FFT LLC reviews the CSS database for site/therapist adherence, service delivery trends and client outcomes, and provides a whole team, one-day, onsite/virtual training for continuing education in FFT (the same one-day training cited in Phase II). Phase III is renewed on an annual basis.[7]

c. **Target Population in Colorado:**

Youth between the ages of 11 and 18 with behavioral issues, who are not currently in out-of-home placements, are eligible to receive FFT services.

Referral sources to FFT may include schools, community-based organizations, hospitals, child welfare and juvenile justice agencies, and self-referrals. In order to be a candidate for FFT services, families must meet at least one of the following criteria:

- Substance use disorder or addiction

- Mental illness

- Lack of parenting skills

- Limited capacity or willingness to function in parenting roles

- Parents' inability, or need for additional support, to address serious needs of a child/youth or related to the child/youth's behavior or physical or intellectual disability

- Youth with externalized behavioral concerns

- Reunification, adoption or guardianship arrangements that are at risk of disruption

d. **Sites in Colorado**

FFT is currently being utilized in five counties across Colorado; Boulder, Denver, Larimer, Weld, and El Paso. Programming is provided through the following organizations:

1. Mental Health Partners, Boulder, CO

2. North Range Behavioral Health, Greeley, CO

3. Savio House, Denver & Colorado Springs, CO

4. Savio House FFT-G, Denver, CO

▌FIDELITY MONITORING

FFT LLC is the intermediary for the FFT provision of services across the state. Fidelity for each site is monitored through the national Clinical Service System (CSS) database. The CSS is designed to build therapist' competence and skills in the application of FFT. The CSS is the implementation tool that allows therapists to track modalities essential for successful implementation: session process goals, comprehensive client assessments, and clinical outcomes. Therapists and supervisors are required to enter the information at each consultation and evaluation. FFT LLC reviews the CSS database for site/therapist adherence, service delivery trends and client outcomes, and provides a Tri Yearly Performance Evaluation to sites three times a year reviewing outcomes and model fidelity.

CDHS will coordinate with FFT LLC to receive relevant fidelity data which will then be translated into the standardized statewide metrics of fidelity and moved into the Colorado Fidelity Monitoring Platform. See the Colorado 5-year Prevention Plan for more details on the Platform.

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7 FFT LLC. Phases of FFT Implementation and Certification, FFT LLC. , 2006.

CONTINUOUS QUALITY IMPROVEMENT (CQI)

Therapists are required to enter case information (assessments, contacts, and sessions) into the CSS. National Consultants/Supervisors are required to enter information related to their monitoring of therapists/cases into CSS at each consultation and evaluation which is brought together in a Tri-Yearly Performance Evaluation (TYPE) report. The TYPE report is generated every four months from CSS which includes things like: utilization percentage, outcomes completed, treatment pacing, consultation attendance, and assessment completion. In addition, the sites receive ongoing feedback from families on the benefits and areas for improvement of the program, providing an opportunity for real time correction to service delivery. Results from all data sources are then used by FFT LLC and the therapist to create quality assurance plans, impacting the efficacy of service provision.

FFT LLC requires that individual therapists meet with a national consultant weekly, either virtually or over the phone during Phase I of training. In Phase II, the national consultant meets twice a month, virtually or over the phone, with the staff supervisor, while the supervisor then takes over the weekly consultations with their individual therapists. In Phase III, they move to monthly calls between the staff supervisor and the consultant. Consultation includes general topics, such as issues around documentation or caseloads and moves into being more clinical, utilizing the FFT model of supervision and staffing of cases. At a minimum, the weekly calls are considered a requirement for site certification, so attendance by individual therapists is mandatory.

FFT LLC will be the main point of contact for any service/provider level fidelity monitoring and CQI efforts through implementation and the TYPE report.

ELIGIBILITY FOR FEDERAL CLAIMING

For Family First IV-E claiming purposes, only youth in an open child welfare case are eligible for federal reimbursement to Colorado's Children's Trust Fund. Per FFT service eligibility, youth may not be in current out-of-home placements in order to receive FFT services.

REQUEST FOR EVALUATION WAIVER

Colorado is seeking an evaluation waiver for FFT and, upon approval, will assess program implementation and fidelity through a robust continuous quality improvement (CQI) process rather than through formal, independent evaluation.

Existing Research

Since 2010, FFT LLC proprietary training and implementation has been evaluated in 20 published, peer-reviewed studies that show feasibility, acceptability, and positive outcomes. These studies were completed with samples from five different countries (Denmark, England, New Zealand, Singapore, and Scotland) and seven US States (California, Florida, Louisiana, New Jersey, Pennsylvania, Ohio, and Washington). Please see the FFT LLC Research Table for details on each specific study and the research outcomes.

FFT is rated as well-supported by the Title IV-E Prevention Services Clearinghouse. It has extensive and rigorous research behind it, with nine studies qualifying as eligible for review by the Clearinghouse.

CHILD SAFETY AND INDIVIDUAL PREVENTION PLANS

As described in Colorado's five-year prevention plan, child safety is an important component of the implementation plan. With all open child welfare cases, the county department is responsible for ongoing safety monitoring.

All FFT sites in Colorado follow the rigorous training schedule and guidelines in the Functional Family Therapy Clinical Training Manual. Child safety is assessed at multiple points during a family's engagement with an FFT provider.

During the referral/engagement phase of FFT, resources are provided to help the therapist make assessments around the appropriate engagement of family members. This includes conversations with the referring agent (e.g., judge, probation officer, case worker, etc) and all relevant intake materials. The therapist will be able to further assess this on phone calls with the family before

the first session. Part of this assessment decision-making includes gauging and monitoring the safety of the child/youth.

During service provision for substance use treatment, targets of FFT include the reduction in family symptoms and referral symptoms (truancy, compliance with probation, family safety, etc) by enhancing family protective factors (appropriate parental monitoring, appropriate family communication, etc) and decreasing family risk factors (inappropriate parent skills, inappropriate family communication, inappropriate problem solving skills, etc). Part of enhancing family protective factors include gauging and monitoring the safety of the child/youth.

Assessment in FFT occurs throughout the treatment period, and is an ongoing, multifaceted process that reflects the phased and functional nature of FFT. Child safety is continually gauged during the assessment process. In general, important features of this assessment phase include:

- The pretreatment formal assessment often accompanies referrals to FFT; the FFT-specific assessment occurs once actual face-to-face intervention commences. As such, much of the important assessment focus is simultaneous with early session interventions.

- Beyond the generic assessment generally obtained in educational, juvenile justice, and social service/mental health contexts, FFT emphasizes the identification of the interpersonal impact of behavior for each family member, usually determined on the basis of the characteristic patterns and processes that have characterized the family of late. The initial focus of this assessment is within the family and between the family members and the therapist. The assessment focus then broadens to include behavioral strengths and problems of the youth and parental figures.

- After the initial pretreatment formal assessments, FFT uses formal assessments when necessary to answer specific questions that cannot be answered in direct clinical contact, or when additional information

is necessary for legal and/or record keeping responsibilities (e.g., drug screens, documentation of reading scores to establish improvement or appropriate school placement) is required. This form of direct clinical contact allows for continual monitoring of child safety throughout the treatment period.

FFT therapists are all trained and required to use the CSS database to collect demographic data, case tracking information, progress and assessment notes, and outcome measures. Individualized session plans are documented in the CSS. The CSS keeps therapists focused on relevant goals, skills, and interventions necessary for each phase of FFT. The computer-based format allows the therapist to have easy access to a wide variety of process and assessment information in order to make good clinical decisions and complete outcome information to evaluate case success. The following pieces of functionality are built into the CSS system:

- Client Assessment

- Case Tracking

- Process Tracking

- Outcome Assessment

As FFT is administered weekly, and the frequency and intensity of treatment vary depending on risk and protective factors, reassessment for the risk of out-of-home placements occurs on a regular basis. Risk factors are targeted through the duration of treatment, which typically last from three to five months. In the final phases of FFT treatment, therapists create a general plan with the family, to ensure the continuation of addressing risk factors, and maintaining supports for the family post-treatment.

WORKFORCE SUPPORT AND TRAINING

Colorado's adherence to the rigorous design of the FFT implementation and certification model will ensure the successful replication of FFT programming across the state. This adherence further ensures the program's long-term viability at each individual site. The three main phases of this process: 1) Clinical Training, 2) Supervision Training, and 3) Practice Research Network, provide

Multisystemic Therapy (MST)

Multisystemic Therapy (MST)MST is an intensive family- and community-based treatment program that addresses the multiple influences that contribute to youth risk of out-of-home placement, including serious antisocial or illegal behavior, truancy, school refusal, and substance use in youth aged 12 to 17 years old. The MST approach views individuals as being part of, and influenced by, a complex network of interconnected systems that encompass individual, family, and extrafamilial (peer, school, neighborhood) factors. In MST, this "ecology" of interconnected systems is viewed as the "client." To achieve successful outcomes with these youth, interventions are generally necessary within and among a combination of these systems. MST uses the strengths of each system to promote behavior change in the youth's natural environment and increase the likelihood that they can remain successfully in their home.

The ultimate goal of MST is to empower parents, assuring that they have or can develop the skills and resources needed to address the difficulties that arise in raising children and adolescents, and to similarly empower youth to cope with family, peer, school, and neighborhood problems.

MST is provided using a home-based model of service delivery. This model helps to overcome barriers to accessing services, increases family retention in treatment, allows for the provision of intensive services, and enhances the maintenance of treatment gains. The usual duration of MST treatment is about 4-5 months, with multiple meetings between the family and therapist occurring each week. Frequency of contact is calibrated to family needs and progress, such that therapists see families more frequently early in treatment and less frequently as treatment goals are reached.

As of this writing, the program intermediary for Colorado is a licensed MST Network Partner now located at the Kempe Center for the Prevention and Treatment of Child Abuse and Neglect at the University of Colorado.

PROGRAM SELECTION AND OUTCOMES

Colorado has been evaluating the effectiveness of MST in the State through the Colorado State Pay for Success Initiative. The Pay for Success Initiative aims to expand MST to underserved regions of Colorado using a Pay for Success funding structure. The plan details the use of a propensity score analysis to match children/youth and track out-of-home placements and recidivism up to a year after receiving MST services. At the time of this writing, findings are not yet available.

For Family First, the three overarching domains for MST in Colorado are:

- Child Well-Being: Behavioral and emotional functioning

- Child well-being: Delinquent behavior

- Adult well-being: Positive parenting practices

Child Well-Being: Behavioral and emotional functioning

The specific outcome Colorado will be targeting and tracking in this domain is decreased oppositional, conduct and externalizing issues. This outcome is measured by providers using the [assessment tool(s)], which is administered [frequency]. Statistically significant effect sizes for this domain were found in multiple Clearinghouse "highly rated" studies.

This outcome specifically links back to Colorado's candidacy definition by targeting parents' inability, or need for additional support, to address serious needs of a child/youth or related to the child/youth's behavior or physical or intellectual disability.

Child Well-Being: Delinquent behavior

The specific outcome Colorado will be targeting and tracking in this domain is decreased offending behavior. This outcome is measured by providers using the [assessment tool(s)], which is administered [frequency]. Statistically significant effect sizes for this domain were found in multiple Clearinghouse "highly rated" studies.

This outcome specifically links back to Colorado's candidacy definition by targeting parents' inability, or need for additional support, to address serious needs of a child/youth or related to the child/youth's behavior or physical or intellectual disability.

Adult Well-Being: Positive parenting practices
The specific outcome Colorado will be targeting and tracking in this domain is youth-parent relationship quality. This outcome is measured by providers using the [assessment tool(s)], which is administered [frequency]. Statistically significant effect sizes for this domain were found in multiple Clearinghouse "highly rated" studies.

This outcome targeted through MST specifically links back to Colorado's candidacy definition by targeting parents' lack of parenting skills.

SERVICE DESCRIPTION AND OVERSIGHT

a. Implementation Manual

Henggeler, Schoenwald, Borduin, Rowland, & Cunningham (2009) Multisystemic Therapy for Antisocial Behavior in Children and Adolescents. The Guildford Press.

b. Implementation of MST

The Rocky Mountain MST Network (RM Network) (formerly the Center for Effective Interventions) is the MST intermediary in Colorado and oversees the implementation, program evaluation, training, and licensing of MST providers across Colorado. As an MST Services network provider licensed to disseminate MST, the RM Network trains and licenses local provider teams to ensure they deliver the intervention with quality and fidelity. Becoming a licensed MST provider involves careful consideration of how systems operate in the community and how the MST treatment model can become an integral part of the system of services available to adolescents and their families.

c. Preparatory Process

Agencies participate in a preparatory process that encompasses topics such as securing funding, developing referral criteria, confirming agency policies and procedures for MST, and obtaining memoranda of understanding between agencies. This process maximizes the chances of having a sustainable program that reliably provides good clinical outcomes.

d. Practice Requirements

Certain practice requirements are important to ensure high-quality services. These requirements include identifying training and consultation expectations; the completion of all necessary adherence-measure instruments; and creation of internal policies, such as flexible appointment schedules, maintaining caseloads of 4–6 families, monitoring duration of treatment, and other therapist supports.

e. Training

Once site readiness activities are successfully completed and the necessary contracts are signed, therapists may be trained in MST and begin serving clients.[1]

Training in MST through the RM Network is intensive and ongoing. The basic elements of training for clinical staff include a week of orientation training, weekly consultation with an expert in MST, and quarterly booster training.

The MST supervisor at each agency site provides task-oriented, analytically-focused clinical supervision on-site. The overarching objective of MST Clinical Supervision is to facilitate therapists' acquisition and implementation of the conceptual and behavioral skills required to achieve adherence to the MST treatment model. These skills are critical to reducing or eliminating identified problems and achieving positive, sustainable outcomes for children and their families.

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1 Our Services: MST, CEI Services | Graduate School of Social Work | University of Denver, 2021, socialwork.du.edu/effectiveinterventions/our-services.

The RM Network acts as the MST expert, providing weekly consultation to each treatment team (therapists and MST supervisor). Consultation sessions focus on promoting adherence to MST treatment principles, developing solutions to difficult clinical problems, and designing plans to overcome any barriers to obtaining strong treatment adherence and favorable outcomes for youths and families.[2]

f. Target Population in Colorado

In Colorado, MST providers serve youth and the families between the ages of 12 and 17. Specifically, the programming is designed to support youth and families who have experiences with or are at risk of substance abuse and/or are at risk of becoming, or already have been, involved in the child welfare or juvenile justice system.

Child welfare involved families and non-child welfare involved families are eligible to receive MST services. Referrals can be accepted from a range of sources, including but not limited to: community agencies, juvenile justice and child welfare agencies, mental health centers, schools, hospitals, faith-based community resources, and self-referrals.

Eligibility for MST services in Colorado are provided to youth, and their families, who display the following behaviors:

1. Verbal Aggression

2. Physical Aggression

3. Substance Use/Abuse

4. Police Involvement/Criminal Behaviors

5. Threatening/Posturing Behavior

6. Engagement with Negative Peers

7. Significant Property Destruction

8. Running Away/Chronic Leaving Home without Permission

9. Truancy/Suspension/Expulsion

10.   Risk of Failure at School due to Behaviors

k. Sites in Colorado

As of this writing, the RM Network supports MST in the following counties: Archuleta, Broomfield, Denver, El Paso, Huerfano, La Plata, Las Animas, Mesa, Park, Pueblo, Teller, and Weld. Programming is provided through the following organizations:

1. Four Feathers Counseling

2. Hilltop Family Resource Center

3. Health Solutions

4. North Range Behavioral Health

5. Savio House

6. Southern Colorado Community Action Agency

7. Synergy (note: this provider is not supported by the same program intermediary)

Counties or agencies interested in MST implementation engage in a full process with the RM Network to ensure successful implementation. The process consists of ensuring readiness for program implementation and sustainability, understanding of all data and CQI requirements, and review of the financial sustainability model of the program proposal. The RM Network works closely with site agencies to support all aspects of program start-up, replication and sustainability.

FIDELITY MONITORING

The RM Network follows the national guidelines for MST Therapist Adherence Measure - Revised (TAM-R) and works closely with the MST Institute (MSTI) to ensure that data are being collected ethically, accurately and to the specifications outlined.

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2 MST Services (2018). Multisystemic Therapy® (MST®) Organizational Manual. Charleston, SC.

Fidelity to MST in Colorado will be assessed by the Therapist Adherence Measure – Revised (TAM-R). The first measure is administered to parents/caregivers telephonically or via an online survey in the first two weeks of treatment and then monthly thereafter. The TAM-R contains 28 items that assess the primary caregiver's perception of treatment. Each item is rated on an adherence scale from 1 (not at all) to 5 (very much). The adherence score is calculated by the number of items rated as adherent (i.e., a 5) divided by the number of items that can be scored. Thus, adherence scores can range from 0 to 1, with a score of 0.61 considered the threshold for fidelity. The adherence scale was originally developed as part of a clinical trial on the effectiveness of MST. The measure proved to have significant value in measuring an MST Therapist's adherence to MST and in predicting outcomes for families who received treatment.

Under Family First, TAM-R will be administered by an independent call center run by MSTI. The call center will enter all data into a national MSTI database that will be used to create a feedback loop to providers and support the CQI process.

MSTI utilizes a secure data collection and reporting system that provides tools to enter, store, and manage the data collection process. Information can be accessed on the MSTI website, msti.org, to guide sites in the process of administering and interpreting the adherence measures. Logins are required to access the secure site and are restricted to individuals who are part of a licensed MST team. Training guides and online training sessions are available on how to use these tools. Information about the online training sessions can be found at msti.org/mstinstitute/services/training.html.

A secondary way in which MST agency sites ensure fidelity to the national MST model is through the use of Program Implementation Reviews (PIR), which are written reports completed every six-months by the site's MST supervisor and the RM Network's MST expert. The report details areas of strengths and areas needing improvement in implementation. The PIR also includes a review

of critical program practices and characteristics; operational, adherence, and case closure data; and the statuses of previously recommended actions and plans.

The Colorado Department of Human Services will coordinate with the RM Network to receive reports from the MSTI system, which will then be reviewed and standardized in the state's CQI Dashboard, as described in the five-year prevention plan.

CONTINUOUS QUALITY IMPROVEMENT (CQI)

The MST site supervisor, in collaboration with agency leadership and the RM Network, is primarily responsible for ensuring that the MST quality assurance and improvement program is in place and functions as intended. The MST site supervisor manages the day-to-day business of the MST team so that each therapist can effectively implement MST with each youth and family being treated. While the RM Network supports the site's data collection and CQI efforts, measurement of the implementation of MST is a function of the MSTI, and is intended to provide all MST programs around the world with tools to assess the adherence to MST of therapists, supervisors, experts and organizations. The national MSTI provides comprehensive guidelines for their MST Program Quality Assurance/Quality Improvement (QA/QI) in their organizational manual.

As part of the national MST QA/QI Program implementation, information is gathered from caregivers, therapists, and supervisors. The families receiving MST will be asked to answer a few questions about treatment periodically. In addition, therapists will be asked to rate their supervisors and experts bimonthly. Finally, supervisors report on the expert, as well as report on organizational practices in collaboration with the expert. MST experts, in collaboration with MST Supervisors and other MST program staff, will use this information to provide feedback to the MST program about how to improve adherence and program outcomes.[3]

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3 MST Services (2018). Multisystemic Therapy® (MST®) Organizational Manual. Charleston, SC.

ELIGIBILITY FOR FEDERAL CLAIMING

For Family First IV-E claiming purposes, only children and families in an open child welfare case are eligible for federal reimbursement to the Colorado's Children's Trust Fund.

REQUEST FOR EVALUATION WAIVER

Colorado is seeking an evaluation waiver for MST and, upon approval, will assess program implementation and fidelity through a robust continuous quality improvement (CQI) process rather than through formal, independent evaluation.

MST is rated as well-supported by the Title IV-E Prevention Services Clearinghouse. It has extensive and rigorous research behind it, with 16 studies qualifying as eligible for review by the Clearinghouse.

CHILD SAFETY AND INDIVIDUAL PREVENTION PLAN

As described in Colorado's five-year prevention plan, child safety is an important component of the implementation plan. With all open child welfare cases, the county department is responsible for ongoing safety monitoring.

MST utilizes a perpetual planning process throughout the treatment period. MST uses a structured, ongoing, logical treatment planning process, which includes the ongoing use of assessments that look at strengths and needs, appropriateness of treatment intervention, and prioritization. The MST analytical process includes the individual, school, peer, and community perspectives in order to determine the intervention process. Overall MST program efficiency and effectiveness depend on the effective implementation of this process, so it is rigorously monitored.

This analytic process calls for specific procedures to collect and assess data from multiple sources, develop goals with families, develop and implement interventions, assess outcomes, and adjust interventions as goals are met or new data become available. The MST Supervisor monitors the ongoing treatment planning and implementation process for each case to facilitate problem solving by the MST team and with individual clinicians as

needed. Throughout this process therapists identify risk and protective factors for families and then personalize the interventions. Upon discharge, therapists submit documentation to supervisors and experts, which is then coded and entered into the MSTI website.

MST therapists continuously assess and address safety needs with the family and assist caregivers in developing and implementing tailored safety plans. These plans involve the commitment from the caregivers to significantly increase the monitoring and supervision of their youth (with the support of others within their ecology). Together the MST therapist and caregivers closely monitor the effectiveness of the safety plan and immediately adjust the plan if barriers or loopholes are identified.

The MST guidelines for this process support staff monitoring for child safety throughout the youth and family's involvement in the program.

WORKFORCE SUPPORT AND TRAINING

MST agency sites participate in Program Implementation Reviews (PIR), which are written reports completed every six-months by the site's MST supervisor and the RM Network's MST expert. The report details areas of strengths and areas needing improvement in MST implementation. The PIR also includes a review of critical program practices and characteristics; operational, adherence, and case closure data; and the statuses of previously recommended actions and plans.

Weekly clinical group supervision is provided by the MST site supervisor as an additional support to individual therapists. MST experts also provide weekly group consultations. These sessions are an opportunity to ensure that therapists are implementing the skills and competencies that adhere to the MST treatment model, and to provide them support and access to learning opportunities that may enhance their practice.

Additionally, the national MST office has a MST Services branch that provides ongoing support to agency sites (teams) and intermediaries (network partners).

- Team Support Services (TSS) Division: The objective of this section of MST Services is to

provide direct program development and MST expert support to domestic and international MST teams and provider organizations. MST Services employs many experts and program developers, whose roles and functions are described above. Additionally, the TSS Division coordinates many of the MST trainings that are held worldwide.

- Network Partner Support Division: This division of MST Services includes the Manager of Network Partnerships (MNP) role who acts as the primary liaison between MST Network Partnership organizations and MST Services. The MNP orients, trains and provides ongoing coaching to MST experts, and partners with Network Partner Directors and Program Developers in their efforts to maintain model fidelity and positive outcomes. The Network Partner Support Division provides leadership to the global MST community in continuous quality improvement endeavors via projects, task groups, conferences and workshops each year.[4]

All MST agency sites and their staff will be held

to the trauma-informed care prevention service provider requirements designed by the Colorado Department of Human Services and included in Colorado's 5-year Prevention Plan. In addition to meeting those requirements, training specific to trauma-informed therapy is also required of clinicians upon their hiring. The booster trainings, which occur every three months, represent additional opportunities in which to incorporate further training around trauma-informed service delivery.

PREVENTION CASELOADS

MST is provided using a home-based model of service delivery. This model helps to overcome barriers to accessing services, increases family retention in treatment, allows for the provision of intensive services (i.e., therapists are full-time staff with low caseloads of 4 to 6 families per therapist), and enhances the maintenance of treatment gains. The usual duration of MST treatment is about 4-5 months, with multiple meetings between the family and therapist occurring each week. Frequency of contact is calibrated to family needs and progress such that therapists see families more frequently early in treatment and less frequently as

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4   MST Services (2018). Multisystemic Therapy® (MST®) Organizational Manual. Charleston, SC.

Child First

Child FirstChild First is a national, evidence-based two-generation model that works with young children and families, providing intensive, home-based services.

Child First is delivered by a two-person team consisting of a Master's prepared mental health clinician, with experience in early childhood development, and a family support partner who works with the entire family unit on the sources of stress that impact their family and to connect them with resources. The program is unique because it combines two complementary approaches to healing from trauma and adversity: it directly decreases the stressors experienced by the family by connecting them to needed services and supports, and it also facilitates a nurturing, responsive parent-child relationship. Research has demonstrated that this approach protects the young developing brain and metabolic systems from the damaging effects of high stress environments such as poverty, homelessness, domestic violence, and trauma.

Child First works with parents and young children together in their homes because that provides the best opportunity to strengthen families. In Colorado, Child First programming, as delivered by local affiliate agencies, is coordinated and supported by a Colorado-based intermediary agency, Invest in Kids (IIK).

PROGRAM SELECTION AND OUTCOMES

The three overarching domains for Child First in Colorado are:

- Child Well-Being: Behavioral and emotional functioning
- Adult well-being: Family functioning

- Adult well-being: Parent/caregiver mental or emotional health

Child Well-Being: Behavioral and emotional functioning

Colorado will be targeting and tracking decreased externalizing behaviors in this domain. This outcome is measured by providers using the Brief Infant-Toddler Social & Emotional Assessment (BITSEA), which is administered within the first 30 days, at 6 months, and at the end of the designated age range (35 months). Providers have the option of administering the more comprehensive Infant-Toddler Social & Emotional Assessment (ITSEA) as well. Statistically significant effect sizes were found in Clearinghouse "highly rated" studies, as measured by the ITSEA.[1]

This outcome specifically links back to Colorado's candidacy definition by targeting parents' inability, or need for additional support, to address serious needs of a child/youth or related to the child/youth's behavior or physical or intellectual disability.

Adult Well-Being: Family Functioning

Colorado will be targeting and tracking parenting stress in this domain. This outcome is measured by providers using the Parenting Stress Index-4th Edition Short Form (PSI-4-SF) at intake, 6 months, and at the conclusion of services. Statistically significant effect sizes were found in Clearinghouse "highly rated" studies, as measured by the PSI Total Score, Difficult Child, Parent-Child Dysfunction and Parent Distress.[2]

This outcome targeted through Child First specifically links back to Colorado's candidacy definition by addressing parents' lack of

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1   Lowell, D. I., Carter, A. S., Godoy, L., Paulicin, B., & Briggs-Gowan, M. J. (2011). A randomized controlled trial of Child FIRST: A comprehensive home-based intervention translating research into early childhood practice. Child Development, 82(1), 193-208. https://doi.org/10.1111/j.1467-8624.2010.01550.x

2   Lowell, D. I., Carter, A. S., Godoy, L., Paulicin, B., & Briggs-Gowan, M. J. (2011). A randomized controlled trial of Child FIRST: A comprehensive home-based intervention translating research into early childhood practice. Child Development, 82(1), 193-208. https://doi.org/10.1111/j.1467-8624.2010.01550.x

parenting skills and limited capacity or willingness to function in parenting roles.

Adult Well-Being: Parent/caregiver mental or emotional health

Colorado will be targeting and tracking parent/caregiver depression in this domain. This outcome is measured by providers using the Center for Epidemiology Scale-Depression (CESD-R) at intake, 6 months, and at the conclusion of services. Statistically significant effect sizes were found in Clearinghouse "highly rated" studies, as measured by the CESD-R.[3]

This outcome targeted through Child First specifically links back to Colorado's candidacy definition by targeting parent/caregiver mental illness.

▌ SERVICE DESCRIPTION AND OVERSIGHT

a. Implementation Manual:

Child First National Service Office, (2019). Child First Training Manual.

Implementation of Child First

The Child First National Service Office (NSO) along with IIK, follow an extensive protocol to launch and sustain Child First affiliate agencies. Components of the protocol are as follows:

Learning Collaborative

Child First uses the Learning Collaborative methodology for start-up training at agencies new to Child First, or for major expansion of capacity. The training is provided by the Child First Clinical Faculty and is a 6-8 month process that brings together staff from multiple new affiliate sites in a single location to learn together. This includes current members of the National Service Office Clinical Training Leadership Team, Child First Clinical Faculty (who are guest presenters), and Colorado's Statewide Program Director (an IIK employee). The components of the Child First Learning Collaborative include:

Child First Affiliate Site Clinical Supervisor Training

This training is designed to help new Child First Clinical Supervisors learn the skills necessary to lead a Child First affiliate site. Training includes Fundamentals of the Child First model and underlying theory of change; roles of the Statewide Program Director and Site Clinical Supervisor; reflective clinical supervision; use of video in intervention and supervision; implementation of distance learning with on-site discussions, activities and observations; the referral process and prioritization; accessing community services; staff safety within the community; and the development of the Child First Community Advisory Board.

Learning Sessions

i.   Learning Session 1: This is a 2-day training designed for new Child First providers to learn the basic components of the model, gain foundational knowledge around toxic stress and Adverse Childhood Experiences (ACEs), understand the importance of early relationships, and understand how Child First is integrated into the local early childhood system of care. It also provides training in the use of distance learning tools.

ii. Learning Session 2: This is an intensive 2-day session that follows a 3-week period of online learning (see Online Section 1 below) in which the staff learn fundamental content. This is a highly interactive training that includes attachment theory and the relationship-based, psychodynamic approach used in infant- and child-parent psychotherapy. It covers the use of video in intervention with families, therapeutic and interactive play, executive functioning, mental health consultation in early care and education, understanding the strengths and vulnerabilities of families, and the development of the formulation and treatment plan. It also includes working

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3   Lowell, D. I., Carter, A. S., Godoy, L., Paulicin, B., & Briggs-Gowan, M. J. (2011). A randomized controlled trial of Child FIRST: A comprehensive home-based intervention translating research into early childhood practice. Child Development, 82(1), 193-208. https://doi.org/10.1111/j.1467-8624.2010.01550.x

with caregivers affected by depression, substance abuse, and interpersonal violence, with strategies to help them with emotional regulation.

iii. Learning Sessions 3 and 4: Reinforcement of basic model tenets and procedures, plus additional technical and theoretical didactic and experiential sessions constitute the core of these sessions.

Child-Parent Psychotherapy

Child-Parent Psychotherapy (CPP) is taught by a certified CPP trainer. There are three sessions (the first lasting four days and two "boosters" lasting two days each) which are embedded within a Learning Collaborative model of training over a 12-month period. The first day of the first session is provided for all staff and the subsequent training is for Clinicians and Clinical Supervisors only. The training also includes 18 months of phone consultation with the CPP trainer.

Distance Learning

Child First has developed a blended training model that incorporates distance learning using web-based technology between on-site Child First training Learning Sessions. During each Online Training Period, staff will utilize narrated powerpoints, videos, guided discussions, observations, exercises, activities, process notes and readings.

The Online Training Periods occur between Child First training Learning Sessions. These provide foundational knowledge that prepares all staff for the subsequent Learning Session and for the direct work with children and families. All modules are able to be reviewed at any future time to reinforce learning or when the topic is especially relevant to a specific family.

i. Online Training Period 1 is completed between Learning Sessions 1 and 2. It covers the Child First process, the roles of the Mental Health Clinician and Family Support Partner, infant and early childhood development and normal developmental challenges, the psychological transition into parenthood,

attachment, executive functioning, psycho-social risk and protective factors, and the Child First Assessment Protocol.

ii. Online Training Period 2 is completed between Learning Sessions 2 and 3. Training Period 2 will be covered immediately after Learning Session 2, prior to beginning work with families. It includes the Child First Fidelity Framework, quality enhancement, and safety for both staff and family.

Child First Reflective Clinical Consultation and Technical Assistance

Reflective, Clinical, Site-based Consultation: Each new Child First affiliate site receives reflective, clinical consultation by the Statewide Program Director weekly for 6 months and then biweekly for 6 months. After 12 months, the affiliate Clinical Supervisor assumes full responsibility for the ongoing group reflective supervision at their site. They will continue to receive biweekly individual consultation from the Statewide Program Director.

Clinical Supervisors' Network Meeting

All Clinical Supervisors meet on a monthly basis for a combination of clinical consultation around their own cases and the reflective supervisory process, and administrative consultation around the Child First implementation process. This is an opportunity for the Clinical Supervisors to share both their challenges and successes with their colleagues, in order to facilitate peer learning and quality enhancement. This meeting is facilitated by the Statewide Program Director.

Staff Accelerated Training (STAT)

The STAT program was developed to provide a comprehensive accelerated training curriculum for new staff of existing Child First agencies. With the support of experienced Clinical Supervisors and team partners, staff can access four trainings with the critical elements of each component of the Child First model. Using a combination of didactic and experiential activities, video review and case examples, staff acquire core knowledge in four distinct phases that mirror the Learning Session content, but are

delivered in 1-2 day sessions over a period of 4 consecutive months.[4]

c. Target Population in Colorado

In Colorado, Child First serves a broad array of families with children from the prenatal stages up to the child's sixth birthday at enrollment. Specifically, the programming is designed for children who have experienced trauma, have challenging behaviors, learning problems, are living with chronic stress, and are in need of mental health support. Delinquent/justice-involved youth who are pregnant or are young parents may also be eligible if they meet the other eligibility criteria.

Child First is also designed for families whose caregivers are managing mental illness, substance use, incarceration, intimate partner violence or housing instability. Families referred to Child First are at risk of becoming, or already have been, involved in the child welfare system.

d. Sites in Colorado

Child First is currently available in the following counties: Alamosa, Conejos, Costilla, Mineral, Rio Grande, Saguache, Douglas, Boulder, Broomfield, Jefferson, El Paso, Adams, Arapahoe. Programming is provided through the following organizations:

1. San Luis Valley Behavioral Health Group

2. Aurora Mental Health Center

3. Tennyson Center for Children

4. Savio House

e. Fidelity Monitoring

IIK is the intermediary agency for the provision of Child First services across the state of Colorado. All Child First affiliate sites report to the NSO on two types of data:

1. Process data or metrics

2. Outcome data

The Child First NSO has established benchmarks for both types of data. This data is used for ongoing assessment of implementation at the affiliate sites and for Child First Accreditation.

Monthly Metrics:

- The Child First NSO has established Metric Benchmarks, which include: the number of families served, the number of visits/week, the number of missed appointments, ages of children, assessments completed, connection to community resources, early care mental health observations, supervision hours, length of service, goal completion, and prioritization of waitlist.

- Metric reports are made available to each Child First site on a monthly basis. Colorado's Statewide Program Director reviews these reports with each site to promote problem solving and the development of program-based quality enhancement strategies. Successful and innovative strategies are frequently shared with the Child First Network.

Assessment Data Collection and Analysis:

- All Child First sites must collect baseline, 6 month, and outcome assessment data according to the Child First Assessment Protocol. All assessment data must be entered into the Child First cross-site, web-based data collection system (or another system approved by the Child First NSO). Assessment data must be entered within one week of collection to promote use of scores in formulating treatment.

- Outcome reports are provided to all Child First affiliate sites (which include both site-level and team-level data) on a quarterly basis.

- Analysis of data by the Child First NSO provides opportunities for identifying challenges and problem solving, with enhanced training provided by the NSO, if needed. Effectiveness of variations in implementation across program

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4 Child First: Model Structure - Affiliate Agencies, Child First National Program Office, 9 Aug. 2018, www.childfirst.org/about-us/model-structure.

sites are explored, leading to shared quality improvement strategies across the Child First Network.[5]

CDHS will coordinate with IIK to receive relevant fidelity data which will then be translated into the standardized statewide metrics of fidelity and moved into the Colorado Fidelity Monitoring Platform. See the Colorado 5-year Prevention Plan for more details on the Platform.

CONTINUOUS QUALITY IMPROVEMENT (CQI)

A Quality Enhancement (QE) Team from the NSO works with IIK as the intermediary agency to provide CQI guidance to affiliate agencies. The QE team is responsible for working with IIK to ensure timely and accurate data collection and entry and to provide monthly metric and quarterly assessment outcome reports to all Child First sites.

Reflective Clinical Consultation: Reflective clinical consultation is provided to each affiliate agency site on an ongoing basis. IIK's Child First Program Director meets with each site's Clinical Supervisor every other week to discuss issues around specific clinical challenges, clinical fidelity and staff supervision.

Continuous Quality Improvement: IIK's Child First Program Director consults with each site on a monthly basis so that the staff understand the significance of their data and create strategies to continuously improve implementation and outcomes.

Performance Improvement Plans: If the monthly data review identifies difficulties in reaching appropriate benchmarks or lack of fidelity to the clinical model at a program site, a full meeting with the QE Team, IIK's Child First Program Director, the site's Clinical Supervisor and Senior Leader is held. At this time, a Performance Improvement Plan is created by the QE Team in collaboration with IIK and the affiliate agency, with specific goals and timelines. Progress in meeting the goals of this

plan is monitored on a monthly basis. Success of this process is a critical element in the accreditation process.

Technical assistance: IIK's Child First Program Director conducts group meetings and conference calls with Child First Network Senior Leaders. Technical assistance from the Child First NSO may be requested at any time.[6]

ELIGIBILITY FOR FEDERAL CLAIMING

For Family First IV-E claiming purposes, only children and families in an open child welfare case are eligible for federal reimbursement to the Colorado's Children's Trust Fund.

RESEARCH AND ONGOING RIGOROUS EVALUATION

Existing Research

Child First is rated "Supported" in the Title IV-E Prevention Services Clearinghouse. In 2001, Child First received a Starting Early Starting Smart federal grant from the Center for Substance Abuse Prevention (CSAP) of the Substance Abuse and Mental Health Services Administration (SAMHSA) of the U.S. Department of Health and Human Services (HHS), to support a randomized controlled trial of the Child First model. This is one of the few randomized controlled trials to test the effectiveness of an integrated home-based, psychotherapeutic, family intervention embedded in an early childhood system of care with young, vulnerable children from high risk families. Funding for data analysis was provided by the Robert Wood Johnson Foundation.

A summary of the results of this trial can be found in an article published in the January/February 2011 issue of the journal Child Development. There is an addendum to the initial publication that includes follow-up analyses, which can be found at the Child First website.[7]

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5 Child First: Data & Quality Enhancement, Child First National Program Office, 19 Feb. 2016, www.childfirst.org/our-work/data-and-quality-enhancement.

6 Child First: Data & Quality Enhancement, Child First National Program Office, 19 Feb. 2016, www.childfirst.org/our-work/data-and-quality-enhancement.

7 Child First: Research, Child First National Program Office, 18 Dec. 2020, www.childfirst.org/our-impact/research.

Plans for Ongoing Rigorous Evaluation

Pre-pandemic and publication of the Title IV-E Prevention Services Clearinghouse Handbook, MDRC launched a randomized controlled trial of Child First in two states. The trial is currently paused and random assignment will not restart until at least 80 percent of the Child First services are being delivered in home (i.e., not a telehealth adaptation). This pandemic-induced pause is providing time for the analysis plan to be revised for alignment to Title IV-E Clearinghouse Standards and the goal of determining if Child First can move from a "supported" to a "well-supported" practice.

Colorado plans to onboard to this randomized trial, and a rigorous evaluation plan was finalized in January 2022. Randomization is expected to begin once Colorado sites have demonstrated delivery of Child First with fidelity (i.e., adherence to the model). The rigorous evaluation plan can be found in Appendix B.

CHILD SAFETY AND INDIVIDUAL PREVENTION PLANS

As described in Colorado's five-year prevention plan, child safety is an important component of the implementation plan. With all open child welfare cases, the county department is responsible for ongoing safety monitoring.

In all Colorado Child First affiliate sites, child safety is assessed at intake, at six months and again at termination of the program. This may vary slightly depending on how long the family is engaged in the program. Assessment protocols are in place for all Child First programs that include key components to help staff monitor child safety, such as:

i.   Gathering information from the parents/caregivers through discussion

ii.   Observation of the child in interaction with caregiver(s) and other significant others

iii.   Interactive play with the clinician and child

iv.   Observations in the early care or school setting

v.   Developmental observations and assessments

vi.   Gathering health information

vii.   Gathering important information from other important service providers in the life of the child and family

Rigorous assessment protocols are also in place for all Child First programs, which ensure child safety is being monitored throughout the child and family's involvement in the program. The Child First Toolkit contains details on assessment tools and schedules for assessments based on child development and age.[8]

WORKFORCE SUPPORT & TRAINING

Child First training is administered through a Learning Collaborative model, as well as via distance learning. Clinical Supervisors at each Child First site are available to support staff and IIK's Child First Program Director is available for additional support when needed. Full details of the training process can be found in the Implementation of Child First section of this document.

Through the intensive training process, Child First site staff are trained to identify individual child and family needs using the SNIFF (Service Needs Inventory for Families) tool. This tool allows families to guide the identification of services that would be most appropriate for them and their individual needs. Families are asked to complete the SNIFF on their own or offered support via an interview/survey style discussion with their care coordinator/family resource partner. The SNIFF is completed on a quarterly basis to ensure that newly identified needs are included in the families' plan of care.

IIK and all Child First site staff will be held to the trauma-informed care prevention service provider requirements designed by the Colorado Department of Human Services and included in Colorado's 5-year Prevention Plan. In addition to meeting those requirements, the Child First model was specifically developed for populations who have experienced trauma and adversity. Trauma-informed care and service delivery is embedded in all training curriculums for clinicians and for the family support partner. Specific trainings

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8 Child First Toolkit. Child First National Program Office, 2013.

on trauma are available, and all clinicians who work in Child First are trained in Child-Parent Psychotherapy. The Child First NSO also received a grant to be part of the National Child Traumatic Stress Network, a national trauma training center around early childhood mental health and trauma.

PREVENTION CASELOADS

The intensity of family needs and distance traveled are important factors that go into caseload size determinations. There are requirements under the Child First model that the clinical staff complete a specific number of home visits each week (the goal is 12 home visits per week). Based on that requirement, site staff in Colorado average a caseload of one to ten families per team. To determine appropriate caseload size, the site Clinical Supervisor, in coordination with IIK, considers factors such as:

i. Family need

ii. Distance of travel from site office to family home

iii. Staff capacity threshold.

**Randomized Control Trial of Child First
Pre-Analysis Plan**

Revised January 4th, 2022

Note: The current study builds off an existing RCT which began enrolling families and which was halted in March 2020 due to the COVID-19 pandemic. The study will re-start in summer 2022 and will proceed with minor revisions to the original pre-analysis plan, reflected here. Sites will begin randomization once they have demonstrated fidelity to the Child First model and generated a waitlist.

I.   Treatment

In 2015, there were over 700,000 children in the U.S. who were abused and/or neglected, and 3.4 million families were involved in some way with child welfare systems. About 15 to 20 percent of children nationally are estimated to have significant social-emotional or behavioral problems. According to the Centers for Disease Control, 15% of young children currently experience delays or disabilities in critical skills which increase the likelihood of experiencing academic problems when they begin school. Rates of abuse, neglect, and social-emotional/behavioral problems are elevated for low-income children. Given linkages between early behavioral problems and mental health problems in adulthood, and the high societal cost of parental depression and involvement in the child welfare system, there is a strong policy interest in supporting scaled interventions that can effectively reduce the prevalence of these issues during early childhood.

One intervention that seeks to accomplish these goals is Child First, a comprehensive, home-based, therapeutic intervention targeting multi-risk young children and families, embedded in a coordinated system of care. The current study aims to estimate the impacts of the Child First treatment on outcomes for children, parents, and families.

The Child First program has two components that act synergistically:

1. a system of care approach to provide comprehensive, integrated services and supports
2. a relationship-based approach, rooted in parent-child psychotherapy, to promote nurturing, responsive parent-child interactions as well as positive social-emotional and cognitive development.

The program is implemented in the field by teams of staff made up of mental health clinicians and care coordinators, supervised by clinical directors. Clinicians have master's degrees in developmental/mental health and care coordinators have associate's or bachelor's degrees. Clinical directors have at least a master's degree and experience in managing clinicians and providing mental health services to clients. Staff reflect the ethnic diversity of the families enrolled in the Child First program and speak the language of the family's choosing. Engagement and building trust are fundamental goals of the intervention.

Families with children ages 6 months to 6 years old are identified as being eligible for Child First services if the target child has shown evidence of developmental delays, or a parent or caregiver in the family has screened high for psycho-social risk. Therapeutic services are delivered predominantly in the home, which provides an opportunity to respond to identified

problems as they arise in their natural setting and eliminates barriers of transportation, child care, and stigma. The clinician and care coordinator partner with the parent(s) in a comprehensive assessment of the child and family, identifying and involving all other service providers. The result is a family driven plan of broad, integrated supports and services for all family members, which reflect family priorities, strengths, culture, and needs.

Clinicians take primary responsibility for therapeutic assessment and intervention with the target child and parent. The care coordinator, with expertise in community resources, facilitates family engagement in community services. Weekly visits are 45–90 minutes each and made jointly or individually with the clinical and/or care coordinator, as needed by the family. A major goal of the therapeutic relationship is to help the parent(s) reflect on his or her child's experiences and the motivations and feelings underlying the child's behavior and, in turn, on their own feelings and responses to the behavior. This often involves exploring connections between the parent's past and current relationships and feelings toward the child. Together, parents and clinicians explore alternate interpretations of the meaning of the child's behavior and develop more effective responses. In addition, educational materials for the child are shared by the Child First staff with the family.

The overall goal of the Child First intervention is to help parents internalize a process for future responses to child communications rather than teaching specific strategies for problem behaviors. Additionally, clinicians are trained to reinforce positive maternal behaviors directed to the child and child behaviors that are indicative of the importance of the mother to the child. A central goal is to facilitate mutual delight through reciprocal parent–child play, as well as positive interactions through reading, play, and family routines. Play is also used to help the child master and rework difficult challenges and to promote language development.

The Child First Assessment and Intervention Manual is used to teach and guide the intervention. The Assessment and Intervention Fidelity Checklist focus on the core elements of the intervention and include: observation of the child's emotional, cognitive, and physical development; observation of parent–child interaction and play; psychoeducation including developmental stages, expectations, and meaning of typical behaviors; reflective functioning to understand the child's feelings and meaning of the child's unique and challenging behaviors; psychodynamic understanding of the mother's history, feelings, and experience of the child; alternate perspectives of child behavior and new parental responses; and positive reinforcement of both parents' and children's strengths to promote parental self-esteem. A parent–child interaction rubric helps to guide observations of parent–child interactions.

II.   Study Design

The purpose of the study is to estimate the impacts of the scaled Child First program on child, parent, and family outcomes 15- and 36-months after study enrollment and random assignment. The study design is a family-level randomized controlled trial in which 600 families split across Connecticut, eastern North Carolina, and Colorado will be randomly assigned to either the Child First program or to a Usual Care control group. Following the collection of baseline data, 60% of eligible families will be randomly assigned to receive the Child First treatment and the remaining 40% of families will not receive Child First but will be able to access any other services available to them in their community. Follow-up data used to estimate impacts of the program will first be collected 15-months after families enroll in the study. We will use caregiver surveys and administrative records to measure study outcomes. Administrative

data will also be used to estimate impacts of the Child First program on families' involvement in child welfare systems 36-months after study enrollment. The current study builds off the existing RCT infrastructure implemented prior to the start of the COVID-19 pandemic in March 2020. The research team worked with sites to enroll 226 families into the original version of the study between June 2019 and March 2020. The team made the decision to stop random assignment and re-start again after the end of the pandemic due to significant changes to the Child First program model during the pandemic (i.e., a shift to remote services) and the difficulty of obtaining follow-up data in 2020. The current pre-analysis plan builds off that existing study infrastructure but seeks to enroll an additional 600 families in the study with enrollment set to begin in summer 2022. A supplementary, exploratory study described in more detail in Appendix B will examine outcomes for the 226 families who originally enrolled in the Child First RCT prior to the start of the pandemic.

III.   Research Questions

This study will examine three primary research questions that correspond to two high priority outcomes for Child First. More specifically, the study will examine the impact of Child First on: 1) parental psychological functioning[1] 15 months post-random assignment; 2) family involvement in child welfare systems 15 months post-random assignment; and 3) family involvement in child welfare systems 36 months post-random assignment (see all primary and secondary outcome measures in Appendix A). We chose these primary outcomes because they represent the domains in which the original study identified sizeable and statistically significant impacts of Child First. We are slightly adjusting the follow-up time period for the parent survey from the original study from 12- to 15-months to ensure that the new study design aligns with the requirements of the [Title IV-E Prevention Services Clearinghouse](#) for estimating post-treatment impacts after the end of service receipt. Because Child First does not have a defined length of treatment and families can be discharged from the program between 6 and 14 months post-enrollment, this adjustment ensures that the follow-up time point will align with the requirement that the outcomes be measured after the end of treatment for all families assigned to the Child First condition. These outcomes are considered confirmatory measures and are aligned with the broader goals of the proposed study to replicate earlier findings.

We will also ask a series of secondary research questions to capture a more varied set of outcomes that are of interest to the Child First program developer and are also relevant to policymakers. These analyses will consider impacts of Child First on children's social-emotional outcomes 15 months post-random assignment, family and child emergency room visits and hospitalizations, parental education and employment, parental income, parenting stress, and children's emotional regulation. In another set of secondary analyses, we will test whether effects of Child First vary by: 1) caregiver baseline depression; 2) child behavior problems at baseline; 3) evidence of child welfare involvement at baseline; 4) caregivers' evidence of baseline substance abuse; 5) caregivers' race and ethnicity; and 6) state. These have been identified by the program developer as subgroups whose impact findings would contribute to future targeting and refinement of the program.

IV.   Sample

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[1] These measures align with the Adult Well-Being, Parent/Caregiver mental or Emotional Health Outcomes listed in the Title IV-E Prevention Services Clearinghouse Handbook of Standards and Procedures, Version 1.0.

The primary locations for the study will be a subset of Child First sites in Connecticut, North Carolina, and two Child First sites located in the Denver, Colorado metro area. The research team is working closely with the Child First national program office to identify sites to participate in the study that: 1) have fully trained teams of staff who are implementing the Child First program with fidelity; 2) are in locations where the control group is unlikely to have access to services similar to Child First; and 3) are able to recruit and serve a sufficient sample to meet study enrollment goals. Following this procedure and after engagement in site recruitment activities through the national office, MDRC will enroll approximately 12 Child First sites into the study. We expect that the bulk of these sites will be those that already participated in the original study before the start of the pandemic. Prior to recruiting families for research activities, participating Child First staff will receive training from the MDRC research team on how to assess study eligibility, ask families for written consent to participate in the study, and collect baseline data on study participants. The sample will be made up of the children (ages 6 months to 6 years at enrollment – as per Child First eligibility guidelines) and their families that: 1) are referred to the Child First sites; 2) screen as eligible for Child First services; 3) screen as eligible for the study (e.g., families in which there is risk of suicide would be ineligible for the study because they would need appropriate services immediately); and 4) provide written consent to participate, and assent for their child to be participate as well. Due to the COVID-19 pandemic, some site staff already received training on these procedures in the spring of 2019. However, all site staff will be retrained completely prior to the launch of random assignment again, in order to ensure that baseline data collection and random assignment are aligned with the team's established practices for generating equivalent groups prior to randomization.

On average, across the three locations, we expect the sample to be largely economically disadvantaged and racially/ethnically diverse. For example, we expect about half of the sample to be Hispanic, a quarter to be Black, and a quarter to be White. Based on current statistics we also assume that about two thirds of the children in the sample will be boys and that about 20% of families in total will speak Spanish as their primary language.

Families and children participating in the study will be followed longitudinally for up to three years (with the possibility of seeking future follow-up if early impacts are detected). Because this is an intent-to-treat study, all families randomly assigned to participate in the RCT will be included in the analytic sample for both the primary and secondary research questions. The treatment status (assignment to Child First vs. Usual Care) that children are assigned at enrollment will be maintained throughout the study.

V.   Data Sources

Baseline data. Prior to recruiting families for research activities, participating Child First staff will receive training (and re-training for staff with prior experience working on the study) from the MDRC research team on how to assess study eligibility, ask families for written consent to participate in the study, and collect baseline data on study participants. In addition to the information that the Child First staff already collect when enrolling new families in the program, the study baseline data collection activities will include additional measures on parents and children relevant to the impact analyses. The core goals of collecting baseline data are: 1) to increase the statistical power of the RCT design (as discussed in more detail below); 2) to accurately describe the study sample at baseline relative to the broader group of families

receiving Child First services and to establish baseline equivalence; and 3) to identify subgroups of interest based on information provided prior to random assignment. In choosing baseline and follow-up study measures, the team has built off the prior evidence from the Child First evaluation, as well as a more contemporary understanding of available measures for assessing primary and secondary outcomes. Importantly, Child First staff will collect baseline data before the randomization process begins. As such, staff will not know families' study condition when collecting these data at baseline.

Parent survey collected 15-months post-random assignment. Data used to estimate shorter-term impacts will come from a parent survey collected 15 months post-random assignment. The survey will ask parents to report on their own psychological well-being, depression, parenting stress, economic well-being, involvement in child welfare services, and their child's behaviors and emotional regulation (see full list of measures in Appendix A). All field-based data collectors will be trained and managed by a survey research firm and *will be blind to study condition* when conducting the follow-up survey. All study participants will be asked about their receipt of Child First and other services at the 15-month follow-up to document treatment contrast. However, because collecting this information could reveal information to the assessor/interviewer about the treatment status of the family, these questions about receipt of Child First will be asked after all other assessments and outcome data are collected. There is currently no planned parent survey after the 15-month follow-up. Due to the experimental design of the study we do not foresee encountering any problems with confounding variables when assessing outcomes.

*Administrative records on families' involvement in child welfare systems **15-months** and **36-months** post-random assignment*. Data on families' involvement in child welfare systems will be accessed through requests to state and county agencies. We will access the data retrospectively and then estimate impacts on involvement in child welfare services at two time-points – one shorter-term (15-months post enrollment) and one longer-term (36-months post enrollment). Due to the experimental design of the study we do not foresee encountering any problems with confounding variables when assessing outcomes.

Possible longer-term follow-up. If we find impacts of Child First on 15- month outcomes, we will pursue funding to access additional administrative data, such as Medicaid and school records, to estimate longer-term impacts on parents, families, and children. If we were to collect additional parent survey data in the longer-term, there would be a completely different person who would conduct that survey than the person who did the original 15-month follow-up survey.

Implications of follow-up timing for Title IV-E Prevention Clearinghouse. The current study is designed to ensure that any positive impacts detected in this randomized trial would help to establish Child First as a well-supported program as rated by the federal Title IV-E Prevention Clearinghouse. Child First is already a supported program because it has been evaluated before in one well-conducted randomized controlled trial and detected impacts on at least one outcome within an established domain (involvement in the child welfare system as an indicator of child safety) more than 12-months after the end of service receipt. To be well-supported, it now needs to demonstrate at least one statistically significant impact on a target outcome within one of the clearinghouse's domains (child safety, child permanency, adult well-being, or child well-being). The current design stands to meet this requirement if impacts are detected.

VI.   Methods

A family-level RCT will be used to estimate impacts on primary and secondary outcomes. The earlier RCT of Child First demonstrated average impacts on the magnitude of 0.45 standard deviations (SDs) (range .33 - .53) across all examined primary and secondary continuous outcomes, and a 17% percentage point reduction in child welfare system involvement for families who had not previously been involved with the child welfare system. Given research demonstrating that larger-scale replication studies typically find substantially smaller effects than the original trial,[2] we have aimed to power the current study to detect minimum detectable effects (MDEs)[3] of less than 0.20 SDs on continuous outcomes of interest and 10 percentage points on binary outcomes. These MDEs are considered to be of practical and policy significance (Hill et al., 2008).

In doing so, we first calculated MDEs for the primary binary outcome of interest – involvement with the child welfare system since study enrollment. We built off work from Bloom (1995) and based calculations on the following formula:

$$MDE = 1.96 * \sqrt{\frac{\pi(1 - \pi)(1 - R^2)}{T(1 - T)n}},$$

Using this equation and corresponding assumptions,[4] we calculated the MDEs for child welfare system referral to be 7 percentage points for a follow-up sample of 600 families (see Table 1). Anticipating that we will also consider this outcome for the subgroup of families who had no prior child welfare system involvement at baseline, we then calculated the MDE for a subgroup sample size of 300 to be 10 percentage points. In the original evaluation of Child First, within the group of families without any prior history of child welfare system involvement, 32% of the control group had been involved with the child welfare system by the time of the 36 month follow-up, relative to 15% of the program group (for the group of families *with* child welfare system involvement, 65% of control group members were involved with child welfare system post-random assignment, relative to 55% of program group members). Assuming similar control group take-up rates, the proposed study should be well-powered to detect impacts on child welfare system involvement at 36 months.

Table 1. *MDEs for Primary Outcomes (Administrative Records and Survey)*

Baseline sample size	Follow-up sample size	R^2 assumption	MDE for full sample at follow-up	MDE within subgroups (subgroup = 50% of sample)
Child welfare system records collected at 15- and 36-month follow-ups				
600	600	.20	7%	10%
Full 15-month follow-up survey sample				
600	480	.50	.19	.26

Notes: Power calculations were done in Power Up!. We assumed an alpha level of 0.05 using a two-tailed test, set power equal to 0.80, and assumed no adjustments for multiplicity of statistical tests. We assumed that 60% of the sample would be randomly

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[2] See Gelman & Carlin, 2014; Nuijten et al., 2015.

[3] The MDE is the smallest true program effect that can be detected with a reasonable degree of power, for a particular study design, sample size, and level of statistical significance.

[4] In this equation 1.96 is the appropriate multiplier for a two-tailed test with 80 percent power and a .05 significance level; π is the proportion of the study population that would have a value of 1 for the binary outcome in the absence of the program; R^2 is the explanatory power of the baseline covariates in the regression (conservatively assumed to be 20% based on data in the original trial used to predict a binary outcome of interest – involvement in the child welfare system). Note that this R^2 is smaller than we are assuming for the continuous outcomes because baseline involvement in the child welfare system assessed through administrative records is not as predictive of later child welfare system involvement as assessed skills and psychological functioning are of later assessments of those outcomes; T is the proportion of the study sample randomly assigned to the program group (assumed to be 60%), and n is the total number of sample members.

assigned to the Child First treatment and 40% would be randomly assigned to the control group. Subgroup power analyses assume we would examine impacts within subgroups rather than using interactions. R^2 assumptions draw upon findings from the original trial of Child First. To get an accurate estimate for R^2, the MDRC team used the data from the earlier RCT and regressed the outcomes from the original trial on a set of baseline demographic characteristics and baseline levels of the assessments that we also plan to collect in the current study. Taken together, we found R^2 values of .52 and .63 for parent psychological functioning and children's social-emotional skills, respectively. In line with these findings, we decided to use an R^2 of .5 across power analyses for all continuous outcomes. 15-month follow-up samples assume an 80% response rate for the parent survey.

With respect to field-based data collection activities, the study aims to collect 15-month parent survey data on 80% of the 600 families enrolled at baseline, with limited differential attrition between the research groups. The MDEs presented in Table 1 are smaller than the impacts detected in the original evaluation of Child First (0.53 SDs on children's social-emotional outcomes; 0.49 SDs on parental psychological functioning), suggesting that the study should have sufficient power to detect program effects.

Baseline equivalence. We will examine baseline equivalence between the families randomly assigned to the treatment and control groups by comparing them across a series of individual characteristics assessed at enrollment. Specifically, we will use a series of independent samples t-tests to examine whether there are any statistically significant differences between the groups with respect to child age at enrollment, child gender, caregiver race/ethnicity, caregiver marital status, caregiver work status, caregiver education, household income, family's receipt of public assistance, caregiver substance abuse, families' involvement in child welfare services, history of homelessness, caregiver psychological well-being, child behavior problems, and parenting stress. In addition, as recommended by the What Works Clearinghouse and used in prior work with BPS lottery data, we will also examine whether
there were *systematic* differences between the treatment and control groups when all
baseline characteristics are taken into account together. This is otherwise known as an omnibus
test. We will regress the indicator for treatment assignment on all of the
baseline characteristics. The *F* test from the regression will be used to examine whether the
characteristics on their own predicted whether students were assigned to the program or control
group, when examined as a set. If the *F* test is not statistically significant, there is evidence of no
systematic differences between the treatment and control groups.

Data analysis and dissemination. Multivariate OLS regressions adjusting for baseline covariates and including fixed effects for site will be used to estimate impacts of Child First on continuous outcomes, and multivariate logit models controlling for the same covariates and including fixed effects for site will be used to estimate effects on involvement in child welfare systems. All outcomes and their type – continuous or binary – as well as whether they are primary or secondary are listed in Appendix A. The key variable of interest will be the dummy variable indicating whether the family was randomly assigned to the treatment (Child First) or to the control group (business as usual services) at enrollment. Families' designation as treatment or control group members begins at enrollment and does not change over time. This is a best practice for ensuring high levels of internal validity. The covariates – all measured at baseline prior to randomization – will be as follows: caregiver age at enrollment, child age at enrollment, child gender, caregiver race/ethnicity, caregiver marital status, caregiver employment status, caregiver education level, whether the family received any financial assistance (SNAP, TANF, SSI, WIC) in month prior to enrollment, caregiver substance abuse at enrollment, any past or current involvement in the child welfare system, household size, indicator for whether the caregiver speaks a language other than English, and the level of the outcome measured at baseline or corresponding proxy. We will fit a different impact model for each outcome. As such,

we will fit separate models for each 15-month follow-up and 36-month follow-up outcome.

Our current MDE estimates do not assume that we will adjust the impact results to account for multiple comparisons.[5] We argue that this is acceptable because the primary outcomes are assessed either at different time points, in different outcome domains, and/or using different data sources (e.g., administrative records vs. parent reports). In addition, multiple comparisons adjustments are typically not required for secondary analyses (Schochet, 2008).

Before running impact analyses we will first assess the extent to which there is missingness on baseline covariates (race/ethnicity categories, gender, baseline level of the outcome, score on Child First's composite risk index, child age, parent age, parent education, household size, household income, parental marital status). Based on our experience collecting baseline and follow-up data on the sample of families enrolled before the pandemic (see Appendix B), we feel confident that we will have fairly complete baseline data on our covariates of interest and limited study attrition (i.e., not more than 20%). However, we will examine missing data on all characteristics used to check baseline equivalence, used as covariates, and used as primary and secondary outcomes to understand whether any missingness on baseline or outcome data is systematically missing. In line with recommendations from the What Works Clearinghouse (2018), we will use dummy-variable adjustment only for baseline covariates if we find that missingness across cases is less than 40% (which is the threshold that WWC used in their simulations to produce current recommendations). Our current plan is not to impute outcomes, but to ensure adequate response rates over time and limit attrition to the extent possible. We were successful in using this approach for the sample of families that we enrolled before the pandemic and collected survey follow-up data for 12 months post random assignment. Our ultimate imputation strategy will be finalized when baseline covariate data are available and before we examine any outcome data. This analysis plan will be updated at that time to reflect our final decision.

Subgroup analyses. We will also conduct a number of exploratory subgroup analyses which are of particular interest to the Child First program development. Specifically, we will examine whether impacts vary by 1) caregiver baseline depression; 2) child behavior problems at baseline; 3) evidence of child welfare involvement at baseline; 4) caregivers' evidence of baseline substance abuse; 5) caregivers' race and ethnicity; and 6) state. These are subgroups based in theory and understanding of model implementation that may have critical implications for program delivery and program targeting.

VII.   Human Subjects Protections

As a nonprofit, nonpartisan research organization, MDRC has a 40-year history of conducting large-scale demonstrations and evaluations. Our IRB follows all federal regulations for the protection of human subjects and we have robust data confidentiality plans and data security protections in place. MDRC is also experienced in working with non-profit organizations that serve vulnerable populations, including any human subjects provisions they may require.

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[5] This strategy of limiting primary outcomes to key domains has been argued for by Schochet (2008) and Porter (2018).

Appendix A
Measures to be Collected in Child First RCT

Outcomes of interest	Illustrative measures[1]	Baseline	15-month FUP	36-month FUP	Outcome Type	Continuous or binary
Parent-level measures						
Parental psychological functioning	Brief Symptom Inventory (BSI)		✓		Primary	Continuous
Parental depression	Center for Epidemiological Studies Depression Scale (CES-D)	✓	✓		Secondary	Continuous[3]
Parent education	Parent report	✓	✓		Secondary	Binary
Parent employment	Parent report	✓	✓		Secondary	Binary
Residential stability	Parent report	✓	✓		Secondary	Binary
Parental substance abuse	Parent report	✓	✓		Secondary	Binary
Parenting stress	Parenting Stress Index (PSI) total score and subdomain scores	✓	✓		Secondary	Continuous
Participation in community services outside Child First	Measure to assess service receipt used	✓	✓		Secondary	Binary
Child-level measures						
Social-emotional skills & behaviors[2]	Brief Infant Toddler Social-Emotional Assessment (BITSEA) for children younger than 4 at follow-up & the Preschool & Kindergarten Behavior Scales (PKBS) for children older than 4 age follow-up	✓	✓		Secondary	Continuous
Emotional regulation	Behavior Rating Inventory of Executive Function – Preschool Version (BRIEF-P)	✓	✓		Secondary	Continuous
Family-level measures						
Involvement w/ child welfare systems	Collected from child welfare system administrative records	✓	✓	✓	Primary	Binary
Family ER visits/hospitalizations	Parent report	✓	✓		Secondary	Continuous

[1] Time has been allocated to the beginning of the project period to finalize a set of measures for the study that will work for the partner organizations and with the project budget. The current analysis plan will be updated once the specific set of measures for baseline and follow-up are finalized.

[2] Due to the wide age range of children in the study we will need to administer different measures for younger and older children. Given that this is an secondary outcome, we will fit models for child outcomes in three ways: 1) by estimating impacts within age groups; 2) by standardizing scores within age groups and then pooling the data across age groups to estimate impacts on externalizing behaviors for the child sample; and 3) by identifying the subset of items across the measures that are conceptually similar and estimating impacts for the full sample on just that subset of items. We used this approach in the impact analysis we did on children enrolled before the start of the pandemic and will thus build off that earlier work and precedent.

3 We may also fit an exploratory impact model estimating impacts on the clinical cut point for the depression scale, which would require use to binarize the outcome.

Appendix B

COVID-19 Exploratory Study
Addendum to Pre-Analysis Plan

Rationale for the COVID-19 exploratory study. As noted in the full pre-analysis plan, the research team originally began enrolling families into the Child First RCT in June 2019. In early March 2020, prior to the start of COVID-19 shut-downs, the team had enrolled 226 families into the study across the participating sites. As of March 15th, 2020, the research team made the decision in partnership with the study's funders and the sites themselves to halt random assignment. Later, during the summer of 2020, the team made a further decision with partners and funders to re-start enrollment into the study from scratch, in order to be able to estimate impacts of Child First on outcomes when all families would get the opportunity to experience the in-person, in-home version of the model. In addition, there were further concerns that because child welfare referrals declined dramatically at the start of the pandemic, two of the primary outcomes for the current study would be biased and we would lack the data needed to establish any impact of Child First on involvement in child welfare, should an impact exist. Even as we continued to plan to begin enrollment again, the team did think there was value in continuing to collect some data from the 226 families who enrolled in the study prior to the start of the pandemic. We had limited funds but decided to conduct a web-based follow-up survey with these families in order to at least describe their experiences during the pandemic and potentially support strengthening of virtual and other services for families in the future.

Examining impacts of Child First during COVID-19. The research team was much more successful in conducting the web-based survey that we originally expected. We were able to generate an 81% response rate on the web-based, self-reported survey, reflecting 183 completed surveys (out of a target 226). There was very limited differential attrition by study condition. Treatment group members – 60% of the baseline sample – make up 61% of the web-based survey respondent sample. Control group members – 40% of the baseline sample – make up 39% of the web-based survey respondent sample. We shared this information with the Child First National Program Office and they indicated interest in the research team estimating impacts of Child First during this time on outcomes for parents, families, and children. The goal of conducting an impact analysis would be to learn about whether the program achieved its targeted objectives during this uniquely challenging time, to understand the extent to which the program was able to help families access needed economic services, and to consider whether the pattern of impacts – if detected – differed from patterns seen during normal operating conditions.

Research aims. All the research questions for the supplementary COVID-19 study are exploratory. As noted below, we have limited statistical power to detect impacts of Child First on targeted outcomes given the small sample size of 183 total families (N = 72 control group; N = 111 treatment group). As such, we will use an exploratory approach to estimate impacts of Child First on parents' psychological well-being (using the CESD-R and the BSI, as outlined in Appendix Table A for the full-study pre-analysis plan), parenting stress (using the Parenting Stress Index), parental employment, food insecurity, residential stability, involvement in child welfare, receipt of virtual and Child First services, receipt of mental health services, receipt of parenting services, receipt of financial assistance, receipt of support to access material supports

(e.g., internet, telephone, PPE, food, household items), receipt of domestic violence services, and substance abuse.

Statistical power. We initially used similar assumptions as noted in the main pre-analysis plan to calculate statistical power for the current study. Assuming an alpha of .05, a two-tailed test, power set to .80, an R^2 of .5, and 61% of the sample assigned to treatment, we found that we have the power to detect impacts of .30 standard deviations on outcomes of interest. Given this large minimum detectable effect (MDE) and the purely exploratory nature of the study, we argue that it is appropriate to consider an alpha of .10 in this supplementary work, particularly because we are using a two-tailed test and an alpha of .10 is often used in large-scale, federally-funded projects of policy relevant interventions. After making this adjustment, our revised MDE for continuous outcomes is .27. We will thus use a .10 alpha level when conducting our exploratory impact analyses for the COVID-19 supplementary study.

Baseline equivalence. We have examined baseline equivalence across the treatment and control group for the COVID-19 study on demographic characteristics assessed at study intake. Below we present these for the sample who participate in the follow-up research activities.

As illustrated in Table 1, our randomization appears to have worked fairly well and there were few, statistically significant observable differences between the groups on these characteristics. When conducting our impact analysis, we will explore parents' reports of psychological well-being, parenting stress, and children's social-emotional skills as other measures for which to assess baseline equivalence.

Impact models. We will follow the same approach for fitting impact models for the supplementary study as we outlined in the main pre-analysis plan. We anticipate fitting impact models for the *full sample only* as we will have very limited ability to detect statistically significant subgroup impacts. We will adjust for the following baseline characteristics in our impact models – the level of the outcome assessed at baseline, child age at intake, child gender, caregiver age, caregiver race, caregiver education, caregiver marital status, receipt of public assistance, caregiver substance abuse, family history of homelessness and the family's previous or current involvement with child welfare. We used prior work from large-scale studies of home visiting (e.g., MIHOPE) and past impact work on Child First (Lowell et al., 2011) to identify this list of covariates. If we identify any further differences between the treatment and control groups at baseline we will include those variables as covariates in the impact models to account for those observable differences. The bulk of our outcomes come from the web-based parent survey. However, we will later request access to child welfare records for this sample of families and further explore impacts using those administrative data as well.

Missing data analysis. We have limited missing data at baseline for this supplementary study sample (5% or less across planned baseline covariates) and will restrict the sample to the families for whom we have complete data at follow-up. Our review of the impact data thus far suggest that for individuals who completed the follow-up survey, missingness on items is minimal (5% or less). We will conduct a descriptive analysis to describe whether there are any observable characteristics that may help explain any missingness on outcomes. However, in line with our

approach for dealing with missing data in the main study, we do not plan to impute outcomes in this supplementary study.

Multiple comparisons. Because all of our study aims are entirely exploratory, we do not plan to conduct any adjustments for multiple comparisons.

Table 1

Sociodemographic Characteristics of the Analytic Sample at Baseline

Characteristic	Program %	Control %	
Child			
Female	33.33	38.89	
Caregiver			
Race/ethnicity			
Hispanic	33.64	29.17	
White	44.55	43.06	
Black	18.18	22.22	
Other	3.64	5.56	
Marital status			
Married or living with partner	38.18	44.44	
Divorced or separated	23.64	12.50	†
Single, never married	37.27	43.06	
Widowed	0.91	0.00	
Work status			
Unemployed	35.14	39.44	
Part-time employed	30.63	28.17	
Full-time employment	34.23	32.39	
Education			
Less than high school degree	13.64	11.43	
High school degree or GED	22.73	34.29	
Some college	46.36	44.29	
Bachelor's degree or higher	17.27	10.00	
Birth mother			
Education			
Less than high school degree	20.41	16.67	
High school degree or GED	28.57	42.42	†
Some college	37.76	34.85	
Bachelor's degree or higher	13.27	6.06	
Household			
Low-income, earnings less than $2,000	79.80	74.19	
Low-income, based on TANF receipt, Medicaid receipt, and earnings less than $500	74.76	70.59	
Family			

Receiving public assistance	73.64	76.06
Ever homeless	13.33	24.29 †
Substance abuse	17.14	21.43
Involvement in child welfare system	59.63	56.34
Number of families enrolled	111	72

Note: N = 183 families. Sample has limited missing data.
*** p < .001, ** p < .01, * p < .05, † p < .10

To: Colorado Department of Human Services (CDHS)

From: Elysia Clemens, Deputy Director/COO, Colorado Evaluation and Action Lab

Date: February 2, 2021

Subject: Colorado FFPSA Technical Review Submission for Fostering Healthy Futures for Preteens

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Independent reviewers Courtney Everson and Stephanie Rogers assigned a rating of "Well-supported" for the Fostering Healthy Futures for Preteens program.

- "Well-supported" means that the program has at least two eligible, well-designed and well-executed studies with non-overlapping samples and that at least one of the studies, aligned to Title IV-E Prevention Services Clearinghouse standards, reported one or more sustained positive effects for at least 12 months beyond the end of treatment on a Family First-relevant outcome.

- Additional evidence on Fostering Healthy Futures is forthcoming via a journal publication currently under review. Once publicly available, it will be assessed and this technical review updated accordingly.

An overview of the technical review process and key findings are bulleted below:

- After conducting a comprehensive literature review, reviewers identified two potentially eligible studies across four publications. Reviewers concluded that two unique studies (three publications)[1,2,3] met handbook design and execution standards. One publication that did not examine a Family First-relevant target outcome was deemed ineligible for full review.

- The eligible studies were all randomized controlled trials (RCTs) with no known confounds. A total of 25 eligible contrasts across the two studies (three publications) were rated; 23 of the 25 met handbook design and execution standards, with 14 rated as moderate support of causal evidence and nine rated as high support of causal evidence. Reviewers calculated baseline equivalence and effect sizes using handbook standards and guidelines.

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[1] Taussig, H., Weiler, L., Garrido, E., Rhodes, T., Boat, A. & Fadell, M. (2019). A Positive Youth Development Approach to Improving Mental Health Outcomes for Maltreated Children in Foster Care: Replication and Extension of an RCT of the Fostering Healthy Futures Program. *Am J Community Psychol*, 64(3-4): 405-417.

[2] Taussig, H. and Culhane, S. (2010). Impact of a mentoring and skills group program on mental health outcomes for maltreated children in foster care. *Arch Pediatr Adolesc Med*, 164(8): 739-46.

[3] Taussig, H., Culhane, S., Garrido, E. & Knudtson, M. (2012). RCT of a Mentoring and Skills Group Program: Placement and Permanency Outcomes for Foster Youth. *Pediatrics*, 130(1): e33-e39.

- Of the 23 contrasts examined, four contrasts in the first study and two contrasts in the second study had favorable (statistically significant and in the desired direction) impact estimates. These included child well-being outcomes of behavioral and social functioning—as measured by the Mental Health Index, Disassociation Scale, and Quality of Life Scale—as well as the child permanency outcome of placement disruption. Of the favorable effects in the first study, one was sustained for zero months (immediate post-test measure), two were sustained for six months, and one was sustained for 12 months beyond the end of treatment. Of the favorable effects in the second study, both were sustained for six months beyond the end of treatment. There were no contrasts with unfavorable impact estimates, and the remaining 17 contrasts showed no statistical significance.

- The FHF-P program has a clearly defined 30-week end of treatment mark, and study authors were clear in the post-completion administration time points for outcome measures. It was thus possible to cleanly determine the length of effect beyond the end of treatment for all favorable effects.

The complete set of technical review documents is linked here.

Attachment B: Checklist for Program or Service Designation for HHS Consideration

Instructions:

Section I: The state must complete Section I (Table 1) once to summarize all of the programs and services that the state reviewed and submitted and the designations for HHS consideration.

Section II: The state must complete Section II (Tables 2 and 3) once to describe the independent systematic review methodology used to determine a program or service (listed in Table 1) designation for HHS consideration. Section II outlines the criteria for an independent systematic review. To demonstrate that the state conducted an independent systematic review consistent with sections 471(e)(4)(C)(iii)(I), (iv)(I)(aa) and (v)(I)(aa) of the Act, the state must answer each question in the affirmative. If the independent systematic review used the Prevention Services Clearinghouse Handbook of Standards and Procedures, the relevant sections must be indicated in the "Handbook Section" column. If other systematic standards and procedures were used, states must submit documentation of the standards and procedures used to review programs and services. States should determine the standards and procedures to be used prior to beginning the independent systematic review process. If the state cannot answer each question in Table 2 and Table 3 in the affirmative, ACF will not make transition payments for the program or service reviewed by the state using those standards and procedures.

Section III: The state must complete Section III (Tables 4 and 5) for each program or service listed in Table 1 and provide all required documentation. Section III outlines the requirements for the review of the program or service. States should complete Table 4 prior to conducting an independent systematic review to determine if a program or service is eligible for review. For a program or service to be eligible for review, the answer to both questions in Table 4 must be affirmative and the state must provide the required documentation. If a program or service is eligible for review, the state must conduct the review and identify each study reviewed in Table 5, regardless of whether a study was determined to be eligible to be included in the review.

Section IV: The state must complete Section IV (Tables 6-10) for each program or service (listed in Table 1) reviewed and submitted and provide all required documentation. Section IV lists studies the state determined to be "well-designed" and "well-executed" and outlines characteristics of those studies. Do <u>not</u> include eligible studies that were <u>not</u> determined to be "well-designed" and "well-executed" in Tables 6 -10. States should complete Table 6 with a list of all eligible studies determined to be "well-designed" and "well-executed." States should complete Table 7 to describe the design and execution of each eligible "well-designed" and "well-executed" study. States should complete Table 8 to describe the practice setting and study sample. States must answer in the affirmative that the program or service included in each study was not substantially modified or adapted from the version under review. States must detail favorable effects on target outcomes present in eligible studies determined to be "well-designed" and "well-executed." States must detail unfavorable effects on target and non-target outcomes present in eligible studies determined to be "well-designed" and

"well-executed."

Section V: The state must complete Section V (Table 11) for each program or service reviewed and submitted. Section V lists the program or service designation for HHS consideration and verification questions relevant to that designation. The state must answer the questions applicable to the relevant designation in the affirmative.

Section I: Summary of Programs and Services Reviewed and their Designations for HHS Consideration

Section I. Summary of Programs and Services Reviewed

Table 1. Summary of Programs and Services Reviewed

To be considered for transitional payments, list programs and services reviewed and provide designations for HHS consideration.

Program or Service Name *(if there are multiple versions, specify the specific version reviewed)*	Proposed Designations for HHS consideration *(Promising, Supported, or Well-Supported)*
Fostering Healthy Futures (FHF) for Preteens	Well-Supported

Section II: Standards and Procedures for an Independent Systematic Review

Section II. Standards and Procedures for a Systematic Review

(*Complete Table 2 and Table 3 to provide the requested information on the independent systematic review. The same standards and procedures should be used to review all programs and services.***)**

Table 2. Systematic Review

Sections 471(e)(4)(C)(iii)(I), (iv)(I)(aa) and (v)(I)(aa) of the Act require that systematic standards and procedures must be used for all phases of the review process. In the table below, verify that systematic (i.e., explicit and reproducible) standards and procedures were used and submit documentation of reviewer qualifications. If the systematic review used the Prevention Services Clearinghouse Handbook of Standards and Procedures, indicate the relevant sections in the "Handbook Section" column. If other systematic standards and procedures were used, submit documentation of the standards and procedures.

	☐ to Verify	Handbook Section
Were the same systematic standards and procedures used to review all programs and services?	☒	--
Were qualified reviewers trained on systematic standards and procedures used to review all programs and services?	☒	--
Were standards and procedures in accordance with section 471(e) of the Social Security Act?	☒	--
Were standards and procedures in accordance with the Initial Practice Criteria published in Attachment C of ACYF-CB-PI-18-09?	☒	--
Program or Service Eligibility: Were systematic standards and procedures used to determine if programs or services were eligible for review? At a minimum, this includes standards and procedures to:	☒	2
• Determine if a program or service is a mental health, substance abuse, in-home parent-skill based, or kinship navigator program; and	☒	2.1.1
• Determine if there was a book/manual or writing available that specifies the components of the practice protocol and describes how to administer the practice.	☒	2.1.2
Literature Review: Were systematic standards and procedures used to conduct a comprehensive literature review for studies of programs and services under review? At a minimum, this includes standards and procedures to:	☒	3
• Search bibliographic databases; and Search other sources of publicly available	☒	3.1, 3.2
• Studies (e.g., websites of federal, state, and local governments, foundations, or other organizations).	☒	3.1, 3.2
Study Eligibility: Were systematic standards and procedures used to determine if studies found through the comprehensive literature review were eligible for review? At a minimum, this includes standards and procedures to:	☒	4
• Determine if each study examined the program or service under review (as described in the book/manual or writing) or if it examined an adaptation;	☒	4.1.6
• Determine if each study was published or prepared in or after 1990;	☒	4.1.1
• Determine if each study was publicly available in English;	☒	4.1.3
• Determine if each study had an eligible design (i.e., randomized control trial or quasi-experimental design);	☒	4.1.4
• Determine if each study had an intervention *and* appropriate comparison condition;	☒	4.1.4
• Determine if each study examined impacts of program or service on at least one 'target' outcome that falls broadly under the domains of child safety, child permanency, child well-being, or adult (parent or kin-caregiver) well-being. Target	☒	4.1.5

outcomes for kinship navigator programs can instead or also include access to, referral to, and satisfaction with services; and		
• Identify studies that meet the above criteria and are eligible for review.	☒	4
Study Design and Execution: Were systematic standards and procedures used to determine if eligible studies were well-designed and well-executed? At a minimum, this includes standards and procedures to:	☒	5
• Assess overall and differential sample attrition;	☒	5.6
• Assess the equivalence of intervention and comparison groups at baseline and whether the study statistically controlled for baseline differences;	☒	5.7, 5.8
• Assess whether the study has design confounds;	☒	5.9.3
• Assess, if applicable, whether the study accounted for clustering (e.g., assessed risk of joiner bias[1]);	☒	5.5
• Assess whether the study accounted for missing data; and	☒	5.9.4
• Determine if studies meet the above criteria and can be designated as well-designed and well-executed.	☒	5.2
Defining Studies: Sometimes study results are reported in more than one document, or a single document reports results from multiple studies. Were systematic standards and procedures used to determine if eligible, well-designed and well-executed studies of a program and service have non-overlapping samples?	☒	4.1
Study Effects: Were systematic standards and procedures used to examine favorable and unfavorable effects in eligible, well-designed and well-executed studies? At a minimum, this includes standards and procedures to:	☒	5.10
• Determine if eligible, well-designed and well-executed studies found a favorable effect (using conventional standards of statistical significance) on each target outcome; and	☒	5.10
• Determine if eligible, well-designed and well-executed studies found an unfavorable effect (using conventional standards of statistical significance) on each target or non-target outcome.	☒	5.10
Beyond the End of Treatment: Were systematic standards and procedures used to determine the length of sustained favorable effects beyond the end of treatment in eligible, well-defined and well-executed studies? At a minimum, this includes standards and procedures to:	☒	6.2.3
• Identify (and if needed, define) the end of treatment; and	☒	6.2.3
• Calculate the length of a favorable effect beyond the end of treatment.	☒	6.2.3
Usual Care or Practice Setting: Were systematic standards and procedures used to determine if a study was conducted in a usual care or practice setting?	☒	6.2.2
Risk of Harm: Were systematic standards and procedures used to determine if there is evidence of risk of harm?	☒	6.2.1
Designation: Were systematic standards and procedures used to designate programs and services for HHS consideration (as promising, supported, well-supported, or does not currently meet the criteria)? At a minimum, this includes standards and procedures to:	☒	6.1
• Determine if a program or service has one eligible, well-designed and well-executed study that demonstrates a favorable effect on a target outcome and should be considered for a designation of promising;	☒	6.1
• Determine if a program or service has at least one eligible, well-designed and well-executed study carried out in a usual care or practice setting that demonstrates a favorable effect on a target outcome at least 6 months beyond the end of treatment and should be considered for a designation of supported; and	☒	6.1
• Determine if a program or service has at least two eligible, well-designed and well-executed studies with non-overlapping samples carried out in usual care or practice	☒	6.1

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[1] If a cluster randomized study permits individuals to join clusters after randomization, the estimate of the effect of the intervention on individual outcomes may be biased if individuals who join the intervention clusters are systematically different from those who join the comparison clusters.

settings that demonstrate favorable effects on a target outcome; at least one of the studies must demonstrate a sustained favorable effect of at least 12 months beyond the end of treatment on a target outcome*;* and should be considered for a designation of well-supported.		
Reconciliation of Discrepancies: Were systematic standards and procedures used to reconcile discrepancies across reviewers? (applicable if more than one reviewer per study)	☒	7.3.1
Author or Developer Queries: Were systematic standards and procedures used to query study authors or program or service developers? (applicable if author or developer queries made)	☒	7.3.2

Table 3. Independent Review

The systematic review must be independent (i.e., objective and unbiased). In the table below, verify that an independent review was conducted using systematic standards and procedures by providing the names of each state agency and external partner that reviewed the program or service. States must answer all applicable questions in the affirmative. Submit MOUs, Conflict of Interest Policies, and other relevant documentation.

List all state agencies and external partners that reviewed programs and services.	
Colorado Evaluation and Action Lab: • Courtney Everson, PhD • Stephanie Rogers, MSW	
	❑ **to Verify**
Was the review independent (conducted by reviewers without conflicts of interest including those that authored studies, evaluated, or developed the program or service under review)?	☒
Was a Conflict of Interest Statement signed by reviewers attesting to their independence? If so, attach the statement.	☒
Was a Memorandum of Understanding (MOU) signed by external partners (if applicable)? If so, attach MOU(s).	☒

Sections III-V: Describe and Document Findings from Each Program and Service Reviewed and Submitted

Section III. Review of Programs and Services
(*Complete Tables 4-5 for each program or service reviewed.*)

Table 4. Determination of Program or Service Eligibility

Fill in the table below for each program or service reviewed.

	❒ **to Verify**
Does the program or service have a book, manual, or other available documentation specifying the components of the practice protocol and describing how to administer the practice?	☒
Provide information about how the book/manual/other documentation can be accessed OR provide other information supporting availability of book/manual/other documentation. **The Kempe Center for the Prevention & Treatment of Child Abuse & Neglect houses the FHF program and has a set of available written manuals (Mentor Training Manual, Skills Group Manual, Implementation Manual) that, collectively, describe how to implement and administer the FHF program, thus meeting requirements under Section 2.1.2. The program is currently active and in use, meeting requirements of Section 2.2.2, and both fidelity supports/trainings and measures are in place through the Kempe Center's oversight of the program, thus meeting requirements in Section 2.2.3. All manuals, fidelity measures and trainings/supports can be accessed by contacting the FHF Program Staff, as listed on the FHF Website: https://www.fosteringhealthyfutures.org/programs/preteen**	
Is the program or service a mental health, substance abuse, in-home parent-skill based, or kinship navigator program or service?	☒
Identify the program or service area(s). **Mental Health Prevention & Treatment Program or Service**	

Table 5. Determination of Study Eligibility

Fill in the table below for each study of the program or service reviewed. Provide a response in every column; N/A or unknown are not acceptable responses. The response in columns iii, v, vi, vii, and ix must be "yes" or "no." The response in column ix is "yes" only when the responses in columns iii, v, vi, and vii are "yes."

i. Study Title/Authors	ii. Publicly Available Location	iii. Is the study in English? (Yes/No)	iv. Design (RCT, QED, or other). If other, specify design.	v. Did the intervention condition receive the program or service under review in accordance with the book/manual/documentation? (Yes/No)	vi. Did the comparison condition receive no or minimal intervention or treatment as usual? (Yes/No)	vii. Did the study examine at least one target outcome? (Yes/No)	viii. Year Published	ix. Eligible for Review? (Yes/No)
A Positive Youth Development Approach to Improving Mental Health Outcomes for Maltreated Children in Foster Care: Replication and Extension of an RCT of the Fostering Healthy Futures Program/Taussig et al.	https://pubmed.ncbi.nlm.nih.gov/31468553/	Yes	RCT	Yes	Yes	Yes	2019	Yes
RCT of a mentoring and skill group program: Placement and permanency outcomes for foster youth/Taussig et al.	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3382920/	Yes	RCT	Yes	Yes	Yes	2012	Yes
Impact of a Mentoring and Skills Group Program on Mental Health Outcomes for Maltreated Children in Foster Care/Taussig & Culhane	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3009469/	Yes	RCT	Yes	Yes	Yes	2010	Yes
Fostering Healthy Futures Child Welfare Cost Study/Winokur & Crawford		Yes	RCT	Yes	Yes	No	2014	No

Section IV. Review of "Well-designed" and "Well-executed" Studies (*Complete Tables 6-10 for each program or service reviewed.)*

Table 6. Studies that are "Well-Designed" and "Well-Executed"[2]

Provide an electronic copy of each of the studies determined to be eligible for review and determined to be "well-designed" and "well-executed."

List all eligible studies that are "well-designed" and "well-executed' (Study Title/Author)
A Positive Youth Development Approach to Improving Mental Health Outcomes for Maltreated Children in Foster Care: Replication and Extension of an RCT of the Fostering Healthy Futures Program/Taussig et al. 2019
Impact of a Mentoring and Skills Group Program on Mental Health Outcomes for Maltreated Children in Foster Care/Taussig & Culhane 2010
RCT of a mentoring and skill group program: Placement and permanency outcomes for foster youth/Taussig et al. 2012

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[2] For reference, the Prevention Services Clearinghouse Handbook Chapter 5 defines "well-designed" and "well-executed" studies as those that meet design and execution standards for high or moderate support of causal evidence. Prevention Services Clearinghouse ratings apply to contrasts reported in a study. A single study may have multiple design and execution ratings corresponding to each of its reported contrasts.

<u>Table 7. Study Design and Execution</u>

For each study eligible for review and determined to be "well-designed" and "well-executed," fill out the table below. Provide a response in every column; N/A or unknown are not acceptable responses for columns i, ii, iii, v, vi, and vii. The response in column ii must be "yes."

i. Study Title/Authors	ii. Verify the Absence of all Confounds? (Yes/No)	iii. List Measures that Achieved Baseline Equivalence	iv. List Measures that did NOT Achieve Baseline Equivalence but were Statistically Controlled for in Analyses	v. Overall Attrition[3] **(for RCTs only)**	vi. Differential Attrition[4] **(for RCTs only)**	vii. Does Study Meet Attrition Standards?	viii. Notes, as needed
A Positive Youth Development Approach to Improving Mental Health Outcomes for Maltreated Children in Foster Care: Replication and Extension of an RCT of the Fostering Healthy Futures Program/Taussig et al. 2019	Yes	-Mental Health Index -Posttraumatic Stress Scale	-Disassociation Scale -Quality of Life Scale	-Mental Health: 18.8% -Posttraumatic Stress: 12% -Disassociation: 12% -Quality of Life: 12%	-Mental Health: 3.6% -Posttraumatic Stress: 2.7% -Disassociation: 3.7% -Quality of Life: 4.6%	Yes (low attrition) for all four contrasts	Attrition was calculated per contrast for this study, wherein for RCTs, cases excluded in outcome analyses due to missing data were counted as attrition, in accordance with Clearinghouse standards in Sections 5.6 and 5.9.4.
Impact of a Mentoring and Skills Group Program on Mental Health Outcomes for Maltreated Children in Foster Care/Taussig & Culhane 2010	Yes	-Posttraumatic Stress Scale -Disassociation Scale -Quality of Life Scale -Negative Coping Scale	-Mental Health Index -Positive Coping Scale -Self-Worth Scale -Social Acceptance Scale	-T2 Posttraumatic Stress: 10.3% -T2 Disassociation: 10.3% -T2 Mental Health: 18.6% -T2 Quality of Life: 10.3% -T2 Positive Coping: 10.3% -T2 Negative Coping: 10.3% -T2 Self-Worth:	-T2 Posttraumatic Stress: 8.0% -T2 Disassociation: 8.0% -T2 Mental Health: 1.8% -T2 Quality of Life: 8.0% -T2 Positive Coping: 8.0% -T2 Negative Coping: 8.0% -T2 Self-Worth:	-T2 Posttraumatic Stress: No (high attrition) -T2 Disassociation: No (high attrition) -T2 Mental Health: Yes (low attrition) -T2 Quality of Life: No (high attrition) -T2 Positive	Attrition was calculated per contrast for this study, wherein for RCTs, cases excluded in outcomes analyses due to missing data were counted as attrition, in accordance with Clearinghouse standards in Sections 5.6 and 5.9.4. In this study, each contrast was measured at two follow-up periods: immediately at end of program completion (T2) and 6 months after program completion (T3). Attrition was thus calculated per contrast, per

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[3] For reference, the Prevention Services Clearinghouse Handbook section 5.6 defines o*verall attrition* as the number of individuals without post-test outcome data as a percentage of the total number of members in the sample at the time that they learned the condition to which they were randomly assigned.

[4] For reference, the Prevention Services Clearinghouse Handbook section 5.6 defines *differential attrition* as the absolute value of the percentage point difference between the attrition rates for the intervention group and the comparison group.

i. Study Title/Authors	ii. Verify the Absence of all Confounds? (Yes/No)	iii. List Measures that Achieved Baseline Equivalence	iv. List Measures that did NOT Achieve Baseline Equivalence but were Statistically Controlled for in Analyses	v. Overall Attrition[3] (for RCTs only)	vi. Differential Attrition[4] (for RCTs only)	vii. Does Study Meet Attrition Standards?	viii. Notes, as needed
				10.3% T2 Social Acceptance: 10.3% -T3 Posttraumatic Stress: 7.7% -T3 Disassociation: 7.7% -T3 Mental Health: 15.4% -T3 Quality of Life: 8.3% -T3 Positive Coping: 8.3% -T3 Negative Coping: 8.3% -T3 Self-Worth: 8.3% T3 Social Acceptance: 8.3%	8.0% -T2 Social Acceptance: 8.0% -T3 Posttraumatic Stress: 7.9% -T3 Disassociation: 7.9% -T3 Mental Health: 5.5% -T3 Quality of Life: 9.2% -T3 Positive Coping: 9.2% -T2 Negative Coping: 9.2% -T3 Self-Worth: 9.2% -T3 Social Acceptance: 9.2%	Coping: No (high attrition) -T2 Negative Coping: No (high attrition) T2 Self-Worth: No (high attrition) T2 Social Acceptance: No (high attrition) -T3 Posttraumatic Stress: No (high attrition) -T3 Disassociation: No (high attrition) -T3 Mental Health: Yes (low attrition) -T3 Quality of Life: No (high attrition) -T3 Positive Coping: No (high attrition) -T3 Negative Coping: No (high attrition) T3 Self-Worth:	administration time point.

i. Study Title/Authors	ii. Verify the Absence of all Confounds? (Yes/No)	iii. List Measures that Achieved Baseline Equivalence	iv. List Measures that did NOT Achieve Baseline Equivalence but were Statistically Controlled for in Analyses	v. Overall Attrition[3] (for RCTs only)	vi. Differential Attrition[4] (for RCTs only)	vii. Does Study Meet Attrition Standards?	viii. Notes, as needed
						No (high attrition) T3 Social Acceptance: No (high attrition)	
RCT of a mentoring and skill group program: Placement and permanency outcomes for foster youth/Taussig et al. 2012	Yes	-# of Prior Placements	-Previous RTC Placement -Placement Type at Baseline	29.%	.08%	Yes (low attrition)	Attrition was calculated per contrast for this study, wherein for RCTs, cases excluded in outcomes analyses due to missing data were counted as attrition, in accordance with Clearinghouse standards in Sections 5.6 and 5.9.4. All contrasts had the same attrition.

Table 8. Study Description

For each study eligible for review and determined to be "well-designed" and "well-executed," fill out the table below to describe the practice setting and study sample as well as affirm that the program or service evaluated was not substantially modified or adapted from the version under review. Provide a response in every column; N/A or unknown are not acceptable responses. The response in column v must be "yes."

i. Study Title/Authors	ii. Was the study conducted in a usual care or practice setting? (Yes/No)	iii. What is the study sample size?	iv. Describe the sample demographics and characteristics of the intervention group	v. Describe the sample demographics and characteristics of the comparison group	vi. Verify that the program or service evaluated in the study was **NOT** substantially modified or adapted from the manual or version of the program or service selected for review (Yes/No)
A Positive Youth Development Approach to Improving Mental Health Outcomes for Maltreated Children in Foster Care: Replication and Extension of an RCT of the Fostering Healthy Futures Program/Taussig et al. 2019	Yes	N=426 (n=233 intervention, n=193 comparison)	Mean age 10.31 (.90 SD); 51.1% Male; 53.5% Hispanic; 31.0% African American; 51.4% White. All youth were between 9 and 11 years of age and placed in out-of-home care by court order due to maltreatment.	Mean age 10.25 (.90 SD); 52.8% Male; 49.2% Hispanic; 25.4% African American; 49.7% White. All youth were between 9 and 11 years of age and placed in out-of-home care by court order due to maltreatment.	Yes
Impact of a Mentoring and Skills Group Program on Mental Health Outcomes for Maltreated Children in Foster Care/Taussig & Culhane 2010	Yes	N=156 (n=79 intervention, n=77 comparison)	Mean age 10.4 (.90 SD); 52% Male; 44% Hispanic; 34% African American; 42% White. All youth were between 9 and 11 years of age and placed in out-of-home care by court order due to maltreatment.	Mean age 10.4 (.90 SD); 49% Male; 56% Hispanic; 25% African American; 44% White. All youth were between 9 and 11 years of age and placed in out-of-home care by court order due to maltreatment.	Yes
RCT of a mentoring and skill group program: Placement and permanency outcomes for foster youth/Taussig et al. 2012	Yes	N = 110 (n=56 intervention, n=54 control)	Mean age 10.38 (0.85 SD); 51.8% Male; 40.4% Hispanic; 42.3% African American; 52.8% White. All youth were between 9 and 11 years of age and placed in out-of-home care by court order due to maltreatment.	Mean age 10.54 (0.91 SD); 51.9% Male; 52.0% Hispanic; 26.9% African American; 55.8% White. All youth were between 9 and 11 years of age and placed in out-of-home care by court order due to maltreatment.	Yes

Table 9. Favorable Effects

For each study eligible for review and determined to be "well-designed" and "well-executed," fill out the table below listing only target outcomes with **favorable effects**. *Provide a response in every column; N/A or unknown are* **not acceptable** *responses.*

i. Study Title/Authors	ii. List the Target Outcome(s)	iii. List the Outcome Measures	iv. List the Reliability Coefficients for Each	v. Are Each of the Outcome Measures Valid?	vi. Are Each of the Outcome Measures Systematically Administered?	vii. List the P-Values for Each of the Outcome Measures	viii. List the Size of Effect for Each of the Outcome Measures	ix. Indicate the Length of Effect Beyond the End of Treatment (in months)
A Positive Youth Development Approach to Improving Mental Health Outcomes for Maltreated Children in Foster Care: Replication and Extension of an RCT of the Fostering Healthy Futures Program/Taussig et al.	Child Well-Being (behavioral and emotional functioning)	Mental Health Index (created based on principal components factor analysis of the child's mean TSCC scores and internalizing scales of the CBCL and TRF)	-TSCC mean clinical scale: a = .84 -CBCL scales: a = .63 to .97 -TRF scales: a = .72 to .95 -In this study, factor loadings were .71 for the TSCC, .67 for the CBCL, and .62 for the TRF	Yes	Yes	$p = 0.04$	$g = 0.2209$	6 months
	Child Well-Being (behavioral and emotional functioning)	Disassociation Scale (of the child self-report Trauma Symptom Checklist for Children, TSCC)	$a = 0.83$	Yes	Yes	$p = 0.02$	$g = 0.2470$	6 months
Impact of a Mentoring and Skills Group Program on Mental Health Outcomes for Maltreated Children in Foster Care/Taussig & Culhane	Child Well-Being (behavioral and emotional functioning)	T2: Quality of Life scale (measured via the Life Satisfaction Survey)	$a = .81$	Yes	Yes	$p = .005$	$g = 0.4759$	Immediate
	Child Well-Being (behavioral and emotional functioning)	T3: Mental Health Index (created based on principal components factor analysis of the child's mean TSCC scores and internalizing scales of the CBCL and TRF)	-TSCC mean clinical scale: a = .84 -CBCL scales: a = .63 to .97 -TRF scales: a = .72 to .95 -In this study, factor loadings	Yes	Yes	$p = .003$	$g = 0.5310$	6 months

i. Study Title/Authors	ii. List the Target Outcome(s)	iii. List the Outcome Measures	iv. List the Reliability Coefficients for Each	v. Are Each of the Outcome Measures Valid?	vi. Are Each of the Outcome Measures Systematically Administered?	vii. List the P-Values for Each of the Outcome Measures	viii. List the Size of Effect for Each of the Outcome Measures	ix. Indicate the Length of Effect Beyond the End of Treatment (in months)
			ranged from .59 to .70 for the three scales					
	Child Well-Being (behavioral and emotional functioning)	T3: Disassociation Scale (of the child self-report Trauma Symptom Checklist for Children, TSCC)	$a = 0.83$	Yes	Yes	$p = 0.02$	$g = 0.3877$	6 months
RCT of a mentoring and skill group program: Placement and permanency outcomes for foster youth/Taussig et al. 2012	Child Permanency (placement disruption)	Placement Changes	Administrative data assumed reliable per Section 5.9.2 of handbook	Yes	Yes	$p = 0.03$	$g = 0.7486$	12 months

Table 10. Unfavorable Effects

*For each study eligible for review and determined to be "well-designed" and "well-executed," fill out the table below listing only target outcomes with **unfavorable effects**. Provide a response in every column; N/A or unknown are not acceptable responses.*

i. Study Title/Authors	ii. List the Target or Non-Target Outcome(s)	iii. List the Outcome Measures	iv. List the Reliability Coefficients for Each	v. Are Each of the Outcome Measures Valid?	vi. Are Each of the Outcome Measures Systematically Administered?	vii. List the P-Values for Each of the Outcome Measures	viii. List the Size of Effect for Each of the Outcome Measures	ix. Indicate the Length of Effect Beyond the End of Treatment (in months)

Note: No unfavorable effects were found for any of the studies

Section V. Program or Service Designation for HHS Consideration

Table 11. Program or Service Designation for HHS Consideration

Fill out the table below for the program or service reviewed. Only select one designation. Answer questions relevant to the selected designation; relevant questions must be answered in the affirmative.

	❏ to Verify
There is **NOT** sufficient evidence of risk of harm such that the overall weight of evidence does not support the benefits of the program or service.	☒
	❏ the Designation and Provide a Response to the Questions Relevant to that Designation
Well-Supported	☒
• Does the program or service have at least two eligible, well-designed and well-executed studies with non-overlapping samples[55] that were carried out in a usual care or practice setting?	Yes
• Does one of the studies demonstrate a sustained favorable effect of at least 12 months beyond the end of treatment on at least one target outcome?	Yes
Supported	☐
• Does the program or service have at least one eligible, well-designed and well-executed study that was carried out in a usual care or practice setting and demonstrate a sustained favorable effect of at least 6 months beyond the end of treatment on at least one target outcome?	
Promising	☐
• Does the program or service have at least one eligible, well-designed and well-executed study and demonstrate a favorable effect on at least one 'target outcome'?	

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[5] Samples across multiple sources of a study are considered overlapping if the samples are the same or have a large degree of overlap. Findings from an eligible study determined to be "well-executed" and "well-designed" may be reported across multiple sources including peer-reviewed journal articles and publicly available government and foundation reports. In such instances, the multiple sources would have overlapping samples. The findings across multiple sources with these overlapping samples should be considered **one** study when designating a program or service as "well-supported," "supported," and "promising."

**An Ecological Model of Risk and Protection for Delinquency
and Juvenile Justice Involvement among Maltreated Youth:
A Longitudinal Study**

Submitted February 6, 2017

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STATEMENT OF THE PROBLEM AND RESEARCH QUESTIONS

Purpose and Objectives

This new application is submitted in response to the solicitation, "Field-Initiated Research and Evaluation Program: Category 2: Small Studies and Analyses" to test the efficacy of a mentoring intervention (previously developed and shown efficacious for psychological and behavioral outcomes) as a delinquency prevention program for youth at risk for involvement with the juvenile justice system due to histories of childhood maltreatment and disruptions in caregiver custody. Despite significant research demonstrating the strong link from childhood adversity to crime, few studies have rigorously tested whether an evidence-based, positive youth development program can mitigate the effects of childhood adversity on juvenile justice involvement. Using a longitudinal sample of foster care youth, we will apply an ecologically-grounded model to examine: (1) how Fostering Healthy Futures (FHF) - a mentoring and skills group intervention delivered during the pre-adolescent years - can help reduce youth delinquent behavior and involvement in the juvenile justice system, (2) whether FHF protects youths from the negative effects of childhood adversity on delinquency/juvenile justice involvement, and (3) whether changes in psychosocial functioning operate as mediators of this intervention effect. Using a diverse sample, we also propose to examine gender and racial/ethnic differences in program efficacy and its mechanisms – an important issue given the diversity of youth placed in foster care across the country (Child Welfare Information Gateway, 2016). Funding for our proposal will permit us to abstract, code and analyze data from the juvenile justice records of youth between preadolescence and young adulthood, in order to examine the impact and cumulative effects of FHF on juvenile justice involvement over a 7-9 year period.

Defining the Problem: Child Adversity and Delinquency

Maltreated youth are particularly vulnerable to a host of adverse outcomes, including juvenile justice involvement. In 2014, 3.6 million children in the U.S. were referred to Child Protective Services, representing almost 5% of the child population, and a 14.6% increase since 2010 (US DHHS, 2016). Maltreated youth are at high risk for delinquency and are overrepresented in the justice system (Smith & Thornberry, 1995; Stouthamer-Loeber, Loeber, Homish, & Wei, 2001, Widom, 1992). In our 6-year longitudinal study of adolescents in foster care, 25% had been arrested, 25% had gang involvement, and 27% had used a weapon to attack someone by age 17 (Taussig & Culhane, 2005). Long-term studies suggest that those who emancipate from foster care continue to be at elevated risk; in a longitudinal study, over half of the males and 30% of the females were arrested and 29% had been incarcerated between the ages of 18 and 21 (Courtney et al., 2007).

In addition to abuse and neglect, maltreated youth are also likely to have experienced other adverse childhood experiences (ACEs), including witnessing intimate partner and community violence, changing homes and schools frequently, and being placed in foster care. Taken together, maltreatment and other ACEs may exert a powerful influence on youth delinquency, given that juvenile offenders are four times more likely to report four or more ACEs than samples of mostly college-educated adults (Baglivio et al., 2014). It is estimated that between 75% and 93% of youth entering the juvenile justice system have experienced some type of trauma (Costello, Erklani, Fairbank & Angold, 2003; Dierkhising et al., 2013; Evans-Chase, 2014). Cumulative childhood exposure to ACEs predicts youth aggressive behaviors, rule-breaking, general delinquency, and recidivism in adolescence (Appleyard, Egeland, van Dulmen, & Sroufe, 2005; Forehand, Biggar,

& Kotchick, 1998; Baglivio, Jackowski, Greenwald, & Howell, 2014). Furthermore, higher ACE scores appear to be associated with earlier and more chronic offending (Baglivio & Epps, 2015).

Although evidence-based delinquency prevention programs for high-risk populations exist, no known preventive interventions have demonstrated efficacy in reducing juvenile justice involvement among *maltreated youth with child welfare involvement*. These youths often require a more individualized and contextually-sensitive intervention approach, which is why mentoring may be a promising strategy. This application proposes to conduct a longitudinal analysis of a randomized controlled trial of a mentoring program for maltreated youth to determine whether this strategy prevents and/or reduces delinquency and juvenile justice involvement.

The Fostering Healthy Futures Program

Fostering Healthy Futures (FHF) is a 9-month intensive program designed for 9-11-year old children placed in court-ordered foster care as a result of maltreatment. The program consists of mentoring and skills groups that aim to promote positive youth development, thereby preventing and reducing delinquent behavior. Using a rigorous, randomized controlled trial design, the program has been successful in significantly reducing youth mental health symptoms (trauma, anxiety, and depression), reducing residential treatment facility placements, and reducing foster care placement changes (Taussig & Culhane, 2010; Taussig et al., 2012). Given that mental health functioning (Kerig, Ward, Vanderzee, & Moeddel, 2009; Ruchkin, Henrich, Jones, Vermeiren, & Schwab-Stone, 2007) may mediate the association between maltreatment and delinquency, FHF may also show efficacy in reducing adolescent delinquency.

Study Goals

The proposed study will test the model illustrated in Figure 1. Specifically, we aim to answer questions summarized under the following goals:

Goal 1: To test whether FHF intervention is associated with less delinquency and involvement with the juvenile justice system. We will examine whether, compared to control youth, youth in the FHF program had lower rates of self-reported delinquency, as well as lower adjudication rates, post program. Furthermore, we will examine trajectories of delinquent behavior until age 18 and test whether FHF youth continue to demonstrate lower rates of delinquency. We expect that the program will have the most profound effect on long-term trajectories of delinquency, as we anticipate a sharp increase in the rates of self- and official-reports of these behaviors during middle to late adolescence.
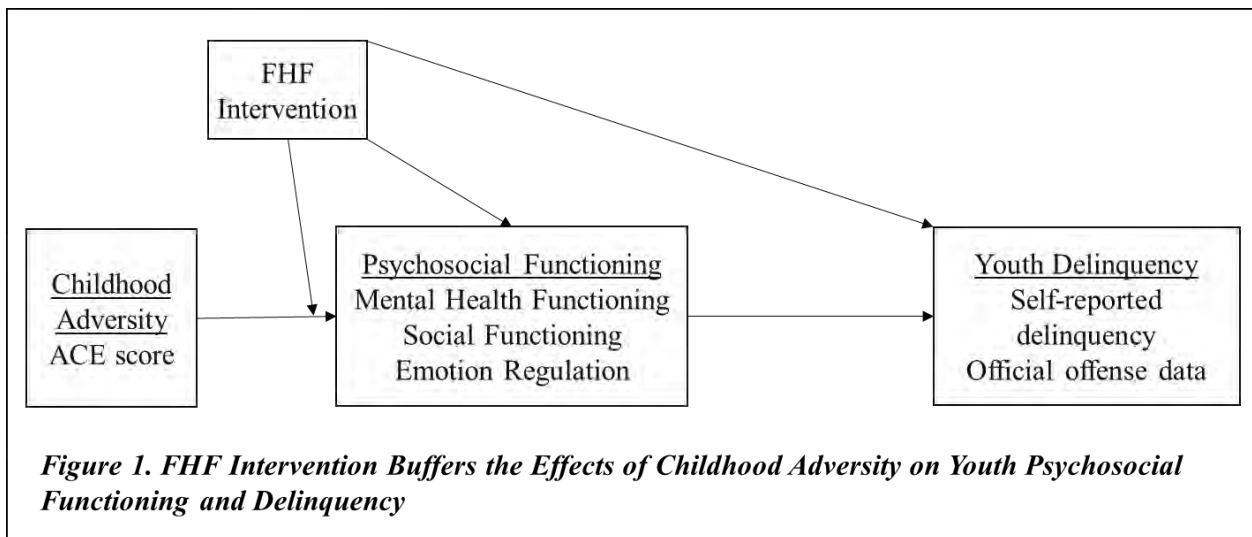
Figure 1. FHF Intervention Buffers the Effects of Childhood Adversity on Youth Psychosocial Functioning and Delinquency

Goal 2: To examine whether the FHF intervention buffers youth from the impact of ACEs on delinquent behavior. In line with previous literature, we expect that greater childhood adversity will be associated with more delinquent behavior. However, we also expect this association to be weaker among youth who received the FHF intervention than for control youth.

Goal 3: To examine the mechanisms of action for the FHF intervention across multiple domains of functioning. We will examine how youth psychosocial functioning may explain the effects of FHF on youth delinquency. Specifically, we propose that FHF participation

will be associated with better mental health functioning, social functioning, and emotion regulation and that these variables will be associated with lower youth delinquency, thus partially mediating the effects of the intervention on delinquency.

Goal 4: To explore gender and racial/ethnic differences in program efficacy and mediating mechanisms. We will conduct exploratory analyses to test whether the effects of the FHF intervention differ across gender and Hispanic/Latino, African American, American Indian, and Caucasian youth and/or whether the mediating mechanisms are invariant.

Review of Relevant Literature

Although the ecological risk factors for juvenile delinquency have been well researched, the mechanisms by which trauma exposure places youth at risk for delinquency are less well understood. Research suggests that trauma exposure may lead youth to be more emotionally reactive and oppositional, resulting in harsh parenting practices that are a known risk factor for delinquency (Snyder, Schrepferman, & Peter, 1997). The American Academy of Pediatrics published a 2012 technical report entitled, "The Lifelong Effects of Early Childhood Adversity and Toxic Stress" in which they posit that chronic childhood adversity impacts molecular biological mechanisms that alter gene expression. Trauma exposure activates the hypothalamic-pituitary-adrenocortical system which results in increased levels of stress hormones. The developing brain is particularly sensitive, and chronic exposure to stress leads to changes in brain structure and function that impact learning, behavior, and health. Behavioral dysregulation leading to delinquent behavior is thought to result from the interplay of these physiological mechanisms with ecological factors (Anda et al., 2006; American Academy of Pediatrics, 2012).

One potential mechanism that links childhood adversity to delinquency is mental health problems. Indeed, greater childhood adversity is robustly associated with heightened mental health

symptomatology, such as depressed mood (Singer, Anglin, yu Song, Lunghofer, 1995), anxiety (Grover, Ginsburg, & lalongo, 2005), and post-traumatic stress (Raviv, Taussig, Culhane, & Garrido, 2010) – mental health symptoms that are also highly comorbid with delinquency and externalizing problems (Hinshaw, 1987; Kerig & Becker, 2012). For example, Allwood, Baetz, DeMarco, & Bell (2012) report on the role of depression, hopelessness, and sense of foreshortened future in mediating the link from early trauma to delinquency. Thus, mental health symptoms associated with early childhood adversity may interfere with adolescents' positive engagement with their social context and thus contribute to higher rates of delinquency.

Social functioning is another potential mediator, given the increasing importance of peer relationships during adolescence. Studies have shown, for example, that peer rejection is associated with crime and delinquency (Ladd & Burgess, 2001; Ladd, Herald-Brown, & Reiser, 2008) and rejected children not only have higher rates of externalizing behaviors as early as kindergarten, but also exhibit more pronounced developmental increases in externalizing behavior, as compared to nonrejected children (Keiley, Bates, Dodge, & Pettit, 2000). One possible explanation for these findings is that peer rejection is a marker for undesirable child characteristics, such as anger and aggressive behavior, which in turn explains elevated trajectories of peer rejection and delinquency among rejected children. However, it is also possible that childhood adversity involves disruptions in early social context, thus interfering with the development of social functioning and resulting delinquent behavior.

Finally, poor emotion regulation is a key risk factor for delinquency and is also associated with childhood adversity. Emotion regulation refers to processes involved in individuals' conscious and unconscious efforts to modulate their emotions (Bargh & Williams, 2007; Rottenberg & Gross, 2003) and responses to stressful events (Campbell-Sills and Barlow, 2007;

Gratz & Roemer, 2004; Gross, 1998; Thompson, 1994). Research shows that exposure to acute and chronic stress has profound neurobiological consequences for prefrontal and limbic-striatal functioning involved in the processing and regulation of emotions (Ansell et al., 2012; Davidson et al., 2002; Seo et al., 2014) and reduces emotion regulation capacity (Dvir et al., 2014; Kim et al., 2013; McEwen, 2004, Sinha, 2001). In turn, deficits in emotion regulation, such as anger regulation and maladaptive regulation strategies, are associated with increased delinquent behavior (Roberton, Daffern, & Bucks, 2012).

We propose that mental health, social functioning, and emotion regulation are not only key modifiable factors that may mediate the effect of childhood adversity on delinquency, but are also putative mechanisms of action for the FHF program. FHF is a preventive intervention for 9-11-year-old children recently placed in foster care. As a positive youth development (PYD) intervention, it rejects deficit models that focus on reducing undesirable behaviors and focuses instead on the promotion of competencies. PYD programs hypothesize that the promotion of positive development will lead to reductions in problem behaviors and may also buffer high-risk children from the impact of prior adverse experiences (Bernat & Resnick, 2006; Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2002; Lerner, 2005). Programs developed through a PYD framework vary considerably but all involve an intentional, prosocial approach. There have been recent calls for integrating a PYD approach into the juvenile justice system (Frabutt, DiLuca, & Graves, 2008).

FHF was designed to augment positive development by targeting many of the risk and protective factors associated with justice involvement. FHF is comprised of two components identified by the Blueprints Program as effective strategies for reducing violence: (1) one-on-one mentoring (based on a more intensive Big Brothers Big Sisters model), and (2) therapeutic skills

groups (based on the PATHS curriculum). FHF aims to: 1) increase involvement in extracurricular activities, 2) promote healthy coping strategies, 3) foster positive attitudes, and 4) support healthy and prosocial peer relationships (cf. Taussig, Culhane, & Hettleman, 2007, for a complete description of the program). FHF has demonstrated success in reducing mental health problems, residential placements, and increasing permanency (Taussig & Culhane, 2010; Taussig, Culhane, Garrido & Knudtson, 2012) and is listed on national registries of effective programs. Although delinquency and juvenile justice outcomes have not yet been examined for the program, we hypothesize that FHF's proven efficacy in improving psychosocial functioning will provide downstream effects for these outcomes.

This grant provides an opportunity for us to build upon previous research and understand the longitudinal relationship between childhood adversity and delinquency in a particularly vulnerable population – i.e., maltreated children in foster care. In addition, the large percentage of girls, Hispanic/Latino youth and American Indian youth in our study will enable us to examine the relationship between ACEs and justice involvement within these understudied subgroups. Despite recognition that juvenile justice involvement and experiences with the system differ by gender and racial/ethnic groups, only a few studies have examined ACEs in these subgroups. In a 2015 study of youth in the juvenile justice system, Baglivio and Epps (2015) found that White youth had a higher number of ACEs than Black or Hispanic youth and that females had more ACEs than males. Other studies have examined whether race/ethnicity and gender moderate the association between ACEs and negative outcomes. Two studies have found that the association between cumulative risk and mental health and behavior problems was stronger for White youth than for Black or Hispanic youth (Gerard & Buehler, 2004; Schilling, Aseltine, & Gore, 2007). Brown et al. (2015) found that the link between ACEs and early sexual behavior was stronger for females than males.

PROJECT DESIGN AND IMPLEMENTATION

Participants

Participants for the proposed project are youth enrolled in the randomized controlled trial of the Fostering Healthy Futures (FHF) program. Between 2002 and 2011, all 9-11-year-old children placed in foster care by participating departments of child welfare were recruited, in yearly cohorts, to participate in the FHF study provided that they were placed in court-ordered foster care as a result of maltreatment and lived within 35 minutes of a site where skills groups were conducted. In order to maximize generalizability, the FHF study did not exclude youth with significant mental health and behavior problems or youth with mild developmental delays. The minimal exclusion criteria used enhances the generalizability of study findings. Based on these inclusion criteria, we enrolled 426 youth and randomly assigned them to treatment (n=233) and control (n=193) groups. The sample included roughly equal numbers of females (47.4%) and males. The mean baseline age was 10.3 (*SD*=.90) years. Over half (53.0%) of the participants identified belonging to more than one racial/ethnic group: 50.2% identified as Hispanic/Latino, 30.3% as African American, 30.1% as American Indian and 44.4% as Caucasian. Despite the fact that participants in our program were at extremely high risk and highly mobile, we had excellent success in recruiting and retaining both treatment and control group participants. Our recruitment rate was 91.3%. Retention at 1.5 years post baseline (T2) was 89.2% (N=380) and retention 3 years post baseline (T3) was 85.9% (N = 366). We are currently completing recruitment for T4 (when participants are 18-22) and have an 85% retention rate (expected N = 225). Caregivers and teachers were also interviewed at T1-3, with similar rates of recruitment and retention (i.e., between 80-90%).

Procedure

      Interviews with youth, caregivers and teachers. Youth and caregivers were interviewed at baseline (T1), 1.5 years post baseline (T2), 3 years post baseline (T3). Youth are also being interviewed as young adults, between the ages of 18-22 (variable length of time since baseline), called T4. Official adjudication data, providing history of offending through age 18, will be available for all participants, regardless of retention status at any of the post-baseline time points. Consent for youths' participation, and to abstract administrative records, including juvenile justice records, was obtained from their legal guardians. In many cases, the child's legal guardian was the applicable child welfare agency. The Colorado Department of Human Services and the University of Denver are parties to a memorandum of agreement (see attached copy) that authorizes county child welfare agencies to provide consent for children's participation in the FHF study. Caregivers also provided their own informed consent and youth provided assent (or consent at the T4 assessment). All procedures for the study were approved by the university IRB and information collected in the study is kept confidential per our federal Certificate of Confidentiality (attached) except as provided by law and explained in the consent/assent forms.

Measures

      Youth and caregiver interviews included measures with sound psychometric properties that have been widely-used in other studies of adolescent delinquency, and have been used successfully with ethnically and racially diverse samples.

      Delinquency. Delinquency will be measured in multiple ways at each time point, using youth, caregiver and teachers reports of delinquent behavior as well as official court records. Delinquency will be assessed based on youth-report data collected via *The Adolescent Risk Behavior Survey* (ARBS; Taussig, 1998), a measure of frequency of past-year and lifetime

engagement in 16 delinquent behaviors (e.g., shoplifting, physical assault, robbery, arson, stealing a motor vehicle). The ARBS is a compilation of scales from three risk behavior surveys that have shown adequate reliability and validity: the National and Denver Youth Surveys, The Problem Behavior Survey, and the National Adolescent Student Health Survey. The externalizing scales of the Achenbach measures (Youth, Caregiver and Teacher reports) will also be used (Achenbach, 1991; Achenbach & Rescorla, 2001; Achenbach, Dumenci, & Rescorla, 2003). A proportional variety score – a score that indicates the proportion of the total number of items endorsed by a participant - will be computed for use in analyses. Variety of offending scores are widely used in developmental criminology, given their high correlations with seriousness of offending and lower susceptibility to recall errors (Hindelang, Hirschi, & Weis, 1981; Piquero, MacIntosh, & Hickman, 2002). We will compute a total delinquency score, violent offending score, and nonviolent offending score.

Official court records of justice involvement will be obtained after receiving a no-cost download of administrative data from the State Court Administrator's Office (letter of approval attached). We will abstract data for the period between participants' baseline interviews and the age of 18. Records will be coded for offense type and age at offense. Similar to the self-, caregiver- and teacher-reported delinquency data, a summary variable will encode for proportional variety score at each age-period. Additionally, we will code placement in residential treatment and detention facilities. Given that offending is curtailed during these placements, proportion of time spent in them will be used as a control variable.

Adverse Childhood Experiences. To assess baseline ACEs, a 6-item measure of adverse childhood experiences, which was created and validated for maltreated children in foster care, will be used (Raviv, Taussig, Culhane, & Garrido, 2010). The scale demonstrates good predictive

validity. The items include: (1) *Physical Abuse;* (2) *Sexual Abuse;* (3) *Removal from a single parent household;* (4) *Exposure to community violence;* (5) *Caregiver Transitions;* and (6) *School Transitions*. Consistent with literature on cumulative risk (e.g., Appleyard et al., 2005), the measure employs conventional standards for dichotomizing and summing the six factors as follows. The abuse exposure and single parent household items were coded as "present" (1) or "absent" (0) from child welfare records. Exposure to community violence, caregiver transitions, and school transitions were dichotomized such that a score of 1 was assigned to scores in the upper quartile of the sample distribution, and a score of 0 was assigned for all others. Exposure to community violence was derived from an adapted 8-item version of the Things I Have Seen and Heard scale (Richters & Martinez, 1993). Children were asked the number of times in the past year they had seen or heard acts such as, "guns being shot" or "seeing someone getting arrested." Responses ranged from never (0) to four or more times (4). The upper quartile included children with mean scores above 1.63 (*M*=1.06, *SD*=.85). The number of caregivers since birth (range=2-12, *M*=4.35, *SD*=2.45) and number of schools since kindergarten (range=1-23, *M*=4.38, *SD*=2.76) were used for the final two items. Upper quartiles for both included children with six or more caregivers and schools. Upon dichotomizing all risk variables, the factors were summed to create an overall risk score. Higher scores indicate greater risk exposure.

Mental Health Functioning was assessed at each time point using a published multi-informant index created based on principal components factor analysis of the following variables: (1) mean score on the Trauma Symptom Checklist for Children (Briere, 1996; TSCC); (2) the Internalizing Scale of the Child Behavior Checklist completed by children's caregivers; and (3) Internalizing Scale of the Teacher Report Form at T3 (Achenbach & Rescorla, 2001).

Social Functioning was assessed using multiple measures and multiple informants: (1) *Social Acceptance* was assessed with youth report on the *Self-Perception Profile* (Social Acceptance scale) and the *Teacher Sociometrics Scale*, a measure of teacher-predicted peer nominations on the following indices: popular, aggressive, a preferred work and play partner, or a non-preferred work and play partner (Huesmann, Eron, Guerra, & Crawshaw, 1994); (2) *Social Support* was assessed with two youth-report measures, the *Social Support Scale for Children* (Harter, 1985) and the short-form scales of the *People in My Life* measure (Gifford-Smith, 2000); and (3) *Social skills* were assessed with caregiver and teacher reports using the normed *Social Skills Rating System* (Gresham & Elliott, 1990) to assess children's cooperation, assertion, responsibility, and self-control.

Emotion Regulation was assessed with (1) youth report of positive and negative coping skills using *The Life Events and Coping Inventory* (Dise-Lewis, 1988) and (2) parent and teacher report on the *Behavior Rating Inventory of Executive Function*, a normed measure of self-regulation and executive functioning (Gioia, Isquith, & Kenworthy, 1996).

Data Analysis Plan

Main analyses will utilize structural equation modeling, using Mplus software (Muthén & Muthén, 1998-2016). Before conducting data analyses, data will be cleaned (e.g., examined for outliers; distributional qualities will be examined, checking assumptions and transforming and recoding variables as needed). Confirmatory factor analyses (CFIs) will examine the optimal factors structure for the mental health, social functioning, and emotion regulation variables. In each case, the CFI models will combine different assessments instruments. These analyses will compare two-factor and one-factor models, while combining reports across different informants (youths, parents, and teachers). Once the best factor model is selected, item loading will be

examined - items with non-significant factor loadings and items that have problematic cross-factor loadings will be considered for deletion.
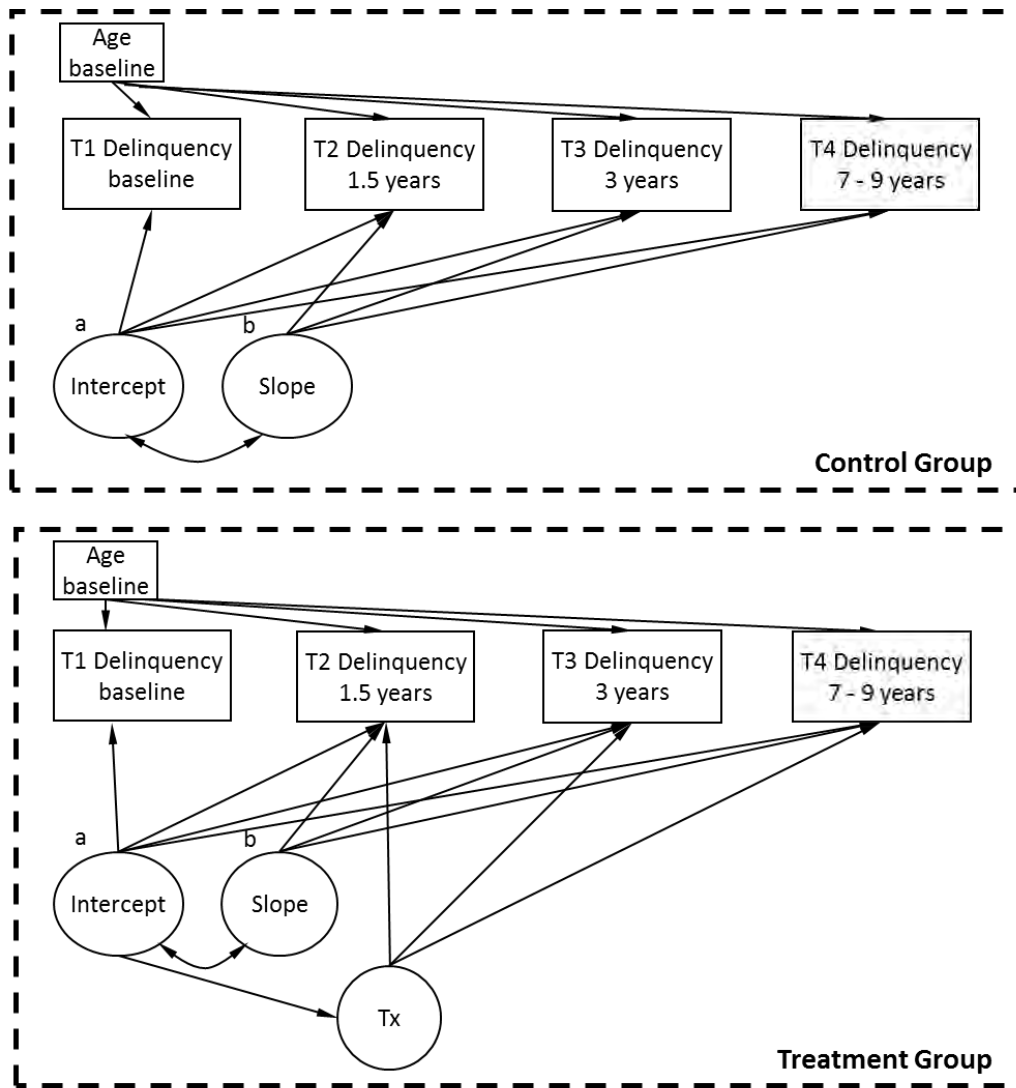

Figure 2: *Multigroup Model Testing Treatment Effect on Trajectories of Delinquency.*

Goal 1: To test whether FHF intervention is associated with less delinquency and involvement with the juvenile justice system. Given the developmental nature of changes in delinquent behavior, we will use Latent Growth Treatment/Control Model (Muthen & Curran, 1997) to estimate individual growth trajectories, controlling for age. As can be seen in Figure 2, this set of analyses will estimate a linear growth trajectory for the control group, thus estimating

time-related changes in the outcome variables (such as developmental changes and regression to the mean). For the treatment group, intercept and slope from the control group will be used to estimate linear change, plus an added treatment factor will capture the incremental or decremental growth or decline that is associated with treatment. The effect of treatment will be allowed to vary over the course of the study by leaving the factor weights that link the treatment effect to each wave to be estimated by the model. Thus, we will be able to estimate changes in treatment effect through Time 4 for self-reported delinquent behavior and through age 18 (coded on yearly basis for 7-9 years post baseline, depending on the age at Time 1) for the official records of offending variables. The model will control for age differences at baseline. Finally, the model will estimate the effect of baseline levels of the outcome variable on treatment efficacy – evaluating whether the intervention has a stronger effect for those with higher levels of baseline involvement.

Overall treatment efficacy will be supported by a significant negative mean treatment effect (i.e., a significant negative intercept for the Tx latent variable). Significant variability in the Tx latent variable will suggest that there are individual differences in treatment efficacy. Finally, inspection of the factor weights for the Tx factor will reveal whether treatment effect is sustained over the course of the study.

Goal 2: To examine whether the FHF intervention buffers youth from the impact of ACEs on delinquent behavior. For this set of analyses, all participants (treatment and control groups) will be modeled together. Delinquency trajectories will be estimated with a Piecewise Latent Growth Model that specifies a latent intercept (Baseline level), short-term (Baseline to Time 2) change that reflects developmental changes in delinquency and changes that are due to short-term treatment effects, and long-term (Time 2 to Time 4, depending on the outcome measure) change that reflects developmental changes and long-term treatment effects. We will test whether

greater childhood adversity is associated with a higher delinquency intercept, as well as short-term and long-term increases (or less pronounced decreases) in delinquency. Treatment assignment will be tested as a moderator of the paths from childhood adversity to short- and long-term changes in delinquency.
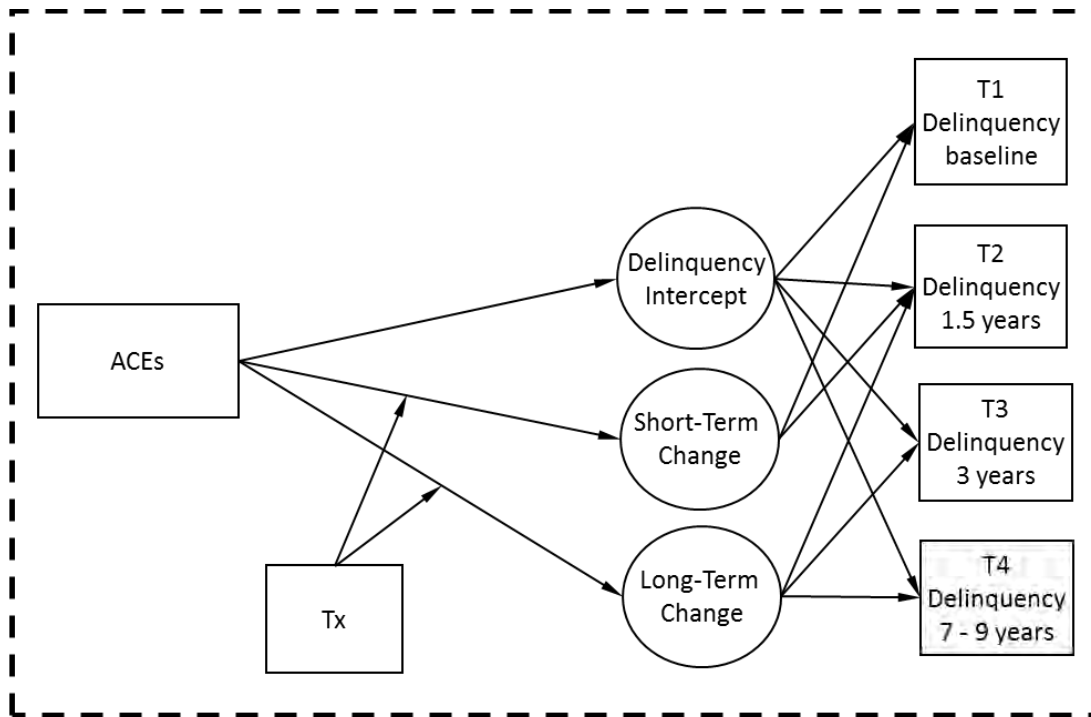

Figure 3: *FHF Intervention Buffers Youth from the Negative Effects of Childhood Adversity.*

Goal 3: To examine the mechanisms of action for the FHF intervention across multiple domains of functioning. We will next test whether short- and long-term effects of the FHF intervention on delinquency are mediated by changes in psychosocial functioning. As illustrated in Figure 4, the model will estimate the intercept and short-term changes in psychosocial functioning variables (each psychosocial functioning variable in a separate model), as well as short- and long-term changes in delinquency. It is hypothesized that ACEs will be associated with poorer psychosocial functioning (both intercept and short-term changes) and delinquency (intercept, short-term changes, long-term changes). The impact of ACEs on delinquency is

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anticipated to be partially mediated by the psychosocial functioning variables. Finally, it is hypothesized that the FHF intervention will reduce the effects of ACEs on psychosocial functioning (by moderating the path from childhood adversity to changes in psychosocial functioning), which in turn will predict improvements in delinquency. The model will permit a test of mediated moderation pathways (presented bold arrows in the figure), so that we will be able to ascertain whether changes in the psychosocial functioning variables mediate the role of the FHF intervention in buffering youth from the effects of ACEs on subsequent delinquency (Preacher, Zyphur, & Zhang, 2010).
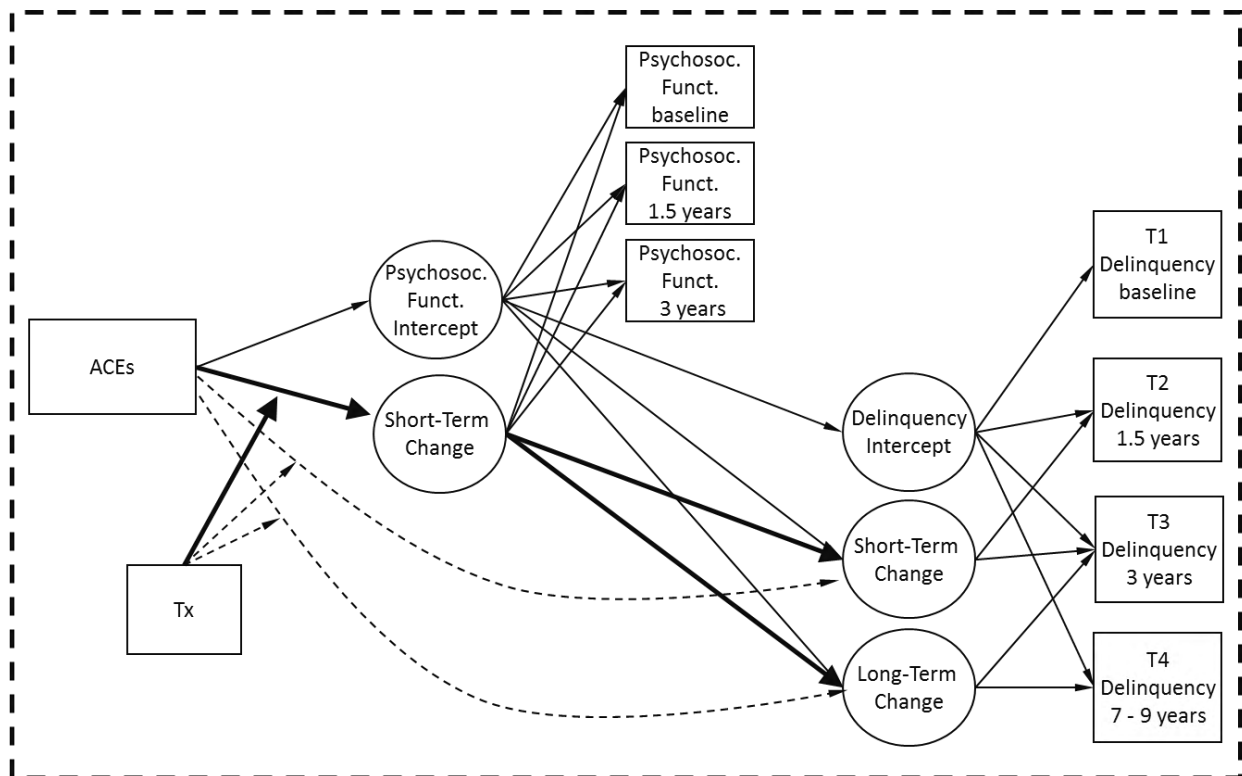
Figure 4: Effects of *FHF Intervention on Delinquency are Mediated by changes in Psychosocial Functioning*

Goal 4: To explore gender and ethnic differences in program efficacy and mediating mechanisms. This set of analyses will explore potential gender and racial/ethnic differences in our data. A binary gender variable will be added to all models to examine whether: (1) the latent FHF intervention effect is greater for boys or girls; (2) there is a three-way treatment × ACEs × gender

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interaction on delinquency, with FHF providing a stronger buffering effect for boys or girls; (3) there is a three-way treatment × ACEs × gender interaction on psychosocial functioning, with FHF providing a stronger buffering effect for boys or girls. For analyses of racial/ethnic data, Hispanic/Latino, African American, American Indian, and Caucasian groups will be compared in a similar fashion, using dummy-coded ethnicity variables.

Missing Data Strategies. Whenever present, patterns of missing data will be analyzed to determine whether data are missing at random and to determine patterns of missing data (Little, 1988). We will utilize full information maximum likelihood (FIML) estimation within Mplus, which will allow for missing values and produces estimates that are less biased than those computed using listwise deletion and single-point data estimation (Enders, 2006).

Power Analyses and Sample Size. Power analyses were conducted to test whether the proposed sample size is adequate to detect treatment effects in the proposed models, with the effect size set at .30, alpha set at .05, and power of at least .80 (Cohen, 1988). Specifically, we conducted Monte Carlo simulations of the models discussed for Goals 1-3, with at least 4 assessment points for the delinquency variable; N = 426 at baseline, N = 380 at time 2, N = 366 at time 3, and N = 225 at time 4. The resulting parameter bias ranged from .003 to .006, standard error bias ranged from .002-.02, and coverage ranged from .943 - .952 – all satisfying the recommended criteria (Muthén & Muthén, 2002). Given the exploratory nature of Goal 4 and the more limited *N* among subgroups, we will look both at statistical significance and patterns of differences across the groups for this set of analyses.

POTENTIAL IMPACT

Implications for Policy and Practice

The proposed study is responsive to the priorities outlined in the solicitation to inform the field's understanding of developmental processes and juvenile justice involvement. It also will examine the impact of a preventive intervention in reducing delinquency among a high-risk population exposed to many adverse events. Finally, the proposed research will study many special populations that have been understudied in the juvenile justice system. The ultimate goal of this research is to develop knowledge that will help OJJDP and the field better understand how to achieve a trauma-informed justice system that meets the needs of *all* justice-involved youth, including understudied subgroups.

If a positive youth development program is found to buffer the effect of ACEs on juvenile justice involvement among a high-risk population, we will have additional evidence to share with the field about the use of such interventions for children involved in the child welfare system. As attention to youth dually involved with child welfare and juvenile justice systems increases, practices are needed to not only identify those youth, but also to adequately intervene. In addition, if differences in the impact of a prevention program on juvenile justice involvement are found for girls, Hispanic/Latino youth, and American Indian youth, it suggests that we may need to develop tailored programming for subgroups of youth at risk. Absent such knowledge, we are reliant on uniform interventions, which may not be as effective as tailored practices.

Youth of color are overrepresented at every stage of the child welfare intervention process, and these disproportionalities grow as children move deeper into the system (Chapin Hall, 2008). Such patterns of disproportionality extend to schools, where African American, Hispanic/Latino and American Indian youth are more likely to be suspended or expelled from school and become

involved in the juvenile justice system; a trajectory often referred to as the "school to prison pipeline." A recent article co-authored by two of the original ACE study architects (Felitti and Anda) discusses the implications of the ACEs research on practice and policy. Identifying family support, service system transformation, and evidence-based interventions as potential ways to mitigate the trauma-adverse outcomes link, they discuss the need for culturally relevant programs and practices to foster resilience and recovery from ACEs (Larkin, Felitti, & Anda, 2014). Although there have been successful initiatives demonstrated to ameliorate the link between violence exposure and negative sequelae, too few of these programs have been adapted for different cultural contexts, in part because the impact of ACEs across cultures is largely unknown. Larkin et al. (2014) also call for a focus on the cost-effectiveness of prevention and intervention activities across groups, as ultimately, fostering positive youth outcomes will bear a great return on investment. The current study aims to contribute substantially to this important research agenda.

Deliverables. As outlined in the solicitation, we are prepared to provide the following deliverables to OJJDP: (a) a practitioner-friendly overview document highlighting the project goals and objectives; (b) a draft implementation plan, (c) detailed progress report every 6 months, which will describe the status of the project, methodological issues, and progress toward goals, (d) practitioner-friendly interim and final reports highlighting the project's findings; (e) at least three scholarly articles submitted to peer-reviewed journals and two or more abstracts submitted for presentations to diverse audiences, (f) a final data set to archive with the National Archive of Criminal Justice Data and (g) final, detailed technical and non-technical reports documenting the research and findings. The PI and each of the co-investigators will be responsible for completing the deliverables per dates outlined in the Timeline. The advantage of including a team of three

researchers for this project is that each investigator can take the lead on different deliverables. This will maximize our time and impact over the 24-month project period.

Dissemination Strategy

As outlined in our CVs, our team has a strong track record for disseminating findings within the research community, both in peer-reviewed journals and at scientific conferences. Although we plan to publish findings from the proposed study in journals and present them at conferences, we have learned that many practitioners do not use these venues to obtain updated information about scientific advances in the field. For this reason, we regularly share our findings with non-scientific audiences using non-technical language and highlighting the practice implications of our work. We prioritize disseminating our work in outlets that target administrators, practitioners, and local government. Recently, we have given presentations to statewide practice organizations, community-based collaboratives, juvenile court and probation departments, mentoring practitioners, diversion programs, and the district attorney's office. Our work has impacted policies and funding priorities that affect children's lives. We have been invited to share our research in mentoring with the Commissioner of the Administration on Children, Youth, and Families (ACYF) and to participate in the Longitudinal Data on Teen Dating Violence Research Meeting convened by the U.S. Department of Justice. Our work has been cited in congressional testimony, in the *Defending Childhood* Report of the Attorney General's National Task Force on Children Exposed to Violence (U.S. Department of Justice, 2012), as well as at the 2013 Institute of Medicine's *Forum on Global Violence Prevention*. Dr. Taussig also sat on the Colorado Governor's Task Force on Foster Care which made recommendations for several sweeping reforms. Our success in disseminating our intervention findings is evidenced by the listing of the Fostering Healthy Futures program on 8 evidence- and research-based registries. Dr.

Taussig serves on the Research Board of the National Mentoring Resource Center (funded by OJJDP) and is regularly invited to present at the annual Mentoring Summit in Washington, D.C., which is attended primarily by practitioners. She also reviews programs for The Office of Justice Programs' CrimeSolutions.gov, which uses rigorous research to determine "what works" in criminal justice, juvenile justice, and crime victim services. In addition, the investigators have presented their research findings to professional and academic audiences through conference presentations at the International Family Violence and Child Victimization Research Conference, the American Psychology Law Society Conference, the Society for Prevention Research Conference and the Society for Research on Child Development Conference. They have also published their work in relevant journals, including *Psychology of Violence*, *Law and Human Behavior* and *Journal of Research on Adolescence*.

Finally, the investigators regularly provide training to juvenile justice, child welfare, and mental health practitioners, and we will use the knowledge gained from this study to advance practitioners' understanding about the ways in which child welfare involvement leads to juvenile justice involvement, including potential differences by gender and racial/ethnic groups.

CAPABILITIES AND COMPETENCIES

As described below, the multidisciplinary investigative team has complementary experience working with youth involved in the child welfare and juvenile justice systems, developing interventions for youth with chronic exposure to trauma, and analyzing longitudinal data from a variety of data sources. We have published, or have under review, numerous papers related to the research proposed in the current application, including:

1. The cross-ethnic and gender equivalence of measures and whether relationships between predictive factors and outcomes are invariant across gender and different racial/ethnic

groups (Culhane & Taussig, 2009; Taussig & Talmi, 2001; Dmitrieva, Chen, Greenberger, & Gil-Rivas, 2004; Farruggia, Chen, Greenberger, & Dmitrieva, 2004)

2. The crossover between child welfare and juvenile justice populations (Litrownik, Taussig, Landsverk, & Garland., 1999)

3. Risk factors for youth delinquency and involvement in the juvenile justice system (Dmitrieva, Monahan, Cauffman, & Steinberg, 2012; Dmitrieva, Gibson, Steinberg, Piquero, & Fagan, 2014; Goldweber, Dmitrieva, Cauffman, Piquero, & Steinberg, 2011)

4. Risk behaviors, including substance use, sexual risk behaviors, self-destructive behaviors and delinquency in maltreated youth (Garrido, Weiler, & Taussig, in press; Nickoletti & Taussig, 2006; Taussig, 2002; Taussig, Clyman, & Landsverk, 2001; Taussig & Clyman 2011; Taussig, Harpin, & Maguire, 2014)

5. The relationship between ACEs and mental and physical health functioning (Hellyer, Garrido, Petrenko, & Taussig, 2013; Garrido, Culhane, Petrenko, & Taussig, 2011a,b; Garrido, Culhane, Raviv, Taussig, 2010; Garrido & Taussig, 2013; Garrido, Taussig, Culhane, & Raviv, 2011; Petrenko, Friend, Garrido, Taussig, & Culhane, 2012; Raviv et al., 2010; Mendoza, Dmitrieva, Perreira, Hurwich-Reiss, & Watamura, 2016)

6. The impact of PYD interventions on mental health and delinquent outcomes and the moderating impact of ACEs on PYD interventions (Taussig & Culhane, 2010; Taussig, Culhane, Garrido, & Knudtson, 2012; Weiler, Haddock, Henry, Zimmerman, Krafchick, & Youngblade, 2015; Weiler & Taussig, under review)

The research proposed in this application will enable us to build upon this prior expertise and contribute to the field, as described above.

Qualifications of Proposed Staff

Heather N. Taussig, Ph.D., Principal Investigator, is a clinical psychologist and a Professor and the Associate Dean for Research at the University of Denver's Graduate School of Social Work. She is the director of the Fostering Healthy Futures Program, which she and her colleagues developed at the Kempe Center for the Prevention and Treatment of Child Abuse and Neglect at the University of Colorado School of Medicine, where she maintains an adjunct appointment. Dr. Taussig has a strong background in prevention science, adverse childhood experiences, and longitudinal research on the developmental trajectories of children who have been maltreated and placed in foster care. She is currently the PI on a National Institute of Justice grant, examining dating violence outcomes for young adults with a history of foster care. She has also served as the PI on several studies funded by the National Institute of Mental Health, and the Edward Byrne Memorial Justice Assistance Grant (through the Colorado Division of Criminal Justice).

Dr. Taussig will be responsible for overseeing all aspects of the study. As the PI, she will: 1) maintain approvals to abstract data from juvenile justice, 2) maintain IRB approval to conduct the proposed research activities; 3) work with the co-investigators and statistician to develop the indices of putative mediators at each time point, 4) oversee the abstraction of juvenile justice data, 5) oversee the conduct and interpretation of statistical analyses and data archiving, 6) coordinate the work of each co-investigator and the graduate research assistant, 7) monitor the budget, 8) present research findings locally, nationally and internationally, 9) prepare manuscripts and reports for publication, and 10) write reports for OJJDP. Dr. Taussig will oversee grant reporting requirements as well as the dissemination and translation of research findings to all stakeholders.

Julia Dmitrieva, Ph.D., Co-Investigator, is a developmental psychologist and Associate Professor at the University of Denver. Her research focuses on the role of psychosocial and cultural

factors in adolescent delinquency. As part of this work, Dr. Dmitrieva have had over 15 years of experience conducting research that examines developmental changes in delinquency embedded in within a diverse bioecological model. As such, her work spans the role of biological (Dmitrieva et al., 2011), peer (Goldweber, Dmitrieva, Cauffman, Piquerro, & Steinberg, 2011), gang affiliation (Dmitrieva at al., 2014), romantic (Monahan, Dmitrieva, & Cauffman, 2014), school (Dmitrieva, Steinberg, & Belsky, 2007), and incarceration-related (Dmitrieva et al., 2012) factors on juvenile delinquency. In addition, Dr. Dmitrieva's work has focused on examining gender and ethnic differences in adolescent delinquency (Dmitrieva et al., 2004; Dmitrieva et al., 2011).

As a developmental psychologist, Dr. Dmitrieva has been extensively trained in and had ample opportunities to work with longitudinal data. In her published work, she has employed latent growth curve modeling, multilevel modeling, and mixture modeling, and has extensive experience of working with both normally distributed data as well as data that requires Bernoulli, zero-inflated Poisson, and other non-linear models. Most pertinent to this proposal, Dr. Dmitrieva has successfully consulted on and run analyses for numerous manuscripts, conference presentations, and dissertation projects that involved structural equation modeling and tested mediated moderation pathways. Given Dr. Dmitrieva's expertise and previous work, she will be involved in all aspects of the grant. Specifically, she will contribute to the developmental of the theoretical models tested in this proposal, conduct data analyses proposed for the grant, and take part in manuscript preparation and other dissemination activities.

Edward Garrido, Ph.D., Co-Investigator, is an Associate Professor of Pediatrics at the University of Colorado and a Visiting Teaching Assistant Professor at the University of Denver. As a social psychologist, Dr. Garrido's research focuses on understanding the impact of early-life trauma exposure on adolescent aggression and violence, including teen dating violence and

juvenile delinquency. He has published over 20 peer-reviewed manuscripts examining the impact of various early-life traumas including exposure to domestic and community violence, caregiver transitions, and physical abuse. In addition to his research, Dr. Garrido was also an evaluator on a federally-funded grant aimed at increasing the delivery of trauma-informed services to families in the child welfare system. Recently he served as Associate Director of SafeCare Colorado, a Colorado Department of Human Services-funded, statewide trial of a home visiting program targeted to families at risk of entering the child welfare system. In terms of his work involving justice-involved youth, Dr. Garrido was co-PI (with Dr. Taussig) on a Colorado Justice Assistance Grant examining correlates of delinquency in youth in foster care. He is also an investigator on a grant from the National Institute of Justice that is examining predictive factors of teen dating violence in a sample of maltreated youth formerly in foster care.

Given Dr. Garrido's previous work examining the impact of trauma on problem behaviors in high-risk youth, he will collaborate with the investigative team to devise measurement strategies for key study variables. He is proficient in managing large datasets and using a variety of analytical techniques to answer research questions of interest. Dr. Garrido will be responsible for data cleaning and for archiving data in accordance with the Data Archiving Plan, as he is currently doing this work on a National Institute of Justice Grant. Finally, Dr. Garrido will collaborate with the team to give presentations, submit reports and manuscripts for publication, as well as integrate the findings into his statewide dissemination of evidence-based practices.

Project Management and Organizational Structure

The complementary expertise of the investigative team in the areas of trauma, delinquency, juvenile justice, child welfare, intervention research and statistical analyses will ensure that the stated goals are achieved. Drs. Taussig and Garrido have worked together for over a decade and

Dr. Dmitrieva is a new colleague of theirs at the University of Denver. As described above, Dr. Taussig will assume responsibility for coordinating the research team's activities to ensure that the project stays on schedule and achieves its stated goals. The team will have bi-weekly meetings to identify and report on individual tasks and progress achieved and will co-supervise the Graduate Research Assistants (GRA). Given the three investigators' history of writing papers for publication and presenting findings, we are confident that we can work effectively and efficiently to produce the stated deliverables.

First, as shown in the attached Timeline, Dr. Taussig will work with our state partners to share consents & receive a download of data from the State Court Administrator's Office (see attached approval). The GRA, supervised by Dr. Garrido, will abstract, code and clean offending data for each year. Dr. Dmitrieva will then conduct analyses to operationalize the constructs, and the three investigators will then collaboratively examine: (1) trajectories of change in delinquency, (2) whether participation in FHF reduces delinquency, and (3) whether FHF moderates the effect of ACEs on delinquency. This will lead to the submission of the first manuscript. Next, the three investigators will examine trajectories of change in the mediator variables, test the mediated moderation models, and write and submit a second paper for publication on these findings. Finally, the investigators will examine gender and ethnic differences in the models, which will lead to the third manuscript submission. Although all investigators will collaborate on the manuscripts, Dr. Taussig will be primarily responsible for writing the methods and discussion sections, Dr. Garrido (with the support of the GRA) will draft the introduction sections and manage the data to be used in analyses, and Dr. Dmitrieva will take the lead on the statistical analyses and result sections. Each investigator will first author one of the three publications. Dr. Taussig will be responsible for the dissemination activities, including the practitioner-friendly overview of findings for OJJDP.
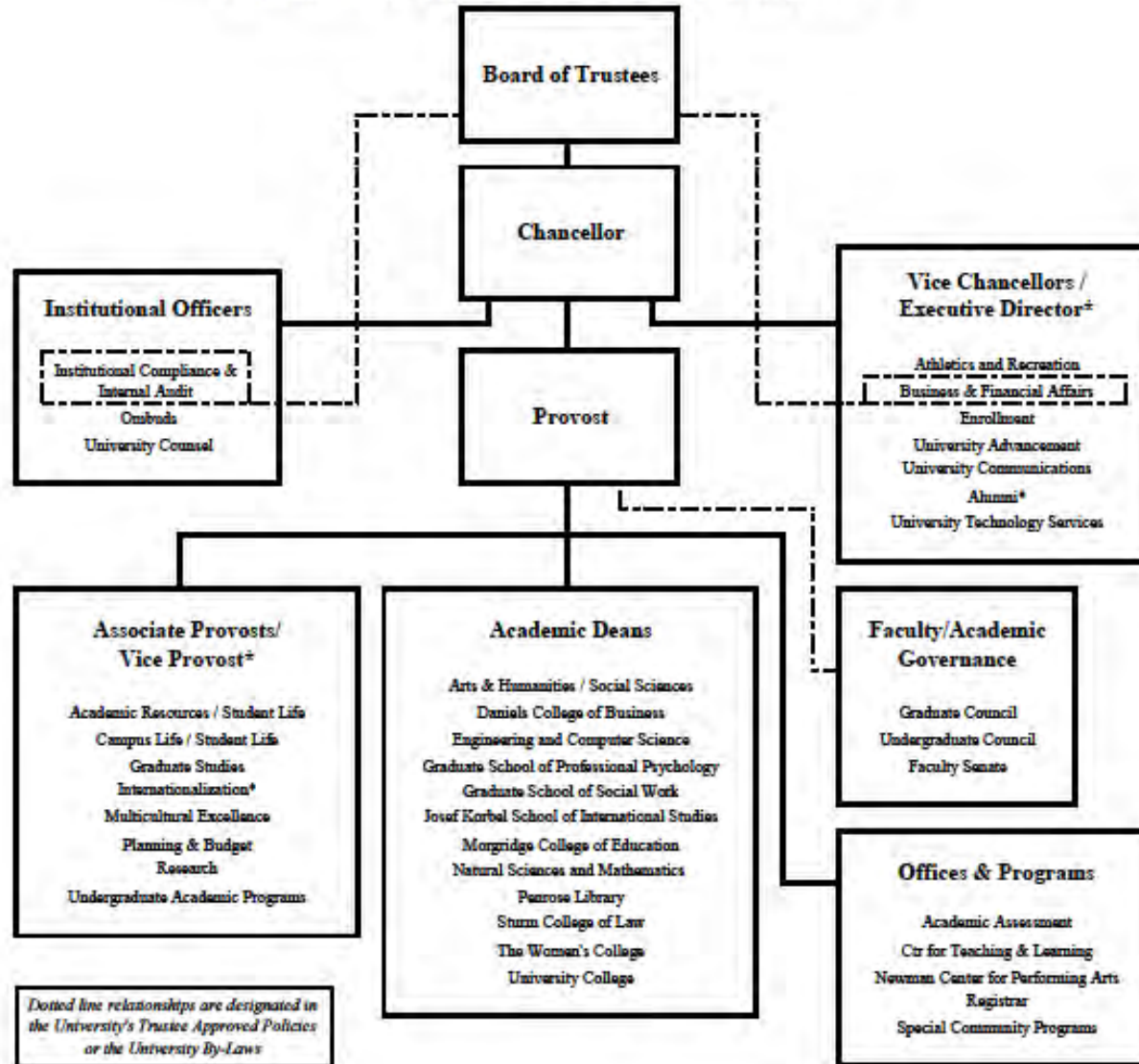
Dr. Garrido will take the lead throughout the project on the data archiving activities and will be responsible for submitting the final data set for archiving.

The University of Denver (DU), the applicant organization, has the experience and capacity to manage the award as described on the Office of Research and Sponsored Project's website: http://www.du.edu/orsp/grant-lifecycle/manage-award/index.html. DU has controls in place to ensure that Federal awards are used for authorized purposes in compliance with laws, regulations, and the provisions of the award and that performance goals are achieved. Please see the University of Denver's Organizational Chart on the following page.
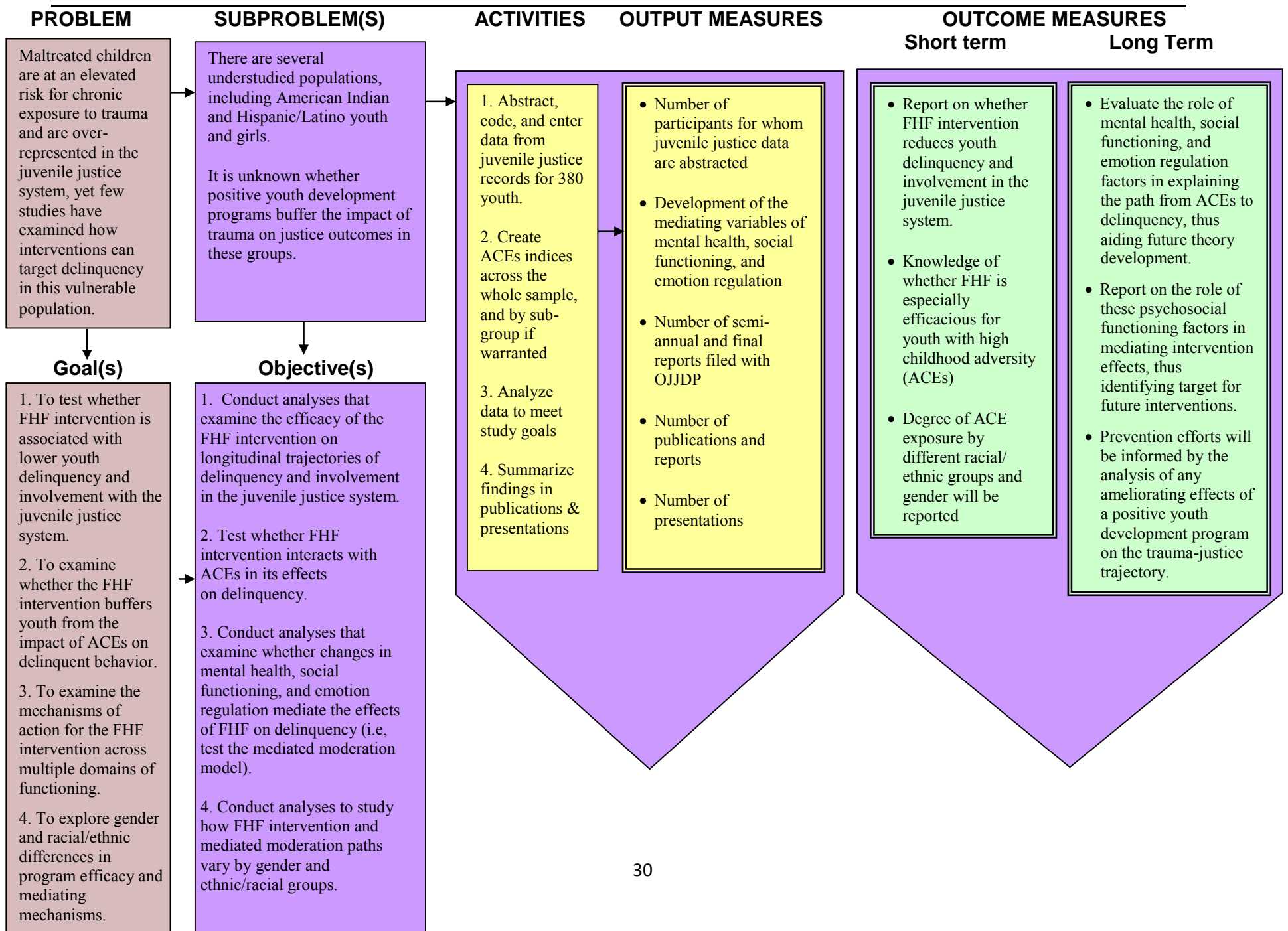
PERFORMANCE MEASURES

In order to demonstrate progress and success, we will provide data that measure the results of our work completed under this solicitation. Please see attached Logic model for a detailed description of the deliverables.

UNIVERSITY OF DENVER - ORGANIZATIONAL CHART

Board of Trustees

Chancellor

Provost

Institutional Officers

Institutional Compliance & Internal Audit
Ombuds
University Counsel

Vice Chancellors / Executive Director±

Athletics and Recreation
Business & Financial Affairs
Enrollment
University Advancement
University Communications
Alumni*
University Technology Services

Associate Provosts/ Vice Provost*

Academic Resources / Student Life
Campus Life / Student Life
Graduate Studies
Internationalization*
Multicultural Excellence
Planning & Budget
Research
Undergraduate Academic Programs

Academic Deans

Arts & Humanities / Social Sciences
Daniels College of Business
Engineering and Computer Science
Graduate School of Professional Psychology
Graduate School of Social Work
Josef Korbel School of International Studies
Morgridge College of Education
Natural Sciences and Mathematics
Penrose Library
Sturm College of Law
The Women's College
University College

Faculty/Academic Governance

Graduate Council
Undergraduate Council
Faculty Senate

Offices & Programs

Academic Assessment
Ctr for Teaching & Learning
Newman Center for Performing Arts
Registrar
Special Community Programs

Dotted line relationships are designated in the University's Trustee Approved Policies or the University By-Laws

An Ecological Model of Risk and Protection for Delinquency and Juvenile Justice Involvement among Maltreated Youth:
A Longitudinal Study

PROBLEM

Maltreated children are at an elevated risk for chronic exposure to trauma and are over-represented in the juvenile justice system, yet few studies have examined how interventions can target delinquency in this vulnerable population.

SUBPROBLEM(S)

There are several understudied populations, including American Indian and Hispanic/Latino youth and girls.

It is unknown whether positive youth development programs buffer the impact of trauma on justice outcomes in these groups.

ACTIVITIES

1. Abstract, code, and enter data from juvenile justice records for 380 youth.

2. Create ACEs indices across the whole sample, and by sub-group if warranted

3. Analyze data to meet study goals

4. Summarize findings in publications & presentations

OUTPUT MEASURES

- Number of participants for whom juvenile justice data are abstracted

- Development of the mediating variables of mental health, social functioning, and emotion regulation

- Number of semi-annual and final reports filed with OJJDP

- Number of publications and reports

- Number of presentations

OUTCOME MEASURES

Short term

- Report on whether FHF intervention reduces youth delinquency and involvement in the juvenile justice system.

- Knowledge of whether FHF is especially efficacious for youth with high childhood adversity (ACEs)

- Degree of ACE exposure by different racial/ethnic groups and gender will be reported

Long Term

- Evaluate the role of mental health, social functioning, and emotion regulation factors in explaining the path from ACEs to delinquency, thus aiding future theory development.

- Report on the role of these psychosocial functioning factors in mediating intervention effects, thus identifying target for future interventions.

- Prevention efforts will be informed by the analysis of any ameliorating effects of a positive youth development program on the trauma-justice trajectory.

Goal(s)

1. To test whether FHF intervention is associated with lower youth delinquency and involvement with the juvenile justice system.

2. To examine whether the FHF intervention buffers youth from the impact of ACEs on delinquent behavior.

3. To examine the mechanisms of action for the FHF intervention across multiple domains of functioning.

4. To explore gender and racial/ethnic differences in program efficacy and mediating mechanisms.

Objective(s)

1. Conduct analyses that examine the efficacy of the FHF intervention on longitudinal trajectories of delinquency and involvement in the juvenile justice system.

2. Test whether FHF intervention interacts with ACEs in its effects on delinquency.

3. Conduct analyses that examine whether changes in mental health, social functioning, and emotion regulation mediate the effects of FHF on delinquency (i.e, test the mediated moderation model).

4. Conduct analyses to study how FHF intervention and mediated moderation paths vary by gender and ethnic/racial groups.

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Appendices

1. References

2. Letter of Approval

3. Memorandum of Understanding

4. Curriculum Vitae

5. List of Project Staff, Affiliation and Roles

6. Timeline

7. List of Previous and Current OJJDP Awards

8. List of Other Agencies to Which this Application has been Submitted

9. Data Archiving Plan

10. Measures

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Weiler, L. M., Haddock, S. A., Zimmerman, T. S., Henry, K. L., Krafchick, J. L., & Youngblade, L. M. (2015). Time-limited, structured youth mentoring and adolescent problem behaviors. *Applied developmental science*, *19*(4), 196-205.

Weiler, L., & Taussig, H.N. (in press). The Moderating Effect of Risk Exposure on an Efficacious Intervention for Maltreated Children. Journal of Clinical Child and Adolescent Psychology.

Widom, C. S. (1992). The cycle of violence. Washington, DC: U.S. Department of Justice, National Institute of Justice.

To: Colorado Department of Human Services (CDHS)

From: Elysia Clemens, Deputy Director/COO, Colorado Evaluation and Action Lab

Date: February 2, 2021

Subject: Colorado FFPSA Technical Review Submission for Fostering Healthy Futures for Teens

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Independent reviewers Sara Bayless and Maggie Schultz Patel assigned a rating of "supported" for the Fostering Healthy Futures for Teens (FHF-T) program.

- "Supported" means that there is at least one research study, aligned to Title IV-E Prevention Services Clearinghouse standards, that reported one or more sustained positive effects of at least six months beyond the end of treatment on a Family First-relevant outcome.

- At the time of publication, the outcome of child permanency was only available for the first two cohorts of participants out of a total of four cohorts. However, study authors have since conducted additional analyses on the third cohort, and analyses on the fourth cohort are forthcoming. Because data collection for cohorts three and four coincide with COVID-19 and its unique implications for program implementation, they may ultimately be considered as a separate study.

An overview of the technical review process and key findings are bulleted below:

- After conducting a comprehensive literature review, reviewers identified two potentially eligible studies. Because one study[1] was focused on the development of FHF-T and program uptake and did not include data on the control group, reviewers concluded that there was only one relevant publication[2] that met handbook design and execution standards.

- The eligible study was a low attrition randomized controlled trial (RCT) with no known confounds. The study included one eligible contrast—an outcome of child permanency as defined by having an open child welfare case—that yielded a design and execution rating of high support of causal evidence.

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[1] Taussig, H., Weiler, L., Rhodes, T., Hambrick, E., Wertheimer, R., Fireman, O. & Combs, M. (2015). Fostering healthy futures for teens: Adaptation of an evidence-based program. *Journal of the Society for Social Work and Research*, 4(4), 617-642.

[2] Taussig, H., Bender, K., Bennet, R., Massey Combs, K., Fireman, O. & Wertheimer, R. (2019). Mentoring for teens with child welfare involvement: Permanency outcomes from a randomized controlled trial of the Fostering Healthy Futures for Teens program. *Child Welfare*, 97(5), 1-24.

- Reviewers calculated baseline equivalence and effect sizes using handbook standards and guidelines. A direct pre-test for the outcome of permanency was not possible because having an open child welfare case was a requirement for eligibility. Reviewers used type of living situation at baseline as a pre-test alternative. Analyses by reviewers indicated that there was a baseline difference (indicated by an effect size of .29) in the proportion of intervention (58%) and control (46%) participants living at home at baseline. However, appropriate statistical models were used, and the dichotomous living situation variable was used as a covariate in the permanency model.

- The eligible contrast examined demonstrated a sustained favorable (statistically significant and in the desired direction) impact estimate, with an implied percentile effect of 38.42%. FHF-T is a nine-month program, and the permanency outcome was assessed at 30 months post-baseline. Therefore, the sustained favorable effect on permanency was demonstrated for longer than 12 months beyond the end of treatment.

The complete set of technical review documents is linked here.

Attachment B: Checklist for Program or Service Designation for HHS Consideration

Instructions:

Section I: The state must complete Section I (Table 1) once to summarize all of the programs and services that the state reviewed and submitted and the designations for HHS consideration.

Section II: The state must complete Section II (Tables 2 and 3) once to describe the independent systematic review methodology used to determine a program or service (listed in Table 1) designation for HHS consideration. Section II outlines the criteria for an independent systematic review. To demonstrate that the state conducted an independent systematic review consistent with sections 471(e)(4)(C)(iii)(I), (iv)(I)(aa) and (v)(I)(aa) of the Act, the state must answer each question in the affirmative. If the independent systematic review used the Prevention Services Clearinghouse Handbook of Standards and Procedures, the relevant sections must be indicated in the "Handbook Section" column. If other systematic standards and procedures were used, states must submit documentation of the standards and procedures used to review programs and services. States should determine the standards and procedures to be used prior to beginning the independent systematic review process. If the state cannot answer each question in Table 2 and Table 3 in the affirmative, ACF will not make transition payments for the program or service reviewed by the state using those standards and procedures.

Section III: The state must complete Section III (Tables 4 and 5) for each program or service listed in Table 1, and provide all required documentation. Section III outlines the requirements for the review of the program or service. States should complete Table 4 prior to conducting an independent systematic review to determine if a program or service is eligible for review. For a program or service to be eligible for review, the answer to both questions in Table 4 must be affirmative and the state must provide the required documentation. If a program or service is eligible for review, the state must conduct the review and identify each study reviewed in Table 5, regardless of whether a study was determined to be eligible to be included in the review.

Section IV: The state must complete Section IV (Tables 6-10) for each program or service (listed in Table 1) reviewed and submitted and provide all required documentation. Section IV lists studies the state determined to be "well-designed" and "well-executed" and outlines characteristics of those studies. Do not include eligible studies that were not determined to be "well-designed" and "well-executed" in Tables 6 -10. States should complete Table 6 with a list of all eligible studies determined to be "well-designed" and "well-executed." States should complete Table 7 to describe the design and execution of each eligible "well-designed" and "well-executed" study. States should complete Table 8 to describe the practice setting and study sample. States must answer in the affirmative that the program or service included in each study was not substantially modified or adapted from the version under review. States must detail favorable effects on target outcomes present in eligible studies determined to be "well-designed" and "well-executed." States must detail unfavorable effects on target and non-target outcomes present in eligible studies determined to be "well-designed" and "well-executed."

Section V: The state must complete Section V (Table 11) for each program or service reviewed and submitted. Section V lists the program or service designation for HHS consideration and verification questions relevant to that designation.

The state must answer the questions applicable to the relevant designation in the affirmative.

Section I: Summary of Programs and Services Reviewed and their Designations for HHS Consideration

Section I. Summary of Programs and Services Reviewed

Table 1. Summary of Programs and Services Reviewed

To be considered for transitional payments, list programs and services reviewed and provide designations for HHS consideration.

Program or Service Name *(if there are multiple versions, specify the specific version reviewed)*	Proposed Designations for HHS consideration *(Promising, Supported, or Well-Supported)*
Fostering Healthy Futures - Teen	Supported

Section II: Standards and Procedures for an Independent Systematic Review

Section II. Standards and Procedures for a Systematic Review

(*Complete Table 2 and Table 3 to provide the requested information on the independent systematic review. The same standards and procedures should be used to review all programs and services.*)

Table 2. Systematic Review

Sections 471(e)(4)(C)(iii)(I), (iv)(I)(aa) and (v)(I)(aa) of the Act require that systematic standards and procedures must be used for all phases of the review process. In the table below, verify that systematic (i.e., explicit and reproducible) standards and procedures were used and submit documentation of reviewer qualifications. If the systematic review used the Prevention Services Clearinghouse Handbook of Standards and Procedures, indicate the relevant sections in the "Handbook Section" column. If other systematic standards and procedures were used, submit documentation of the standards and procedures.

	❐ to Verify	Handbook Section
Were the same systematic standards and procedures used to review all programs and services?	X	--
Were qualified reviewers trained on systematic standards and procedures used to review all programs and services?	X	--
Were standards and procedures in accordance with section 471(e) of the Social Security Act?	X	--
Were standards and procedures in accordance with the Initial Practice Criteria published in Attachment C of ACYF-CB-PI-18-09?	X	--
Program or Service Eligibility: Were systematic standards and procedures used to determine if programs or services were eligible for review? At a minimum, this includes standards and procedures to:	X	2.1
● Determine if a program or service is a mental health, substance abuse, in-home parent-skill based, or kinship navigator program; and	X	2.1.1
● Determine if there was a book/manual or writing available that specifies the components of the practice protocol and describes how to administer the practice.	X	2.1.2
Literature Review: Were systematic standards and procedures used to conduct a comprehensive literature review for studies of programs and services under review? At a minimum, this includes standards and procedures to:	X	3
● Search bibliographic databases; and Search other sources of publicly available	X	3
● Studies (e.g., websites of federal, state, and local governments, foundations, or other organizations).	X	3
Study Eligibility: Were systematic standards and procedures used to determine if studies found through the comprehensive literature review were eligible for review? At a minimum, this includes standards and procedures to:	X	4.1
● Determine if each study examined the program or service under review (as described in the book/manual or writing) or if it examined an adaptation;	X	4.1 & 2.1.2
● Determine if each study was published or prepared in or after 1990;	X	4.1.1 & 4.1.2
● Determine if each study was publicly available in English;	X	4.1.3
● Determine if each study had an eligible design (i.e., randomized control trial or quasi-experimental design);	X	4.1.4
● Determine if each study had an intervention *and* appropriate comparison condition;	X	4.1.4

• Determine if each study examined impacts of program or service on at least one 'target' outcome that falls broadly under the domains of child safety, child permanency, child well-being, or adult (parent or kin-caregiver) well-being. Target outcomes for kinship navigator programs can instead or also include access to, referral to, and satisfaction with services; and	X	4.1.5
• Identify studies that meet the above criteria and are eligible for review.	X	4.1
Study Design and Execution: Were systematic standards and procedures used to determine if eligible studies were well-designed and well-executed? At a minimum, this includes standards and procedures to:	X	5
• Assess overall and differential sample attrition;	X	5.6
• Assess the equivalence of intervention and comparison groups at baseline and whether the study statistically controlled for baseline differences;	X	5.7, 5.7.1-5.7.3
• Assess whether the study has design confounds;	X	5.9.3
• Assess, if applicable, whether the study accounted for clustering (e.g., assessed risk of joiner bias[11]);	X	5.5
• Assess whether the study accounted for missing data; and	X	5.9.4
• Determine if studies meet the above criteria and can be designated as well-designed and well-executed.	X	5
Defining Studies: Sometimes study results are reported in more than one document, or a single document reports results from multiple studies. Were systematic standards and procedures used to determine if eligible, well-designed and well-executed studies of a program and service have non-overlapping samples?	X	4.1
Study Effects: Were systematic standards and procedures used to examine favorable and unfavorable effects in eligible, well-designed and well-executed studies? At a minimum, this includes standards and procedures to:	X	5.10
• Determine if eligible, well-designed and well-executed studies found a favorable effect (using conventional standards of statistical significance) on each target outcome; and	X	5.10
• Determine if eligible, well-designed and well-executed studies found an unfavorable effect (using conventional standards of statistical significance) on each target or non-target outcome.	X	5.10
Beyond the End of Treatment: Were systematic standards and procedures used to determine the length of sustained favorable effects beyond the end of treatment in eligible, well-defined and well-executed studies? At a minimum, this includes standards and procedures to:	X	6.2.3
• Identify (and if needed, define) the end of treatment; and	X	6.2.3

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[1] 1 If a cluster randomized study permits individuals to join clusters after randomization, the estimate of the effect of the intervention on individual outcomes may be biased if individuals who join the intervention clusters are systematically different from those who join the comparison clusters.

• Calculate the length of a favorable effect beyond the end of treatment.	X	6.2.3
Usual Care or Practice Setting: Were systematic standards and procedures used to determine if a study was conducted in a usual care or practice setting?	X	6.2.2
Risk of Harm: Were systematic standards and procedures used to determine if there is evidence of risk of harm?	X	6.2.1
Designation: Were systematic standards and procedures used to designate programs and services for HHS consideration (as promising, supported, well-supported, or does not currently meet the criteria)? At a minimum, this includes standards and procedures to:	X	6
• Determine if a program or service has one eligible, well-designed and well-executed study that demonstrates a favorable effect on a target outcome and should be considered for a designation of promising;	X	6
• Determine if a program or service has at least one eligible, well-designed and well-executed study carried out in a usual care or practice setting that demonstrates a favorable effect on a target outcome at least 6 months beyond the end of treatment and should be considered for a designation of supported; and	X	6
Determine if a program or service has at least two eligible, well-designed and well-executed studies with non-overlapping samples carried out in usual care or practice settings that demonstrate favorable effects on a target outcome; at least one of the studies must demonstrate a sustained favorable effect of at least 12 months beyond the end of treatment on a target outcome; and should be considered for a designation of • of well-supported.	X	6
Reconciliation of Discrepancies: Were systematic standards and procedures used to reconcile discrepancies across reviewers? (applicable if more than one reviewer per study)	X	7.3.1
Author or Developer Queries: Were systematic standards and procedures used to query study authors or program or service developers? (applicable if author or developer queries made)	X	7.3.2

Table 3. Independent Review

The systematic review must be independent (i.e., objective and unbiased). In the table below, verify that an independent review was conducted using systematic standards and procedures by providing the names of each state agency and external partner that reviewed the program or service. States must answer all applicable questions in the affirmative.
Submit MOUs, Conflict of Interest Policies, and other relevant documentation.

List all state agencies and external partners that reviewed programs and services.	
Colorado Evaluation and Action Lab • Sara Bayless • Maggie Schultz Patel	
	❏ **to Verify**
Was the review independent (conducted by reviewers without conflicts of interest including those that authored studies, evaluated, or developed the program or service under review)?	X
Was a Conflict of Interest Statement signed by reviewers attesting to their independence? If so, attach the statement.	X
Was a Memorandum of Understanding (MOU) signed by external partners (if applicable)? If so, attach MOU(s).	X

Sections III-V: Describe and Document Findings from Each Program and Service Reviewed and Submitted

Section III. Review of Programs and Services
(*Complete Tables 4-5 for each program or service reviewed.*)

Table 4. Determination of Program or Service Eligibility

Fill in the table below for each program or service reviewed.

	❏ to Verify
Does the program or service have a book, manual, or other available documentation specifying the components of the practice protocol and describing how to administer the practice?	X
Provide information about how the book/manual/other documentation can be accessed OR provide other information supporting availability of book/manual/other documentation. Two manuals for Fostering Healthy Futures - Teen are available. See narrative for supporting information.	
Is the program or service a mental health, substance abuse, in-home parent-skill based, or kinship navigator program or service?	X
Identify the program or service area(s). Fostering Healthy Futures - Teen is a mental health and substance abuse prevention program focused on child permanency outcomes.	

Table 5. Determination of Study Eligibility

Fill in the table below for each study of the program or service reviewed. Provide a response in every column; N/A or unknown are not acceptable responses. The response in columns iii, v, vi, vii, and ix must be "yes" or "no." The response in column ix is "yes" only when the responses in columns iii, v, vi, and vii are "yes."

i. Study Title/Authors	ii. Publicly Available Location	iii. Is the study in English? (Yes/No)	iv. Design (RCT, QED, or other). If other, specify design.	v. Did the intervention condition receive the program or service under review in accordance with the book/manual/documentation? (Yes/No)	vi. Did the comparison condition receive no or minimal intervention or treatment as usual? (Yes/No)	vii. Did the study examine at least one target outcome? (Yes/No)	viii. Year Published	ix. Eligible for Review? (Yes/No)
Taussig, H., Weiler, L., Rhodes, T., Hambrick, E., Wertheimer, R., Fireman, O., & Combs, M. (2015). Fostering healthy futures for teens: Adaptation of an evidence-based program. *Journal of the Society for Social Work and Research, 4(4),* 617-642.	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4803110/	Yes	RCT	Yes	Yes	Yes	2015	No

Taussig, H., Bender, K., Bennet, R., Massey Combs, K., Fireman, O., & Wertheimer, R. (2019). Mentoring for teens with child welfare involvement: Permanency outcomes from a randomized controlled trial of the Fostering Healthy Futures for Teens program. *Child Welfare, 97*(5), 1-24.	https://www.fosteringhealthyfutures.org/programs/teen	Yes	RCT	Yes	Yes	Yes	2019	Yes

Section IV. Review of "Well-designed" and "Well-executed" Studies

(Complete Tables 6-10 for each program or service reviewed.)

Table 6. Studies that are "Well-Designed" and "Well-Executed"[2]

Provide an electronic copy of each of the studies determined to be eligible for review and determined to be "well-designed" and "well-executed."

List all eligible studies that are "well-designed" and "well-executed' (Study Title/Author)
Taussig, H., Bender, K., Bennet, R., Massey Combs, K., Fireman, O., & Wertheimer, R. (2019). Mentoring for teens with child welfare involvement: Permanency outcomes from a randomized controlled trial of the Fostering Healthy Futures for Teens program. *Child Welfare, 97*(5), 1-24.

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[2] For reference, the Prevention Services Clearinghouse Handbook Chapter 5 defines "well-designed" and "well-executed" studies as those that meet design and execution standards for high or moderate support of causal evidence. Prevention Services Clearinghouse ratings apply to contrasts reported in a study. A single study may have multiple design and execution ratings corresponding to each of its reported contrasts.

Table 7. Study Design and Execution

For each study eligible for review and determined to be "well-designed" and "well-executed," fill out the table below. Provide a response in every column; N/A or unknown are not acceptable responses for columns i, ii, iii, v, vi, and vii. The response in column ii must be "yes."

i. StudyTitle/Authors	ii. Verify the Absence of all Confounds? (Yes/No)	iii. List Measures that Achieved Baseline Equivalence	iv. List Measures that did NOT Achieve Baseline Equivalence but were Statistically Controlled for in Analyses	v. Overall Attrition[3] (for RCTs only)	vi. Differential Attrition[4] (for RCTs only)	vii. Does Study Meet Attrition Standards?	viii. Notes, as needed
Taussig, H., Bender, K., Bennet, R., Massey Combs, K., Fireman, O., & Wertheimer, R. (2019). Mentoring for teens with child welfare involvement: Permanency outcomes from a randomized controlled trial of the Fostering Healthy Futures for Teens program. *Child Welfare, 97*(5), 1-24.	Yes	None	-Living situation at baseline	22%	4.8%	Yes	-

_____

[3] For reference, the Prevention Services Clearinghouse Handbook section 5.6 defines *overall attrition* as the number of individuals without post-test outcome data as a percentage of the total number of members in the sample at the time that they learned the condition to which they were randomly assigned.

[4] For reference, the Prevention Services Clearinghouse Handbook section 5.6 defines *differential attrition* as the absolute value of the percentage point difference between the attrition rates for the intervention group and the comparison group.

Table 8. Study Description

For each study eligible for review and determined to be "well-designed" and "well-executed," fill out the table below to describe the practice setting and study sample as well as affirm that the program or service evaluated was not substantially modified or adapted from the version under review. Provide a response in every column; N/A or unknown are not acceptable responses. The response in column v must be "yes."

i. Study Title/Authors	ii. Was the study conducted in a usual care or practice setting? (Yes/No)	iii. What is the study sample size?	iv. Describe the sample demographics and characteristics of the intervention group	v. Describe the sample demographics and characteristics of the comparison group	vi. Verify that the program or service evaluated in the study was **NOT** substantially modified or adapted from the manual or version of the program or service selected for review (Yes/No)
Taussig, H., Bender, K., Bennet, R., Massey Combs, K., Fireman, O., & Wertheimer, R. (2019). Mentoring for teens with child welfare involvement: Permanency outcomes from a randomized controlled trial of the Fostering Healthy Futures for Teens program. *Child Welfare, 97*(5), 1-24.	Yes	N = 82 Treatment Group = 45 Control Group = 37	On average, intervention group members were 14.33 years old; 77.7% were in 9th grade, 60% were female, 33.3% were Hispanic/Latinx, 48.9% were Caucasian, and 31.1% were African American.	On average, control group members were 14.10 years old; 56.8 were in 9th grade, 67.6% were female, 59.5% were Hispanic/Latinx, 54.1% were Caucasian, and 27.0% were African American.	Yes

Table 9. Favorable Effects

*For each study eligible for review and determined to be "well-designed" and "well-executed," fill out the table below listing only target outcomes with **favorable effects**.*
*Provide a response in every column; N/A or unknown are **not acceptable** responses.*

i. Study Title/Authors	ii. List the Target Outcome(s)	iii. List the Outcome Measures	iv. List the Reliability Coefficients for Each	v. Are Each of the Outcome Measures Valid?	vi. Are Each of the Outcome Measures Systematically Administered?	vii. List the P-Values for Each of the Outcome Measures	viii. List the Size of Effect for Each of the Outcome Measures	ix. Indicate the Length of Effect Beyond the End of Treatment (in months)
Taussig, H., Bender, K., Bennet, R., Massey Combs, K., Fireman, O., & Wertheimer, R. (2019). Mentoring for teens with child welfare involvement: Permanency outcomes from a randomized controlled trial of the Fostering Healthy Futures for Teens program. *Child Welfare, 97*(5), 1-24.	*Child Permanency*	Child permanency (whether child has an open child welfare case or not)	Self-reported (see memo for additional related comments)	Yes	Yes	$p = 0.002$	$g = 1.20$	12 months

<u>Table 10. Unfavorable Effects</u>

For each study eligible for review and determined to be "well-designed" and "well-executed," fill out the table below listing only target outcomes with
unfavorable effects. *Provide a response in every column; N/A or unknown are not acceptable responses.*

i. Study Title/Authors	ii. List the Target or Non-Target Outcome(s)	iii. List the Outcome Measures	iv. List the Reliability Coefficients for Each	v. Are Each of the Outcome Measures Valid?	vi. Are Each of the Outcome Measures Systematically Administered?	vii. List the P-Values for Each of the Outcome Measures	viii. List the Size of Effect for Each of the Outcome Measures	ix. Indicate the Length of Effect Beyond the End of Treatment (in months)

Section V. Program or Service Designation for HHS Consideration

Table 11. Program or Service Designation for HHS Consideration

Fill out the table below for the program or service reviewed. Only select one designation. Answer questions relevant to the selected designation; relevant questions must be answered in the affirmative.

	❒ to Verify
There is ***NOT*** sufficient evidence of risk of harm such that the overall weight of evidence does not support the benefits of the program or service.	X
	❒ the Designation and Provide a Response to the Questions Relevant to that Designation
Well-Supported	
● Does the program or service have at least two eligible, well-designed and well-executed studies with non-overlapping samples[5] that were carried out in a usual care or practice setting?	
● Does one of the studies demonstrate a sustained favorable effect of at least 12 months beyond the end of treatment on at least one target outcome?	
Supported	
● Does the program or service have at least one eligible, well-designed and well-executed study that was carried out in a usual care or practice setting and demonstrate a sustained favorable effect of at least 6 months beyond the end of treatment on at least one target outcome?	Yes
Promising	
● Does the program or service have at least one eligible, well-designed and well-executed study and demonstrate a favorable effect on at least one 'target outcome'?	

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[5] Samples across multiple sources of a study are considered overlapping if the samples are the same or have a large degree of overlap. Findings from an eligible study

determined to be "well-executed" and "well-designed" may be reported across multiple sources including peer-reviewed journal articles and publicly available government and foundation reports. In such instances, the multiple sources would have overlapping samples. The findings across multiple sources with these

overlapping samples should be considered **<u>one</u>** study when designating a program or service as "well-supported," "supported," and "promising."

SafeCare Colorado
DESCRIPTIVE OUTCOMES EVALUATION BRIEF │ SFY2019 Cohort

PROGRAM OVERVIEW

Prevention of child maltreatment requires delivery of evidence-based practices on community- and system-levels. SafeCare is an evidence-based program implemented in Colorado as part of statewide child maltreatment prevention efforts. The SafeCare Colorado (SCC) program is administered by the Colorado Department of Human Services (CDHS) Office of Early Childhood (OEC) and is evaluated by the Social Work Research Center (SWRC) at Colorado State University (CSU). The Kempe Center for the Prevention and Treatment of Child Abuse and Neglect serves as the state intermediary.

BACKGROUND

SafeCare is an in-home behavioral parenting program that aims to prevent child maltreatment by teaching caregivers skills in three topic areas: home safety (to reduce household safety hazards and increase age-appropriate supervision); child health (to respond appropriately to child health needs, illness, and injury); and parent-child/parent-infant interaction (to promote positive parenting practices and appropriate responses to challenging child behaviors). SafeCare is included in the California Evidence-based Clearinghouse (CEBC), the Title IV-E Prevention Services Clearinghouse, and the HomVEE Clearinghouse (for SafeCare Augmented).

To assess implementation activities, proximal impacts, and participant populations reached by SafeCare, descriptive analyses were conducted for families served in State Fiscal Year (SFY) 2019 as part of ongoing performance management tracking.

METHODS

Secondary administrative data were securely received by the evaluation team from the SCC database, Salesforce, maintained by CDHS/OEC. Basic descriptive statistics were used to assess performance management outputs and outcomes.[1] Some variables have missing data, either because the family declined to respond, the data point is not applicable, or the data were not collected by the provider. As such, only valid percentages are reported (i.e., incidence rate out of actual denominator). Analyses and the presentation of findings represent the program lifecycle, from outreach and referrals, to family engagement and retention, to parental competencies gained. Underscoring the life cycle is target populations and the community sites serving these families. Data definitions, inclusion/exclusion criteria, and other analytical notes are provided under the findings section. This study was approved by the CSU Institutional Review Board.

FINDINGS

A total of **1,439 families actively participated** in SafeCare Colorado from July 1, 2018 to June 30, 2019 (SFY2019). Active participation was defined as a family who had more than only an informational session or non-outreach activity on file.

Participant Characteristics. SCC uses both primary caregiver and target child as the delivery approach. The vast majority of primary caregivers identified as female (93.3%). English was the primary language spoken by the majority of participants (79%), followed by Spanish at 20.9%. The median age of the primary caregiver was 28 (Figure 1). It is worth noting that seven percent of participants were younger parents under 20.
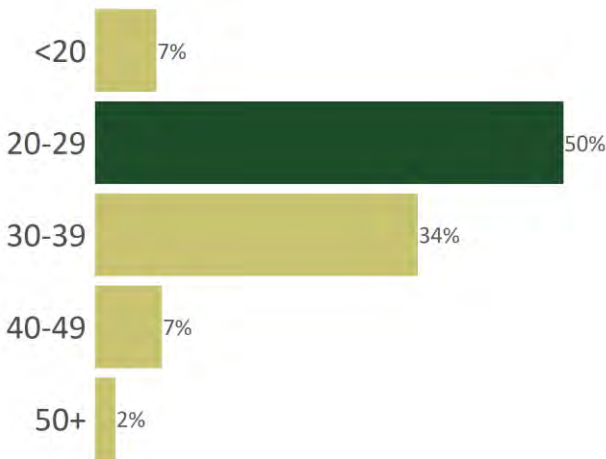
COLORADO
Office of Early Childhood
Department of Human Services

Figure 1. Primary Caregiver Age

Age	Percent
<20	7%
20-29	50%
30-39	34%
40-49	7%
50+	2%

SafeCare targets families with children under five and does not begin until after the birth (i.e., no prenatal enrollment). Figure 2 illustrates the age ranges of children served by SCC; the median age was 1.7 years.

Figure 2. Target Child Age

Age	Percent
< 1	33%
1	21%
2	17%
3	13%
4	10%
5	6%
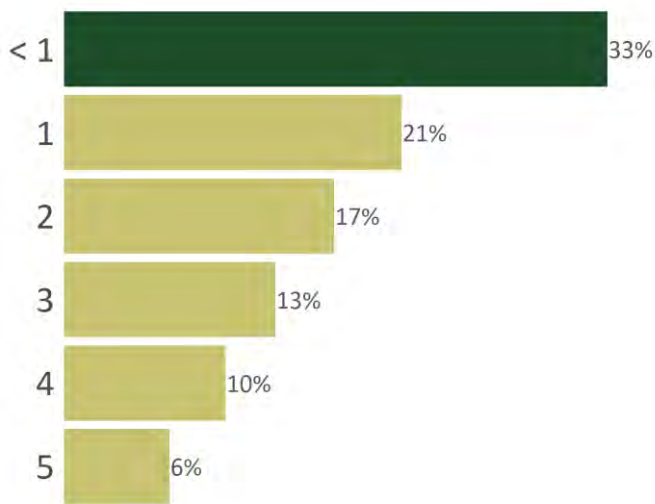
Ninety percent of SCC families received at least one public benefit; Figure 3 depicts the three major forms of assistance reported by families. Only 39.2% of SCC primary caregivers were in some form of employment, while 18.6% were unemployed, and 42.2% were "not working" (defined by serving as a full-time caregiver, a student, or retired). Nearly three-quarters of participants (73.8%) reported an annual household income of <$30,000.*

Figure 3. Public Assistance Rates

Type	Percent
Medicaid	79%
WIC	58%
Food Assistance Benefits	53%
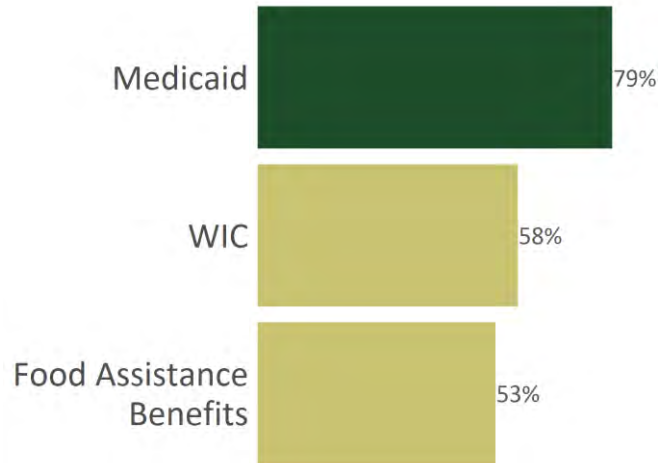
There were also **high mental and physical health needs among primary caregivers**, with 65% of participants reporting at least one health-related issue at present or within the past year (Figure 4).

Figure 4. Health Issues of Primary Caregiver

Issue	Percent
Nervousness	57%
Physical Health	26%
Sadness	46%
Sleep Difficulty	36%
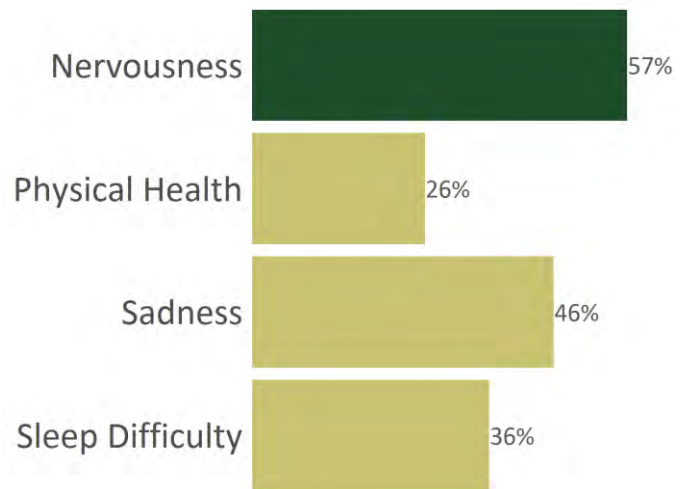
In addition to their own health-related needs, primary caregivers reported **high behavioral health needs among target children**, with 39% of target children having at least one behavior-related issue (Figure 5).

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* For reference, the federal poverty level in 2019 was $25,750 for a family of four.
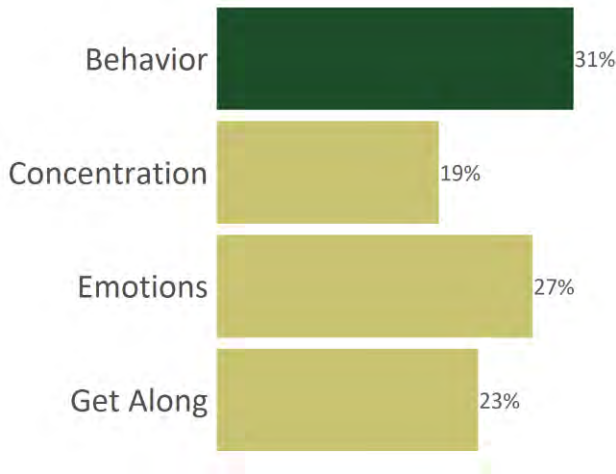
Figure 5. Behavior Issues of Target Child

Finally, SCC families reported low social support, with **13% indicating they had no one to turn to on a day to day basis for emotional help**.

Figure 6. SCC Sites and Geographic Coverage

SCC Sites and Geographic Coverage. Currently[†], SCC is available in 38 counties with service delivery provided by 13 community sites. Figure 6 illustrates the number of SCC families served in SFY19, by geographic county and SCC site. The evaluation team intentionally used SFY19 participant numbers, but only current (i.e., active) SCC sites, in order to visually depict areas for potential site expansion moving forward (i.e., standing up new sites in areas with no geographic coverage, or a county has the potential to be served by an existing site, but there are no to low participant numbers in the area).[‡] Note that in SFY19, 139 participants lived in an unserved county or did not report; this could be because the participant moved counties during SCC services and their files were not accurately transferred in Salesforce, the data are truly missing, or the participant lived in a geographic area no longer served by SCC due to a site discontinuing participation. A total of **15.8% of SCC families lived in rural areas**, **6.9% in frontier areas**, and **77.4% in urban areas**.

[†] As of Spring 2021.
[‡] North Range Behavior Health expanded geographic coverage to Phillips, Washington, Sedgewick, and Yuma counties as of Spring 2021; participant numbers are thus N/A for these sites in SFY19. There have been other site changes as well that have impacted SCC coverage and participant numbers (e.g., Ute Mountain Ute Tribe was served in SFY19, but the site provider slot is vacant as of SFY20, which impacts reach of SCC to tribal communities); please contact the SCC administrator at OEC for specifics of site and coverage year-over-year changes.

Outreach and Referrals. There was a total of 3,690 referrals made to SCC during SFY19 (excluding ineligible, duplicate, and open referrals not closed out in SFY19). Uptake rates are calculated for families that either actively declined or accepted the referral (i.e., active referral), meaning "passive" declines (i.e., unable to reach caregiver; 45.3%) were excluded from the uptake rate. Figure 7 illustrates referral and uptake rates for SCC families in SFY19, with uptake being defined as the percentage of active referrals that resulted in an intake (percentages in the graph are the uptake rates for each referral source). Of the families who actively responded to an outreach, 68% accepted enrollment. **Highest uptakes rates were seen for community referral sources** with a noteworthy 100% uptake rate for community centers and early childhood councils, followed by other home visiting programs (93%), family resource centers (87%), early childhood education/child care (84%), mental health providers (83%), self-referrals (83%), and early intervention (82%). **Lowest uptake rates were observed for child welfare referral sources**, with the lowest seen in closed assessments at 35% uptake. The one exception was non-court involved open case referrals, which reflected a 100% uptake rate; this is a (positive) divergence from past trends and should be watched carefully moving forward.

Family Engagement and Retention. Program engagement and retention for SCC can be understood through a three-dimensional measure of number of topics completed, degree of program completion, and median time to completion.

Number of Topics Completed. In SFY19, **1,484 topics were completed** by 875 families (Figure 8). Mirroring previous years' data, safety continues to be the most completed topic at 36% completion. An impressive 10,316 home visits were completed by providers for topic delivery.

Figure 7. Program Uptake Rates
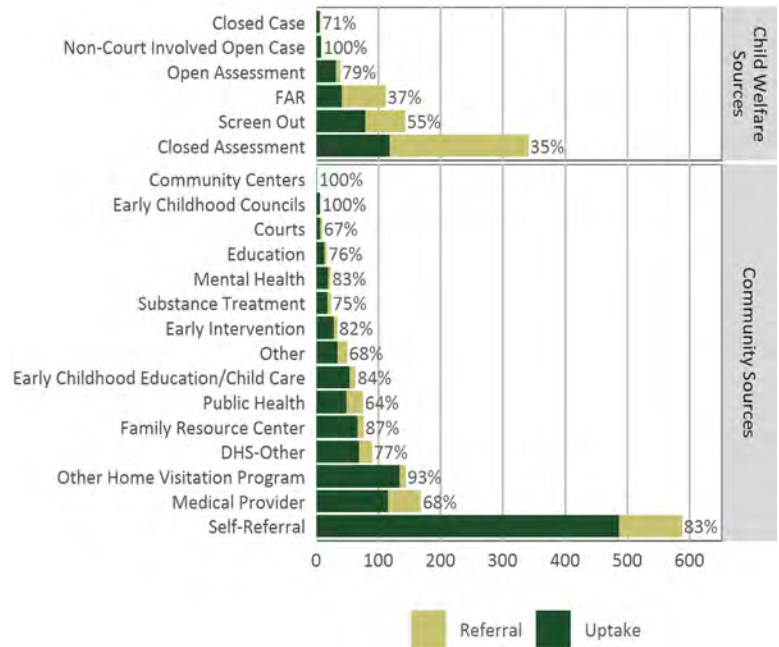
Figure 8. Number of Topics Completed
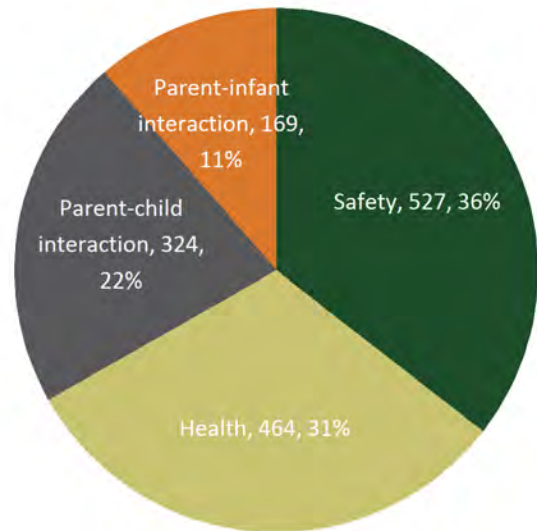
Degree of Program Completion. SCC aims to have families complete all three topics and fidelity to the model is defined as three-topic completers. As a voluntary prevention program, however, families may choose to discontinue program engagement at any time. As such, measuring early attrition and retention through topic completion is important for identifying program growth edges and strengths.

Of the 1,050 families that closed out of the program in SFY19, **68% completed at least one topic** and **29% completed all three topics.** On average, families completed 1.4 topics. Figure 9 illustrates the rates of one-, two-, and three-topic completers.

Figure 9. Topic Completion Rates

Time to Completion. Topic completion rates are accompanied by median time to completion rates, as another dimension for understanding how a SCC family engages with the program. **Median time to program completion was 28 weeks.** Mirroring previous years' trends, parent-child and parent-infant interaction (PCI/PII) took the longest, followed by health, and then safety (Figure 10).

Figure 10. Topic Time to Completion

Parental Competencies Gained. SafeCare providers deliver baseline assessments for each topic at the first topic session and then re-administer the assessment at the last topic session to measure change in parental competencies (i.e., knowledge/skills) in the target domains of home safety (measure: Home Accident Prevention Inventory, or HAPI), child health (measure: Sick and Injured Child Checklist, or SICC), and PCI/PII (measure: Child/Infant Planned Activities Training Checklist, or cPAT/iPAT). A pre-/post-test analysis was conducted to measure change in parental competencies for families that closed out of SCC in SFY19.

For home safety, there was a **91% decrease in the average number of home hazards** recorded on the HAPI from baseline to post-test. For child health, **99% of families met "success" or "mastery" criteria on the SICC at post-test** for each health scenario posed, up from 22% (emergency scenario), 12% (doctor appointment scenario), and 19% (care at home scenario) at baseline. For PCI (as measured by the cPAT) and PII (as measured by the iPAT), the proportion of positive behaviors observed at baseline and post-intervention were examined, and a percentage change was calculated by dividing the post-intervention proportion by the baseline proportion. Greater values indicate an increase in the percentage of positive behaviors observed. **For PCI, scores improved by 220% and for PII, scores improved by 117%.**

DISCUSSION

In this section, we highlight key considerations for moving findings into action, with an eye towards continuous quality improvement and strategic learning.

Strengths. Participant characteristic findings indicate that SCC families experience several social and structural vulnerabilities that can serve as risk factors for child maltreatment and impede healthy child development and family functioning when left unaddressed.[2] SafeCare works to address these factors through a behavioral model that increases parental competencies in the target areas of child health, home safety and parent-child/parent-infant interaction.

Findings from the parental competency analyses demonstrate substantial increases in caregiver knowledge/skills that can act as protective factors for child maltreatment. Specifically, environmental neglect and unintentional injury are anticipated to decrease through a reduction in home hazards alongside improved age-appropriate supervision; medical neglect is anticipated to decrease through a substantial gain in parental competencies in child health; and positive parenting practices alongside healthy child development are anticipated to be improved through an increase on positive parenting behaviors and a decrease in negative behaviors associated with abuse and neglect. Collectively, these findings demonstrate the value SCC brings to child and family well-being, and participant data indicate SCC is reaching target populations prioritized for service delivery.

Growth Edges. SCC serves as a primary and secondary prevention program with voluntary participation. As such, the program receives referrals from both community sources and child welfare sources. On-the-whole, uptake rates were strongest in community sources and lowest in child welfare sources. These findings indicate a need to continue strengthening outreach practices from child welfare sources while sustaining investments in community referral pathways to maximize return on investment and successful program reach.[3, 4, 5]

The second area for continuous quality improvement is found in topic and program completion. While 68% of SCC families with a closed case completed at least one topic, this leaves 32% of families having not completed even one topic in full. Additionally, only 29% of families completed the program in full as intended (i.e., completed all three topics). Program retention and completion is a key growth edge for SCC and improving these rates will ensure families are receiving the maximum benefit possible from program participation. Findings on median time to topic completion point to a potentially useful strategy for increasing retention. Topic completion lengths reflect the variable complexity of SCC topics, with safety being the most clear-cut, followed by health, and then PCI/PII (with completion taking longer for the more complex topics). SCC participants can choose to begin with any topic, though by default most begin with safety. Previous qualitative research[6] with SCC participants indicates that the PCI/PII topic is the most favored by participants, despite being the more complex one. As such, SCC providers may want to encourage participants to start with PCI/PII to leverage passion and encourage ongoing retention.

Collectively, results from the SFY2019 descriptive outcome evaluation position SafeCare as a valuable service in the home visiting array for Colorado families with young children.

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COLORADO EVALUATION AND ACTION LAB

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SafeCare Colorado
DESCRIPTIVE OUTCOMES EVALUATION BRIEF │ SFY2020 Cohort

PROGRAM OVERVIEW

Prevention of child maltreatment requires delivery of evidence-based practices on community- and system-levels. SafeCare is an evidence-based program implemented in Colorado as part of statewide child maltreatment prevention efforts. The SafeCare Colorado (SCC) program is administered by the Colorado Department of Human Services (CDHS) Office of Early Childhood (OEC) and is evaluated by the Social Work Research Center (SWRC) at Colorado State University (CSU). The Kempe Center for the Prevention and Treatment of Child Abuse and Neglect serves as the state intermediary.

BACKGROUND

SafeCare is an in-home behavioral parenting program that aims to prevent child maltreatment by teaching caregivers skills in three topic areas: home safety (to reduce household safety hazards and increase age-appropriate supervision); child health (to respond appropriately to child health needs, illness, and injury); and parent-child/parent-infant interaction (to promote positive parenting practices and appropriate responses to challenging child behaviors). SafeCare is included in the California Evidence-based Clearinghouse (CEBC), the Title IV-E Prevention Services Clearinghouse, and the HomVEE Clearinghouse (for SafeCare Augmented).

To assess implementation activities, proximal impacts, and participant populations reached by SafeCare, descriptive analyses were conducted for families served in State Fiscal Year (SFY) 2020 as part of ongoing performance management tracking.

METHODS

Secondary administrative data were securely received by the evaluation team from the SCC database, Salesforce, maintained by CDHS/OEC. Basic descriptive statistics were used to assess performance management outputs and outcomes.[1] Some variables have missing data, either because the family declined to respond, the data point is not applicable, or the data were not collected by the provider. As such, we report valid percentages only (i.e., incidence rate out of actual denominator). Analyses and the presentation of findings represent the program lifecycle, from outreach and referrals, to family engagement and retention, to parental competencies gained. Underscoring the life cycle is target populations and the community sites serving these families. Data definitions, inclusion/exclusion criteria, and other analytical notes are provided under the findings section. This study was approved by the CSU Institutional Review Board.

FINDINGS

A total of **1,374 families actively participated** in SafeCare Colorado from July 1, 2019 to June 30, 2020 (SFY2020). Active participation was defined as a family who had more than only an informational session or non-outreach activity on file.

Participant Characteristics. SCC uses both primary caregiver and target child as the delivery approach. The vast majority of primary caregivers identified as female (93.8%). English was the primary language spoken by the majority of participants (79.9%), followed by Spanish at 20.05%. The median age of the primary caregiver was 28 (Figure 1); it is worth noting that five percent of participants were younger parents under 20.
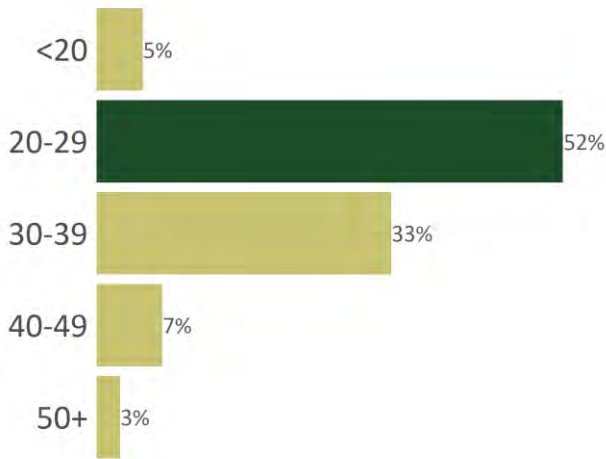
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Department of Human Services

Figure 1. Primary Caregiver Age

- <20: 5%
- 20-29: 52%
- 30-39: 33%
- 40-49: 7%
- 50+: 3%

SafeCare targets families with children under five and does not begin until after the birth (i.e., no prenatal enrollment). Figure 2 illustrates the age ranges of children served by SCC; the median age was 1.7 years.
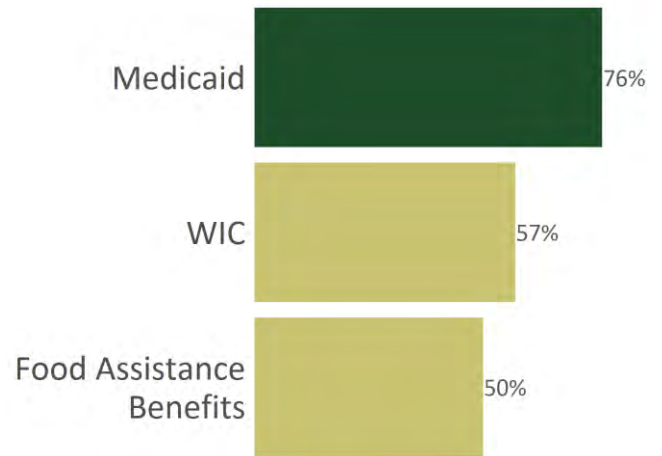
Figure 2. Target Child Age

- < 1: 32%
- 1: 22%
- 2: 18%
- 3: 13%
- 4: 10%
- 5: 6%
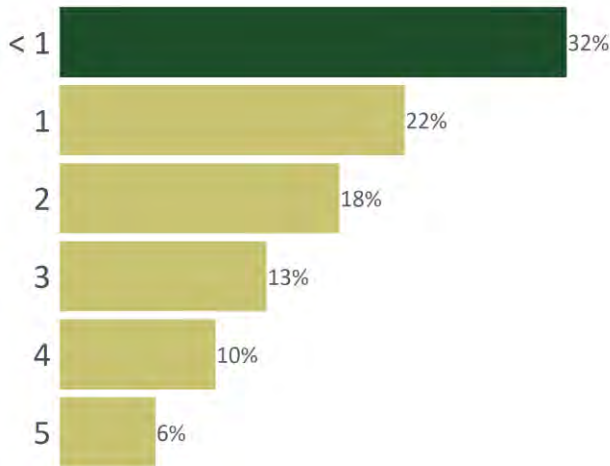
Eighty-eight percent of SCC families received at least one public benefit; Figure 3 depicts the three major forms of assistance reported by families. Only 39.4% of SCC primary caregivers were in some form of employment, while 21.6% were unemployed, and 39% were "not working" (defined by serving as a full-time caregiver, a student, or retired). Nearly three-quarters of participants (71%) reported an annual household income of <$30,000.*

Figure 3. Public Assistance Rates

- Medicaid: 76%
- WIC: 57%
- Food Assistance Benefits: 50%

There were also **high mental and physical health needs among primary caregivers**, with 67% of participants reporting at least one health-related issue at present or within the past year (Figure 4).

Figure 4. Health Issues of Primary Caregiver

- Nervousness: 60%
- Physical Health: 25%
- Sadness: 49%
- Sleep Difficulty: 37%
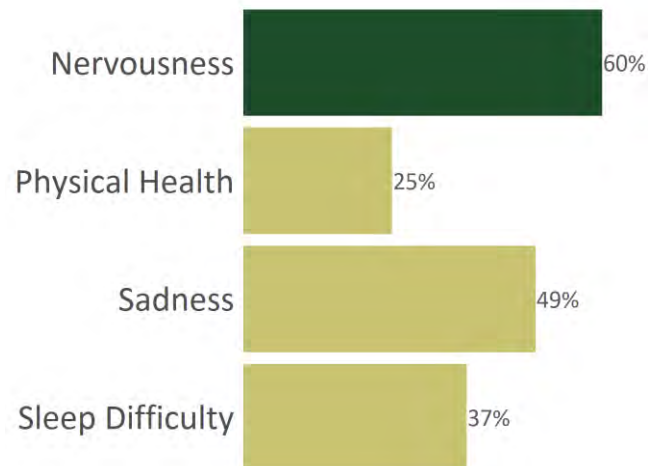
In addition to their own health-related needs, primary caregivers reported **high behavioral health needs among target children**, with 36% of target children having at least one behavior-related issue (Figure 5).

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* For reference, the federal poverty level in 2020 was $26,200 for a family of four.

Figure 5. Behavior Issues of Target Child
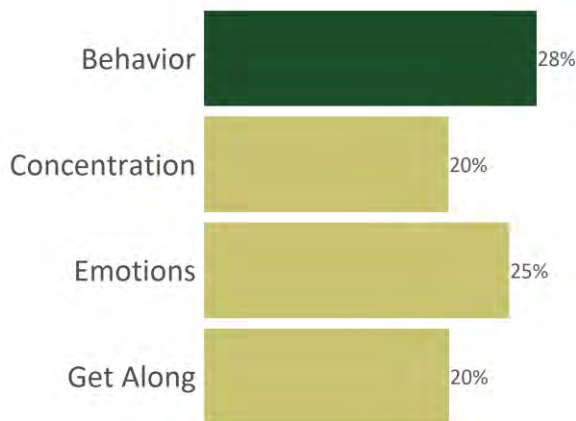
Finally, SCC families reported low social support, with **12% indicating they had no one to turn to on a day to day basis for emotional help**.

SCC Sites and Geographic Coverage. Currently[†], SCC is available in 38 counties with service delivery provided by 13 community sites. Figure 6 illustrates the number of SCC families served in SFY20, by geographic county and SCC site. The evaluation team intentionally used SFY20 participant numbers, but only current (i.e., active) SCC sites, in order to visually depict areas for potential site expansion moving forward (i.e., standing up new sites in areas with no geographic coverage, or a county has the potential to be served by an existing site, but there are no to low participant numbers in the area).[‡] Note that in SFY20, 167 participants lived in an unserved county or did not report; this could be because the participant moved counties during SCC services and their files were not accurately transferred in Salesforce, the data are truly missing, or the participant lived in a geographic area no longer served by SCC due to a site discontinuing participation. A total of **18.0% of SCC families lived in rural areas**, **7.3% in frontier areas**, and **74.7% in urban areas**.

Figure 6. SCC Sites and Geographic Coverage
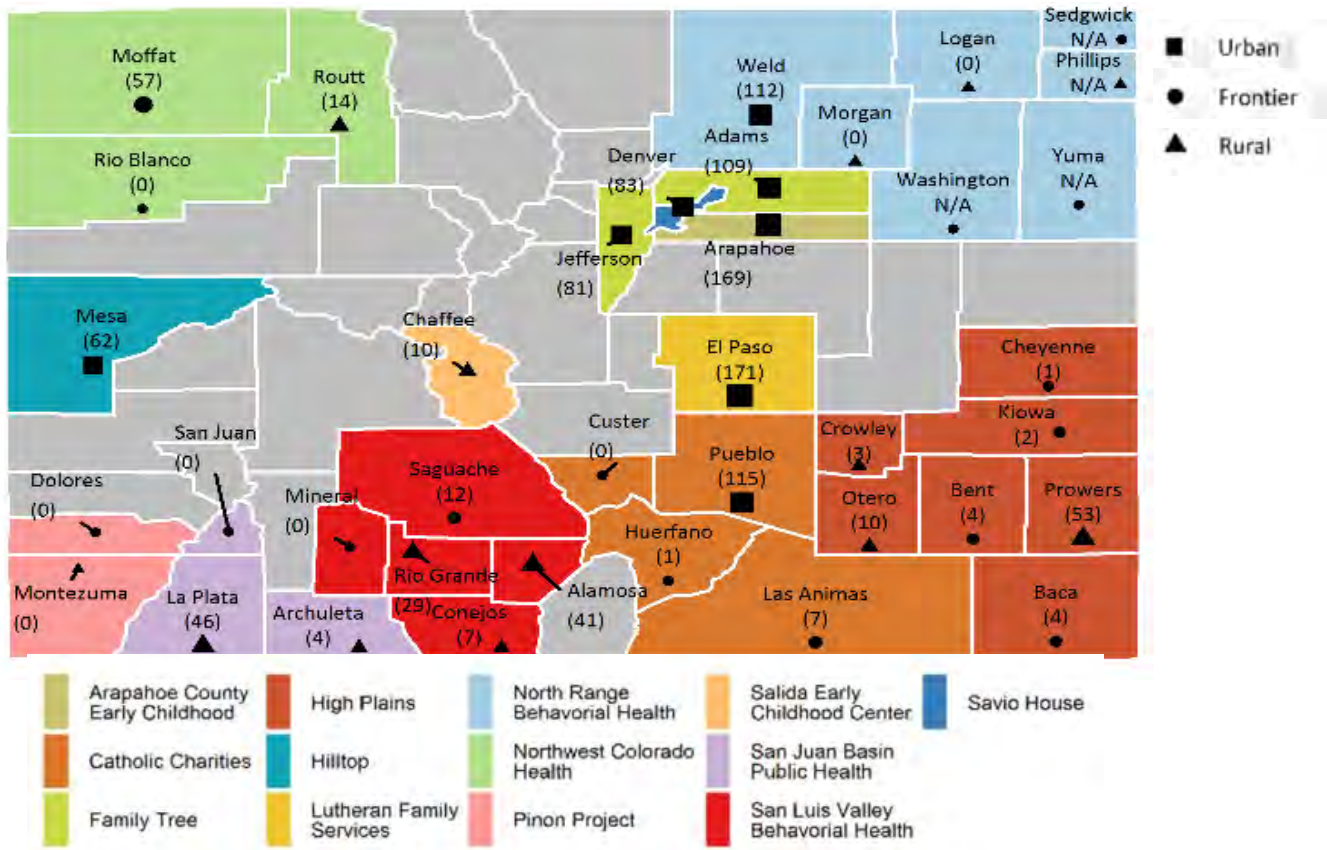
[†] As of Spring 2021.
[‡] North Range Behavior Health expanded geographic coverage to Phillips, Washington, Sedgewick, and Yuma counties as of Spring 2021; participant numbers are thus N/A for these sites in SFY20. There have been other site changes as well that have impacted SCC coverage and participant numbers; please contact the SCC administrator for specifics of site and coverage year-over-year changes.

Social Work Research Center | **3**

Outreach and Referrals. There was a total of 3,664 referrals made to SCC during SFY20 (excluding ineligible, duplicate, and open referrals not closed out in SFY20). Uptake rates are calculated for families that either actively declined or accepted the referral (i.e., active referral), meaning "passive" declines (i.e., unable to reach caregiver; 48%) were excluded from the uptake rate. Figure 7 illustrates referral and uptake rates for SCC families in SFY20, with uptake being defined as the percentage of active referrals that resulted in an intake (percentages in the graph are the uptake rates for each referral source). Of the families who actively responded to an outreach, 67% accepted enrollment. **Highest uptakes rates were seen for community referral sources** with a noteworthy 100% uptake rate for community centers, early childhood, education/childcare, and substance treatment providers, followed by other home visiting programs (87%), mental health providers (86%), early intervention (83%), family resource centers (82%), and self-referrals (81%). **Lowest uptake rates were observed for child welfare referral sources**, with the lowest seen in closed assessments at 37% uptake.

Figure 7. Program Uptake Rates
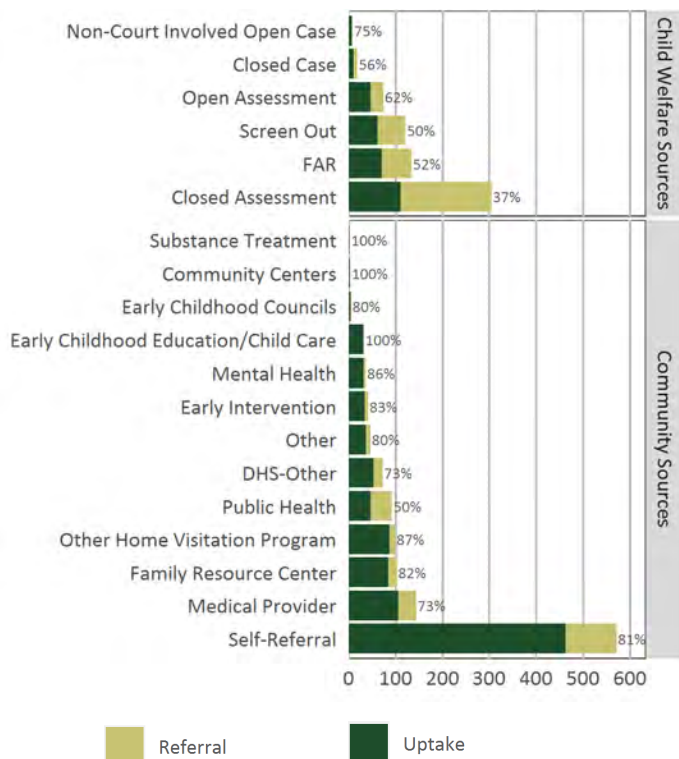
Family Engagement and Retention. Program engagement and retention for SCC can be understood through a three-dimensional measure of number of topics completed, degree of program completion, and median time to completion.

Number of Topics Completed. In SFY20, **1,281 topics were completed** by 775 families (Figure 8). Mirroring previous years data, safety and health continue to be the most completed topics at an equal 35% completion. A total of 9,739 home visits[§] were completed by providers for topic delivery.

Figure 8. Number of Topics Completed
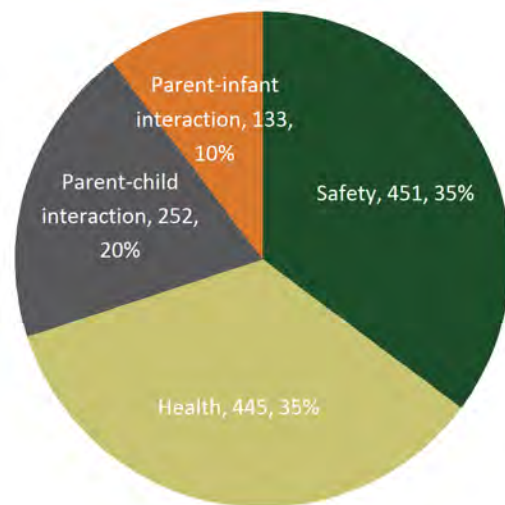
Degree of Program Completion. SCC aims to have families complete all three topics and fidelity to the model is defined as three-topic completers. As a voluntary prevention program, however, families may choose to discontinue program engagement at any time. As such, measuring early attrition and retention through topic completion is important for identifying program growth edges and strengths.

Of the 1,317 families that closed out of the program in SFY20, **67% completed at least one topic** and **29% completed all three topics.** On average, families completed 1.4 topics. Figure 9 illustrates the rates of one-, two-, and three-topic completers.

[§] During the COVID-19 pandemic, many home visits became virtual, using a tele-health model, due to ongoing public health orders and state mandates.

Figure 9. Topic Completion Rates

Time to Completion. Topic completion rates are accompanied by median time to completion rates, as another dimension for understanding how a SCC family engages with the program. **Median time to program completion was 28 weeks.** Mirroring previous years trends, parent-child and parent-infant interaction (PCI/PII) took the longest, followed by health, and then safety (Figure 10).

Figure 10. Topic Time to Completion

Parental Competencies Gained. SafeCare providers deliver baseline assessments for each topic at the first topic session and then re-administer the assessment at the last topic session to measure change in parental competencies (i.e., knowledge/skills) in the target domains of home safety (measure: Home Accident Prevention Inventory, or HAPI), child health (measure: Sick and Injured Child Checklist, or SICC), and PCI/PII

(measure: Child/Infant Planned Activities Training Checklist, or cPAT/iPAT). A pre-/post-test analysis was conducted to measure change in parental competencies for families that closed out of SCC in SFY20.

For home safety, there was an **89% decrease in the average number of home hazards** recorded on the HAPI from baseline to post-test. For child health, **100% of families met "success" or "mastery" criteria on the SICC at post-test** for the emergency scenario, up from 17% at baseline; while 99% of families met "success" or "mastery" criteria on the SICC by post-test for the doctor appointment and care at home scenario, up from 9% and 15% at baseline, respectively. For PCI (as measured by the cPAT) and PII (as measured by the iPAT), the proportion of positive behaviors observed at baseline and post-intervention were examined, and a percentage change was calculated by dividing the post-intervention proportion by the baseline proportion. Greater values indicate an increase in the percentage of positive behaviors observed. **For PCI, scores improved by 227% and for PII, scores improved by 125%.**

DISCUSSION

In this section, we highlight key considerations for moving findings into action, with an eye towards continuous quality improvement and strategic learning. Despite the last three months of SFY20 bringing the onset of COVID-19, findings, on-the-whole, were nearly identical to SFY2019 results. Instability was introduced into the program by COVID-19, however, for key metrics, beginning in April 2020; for this more thorough discussion of COVID-19 early impacts on SCC, please see the evaluation brief entitled, "Impacts of COVID-19 on SafeCare Colorado Performance Measures."

Strengths. Participant characteristic findings indicate that SCC families experience several social and structural vulnerabilities that can serve as risk factors for child maltreatment and impede healthy child development and family functioning when left unaddressed.[2] SafeCare works to address these factors through a behavioral model that increases parental competencies in the target areas of child health, home safety and parent-child/parent-infant interaction.

Findings from the parental competency analyses demonstrate substantial increases in caregiver knowledge/skills that can act as protective factors for

child maltreatment. Specifically, environmental neglect and unintentional injury are anticipated to decrease through a reduction in home hazards alongside improved age-appropriate supervision; medical neglect is anticipated to decrease through a substantial gain in parental competencies in child health; and positive parenting practices alongside healthy child development are anticipated to be improved through an increase in positive parenting behaviors and a decrease in negative behaviors associated with abuse and neglect. Collectively, these findings demonstrate the value SCC brings to child and family well-being, and participant data indicate SCC is reaching target populations prioritized for service delivery.

Growth Edges. SCC serves as a primary and secondary prevention program with voluntary participation. As such, the program receives referrals from both community sources and child welfare sources. On-the-whole, uptake rates were strongest in community sources and lowest in child welfare sources. These findings indicate a need to continue strengthening outreach practices from child welfare sources while sustaining investments in community referral pathways to maximize return on investment and successful program reach.[3, 4, 5] It is worth noting that since the July 2019 Facilitated SCC Stakeholder meeting,[6] SafeCare Colorado sites, the state intermediary, and OEC have invested intentional efforts into improving referrals from community sources as well as reducing the stigma associated with referrals from child welfare. This investment is reflected in SFY2020 data, where despite referrals/outreach remaining a growth edge, positive progress is observed compared to previous year trends.

The second area for continuous quality improvement is found in topic and program completion. While 67% of SCC families with a closed case completed at least one topic, this leaves 33% of families having not completed even one topic in full. Additionally, only 29% of families completed the program in full as intended (i.e., completed all three topics). These trends mirror previous years and program retention and completion continue to be a key growth edge for SCC, as improving these rates will ensure families are receiving the maximum benefit possible from program participation. Findings on median time to topic completion point to a potentially useful strategy for increasing retention.

Topic completion lengths reflect the variable complexity of SCC topics, with safety being the most clear-cut, followed by health, and then PCI/PII (with completion taking longer for the more complex topics). SCC participants can choose to begin with any topic, though by default most begin with safety. Previous qualitative research[7] with SCC participants indicates that the PCI/PII topic is the most favored by participants, despite being the more complex one. As such, SCC providers may want to encourage participants to start with PCI/PII to leverage passion and encourage ongoing retention.

Collectively, results from the SFY2020 descriptive outcome evaluation position SafeCare as a valuable service in the home visiting array for Colorado families with young children.

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SafeCare Colorado
IMPACTS OF COVID-19 ON PERFORMANCE MEASURES

PROGRAM OVERVIEW

Prevention of child maltreatment requires delivery of evidence-based practices on community- and system-levels. SafeCare is an evidence-based program implemented in Colorado as part of statewide child maltreatment prevention efforts. The SafeCare Colorado (SCC) program is administered by the Colorado Department of Human Services (CDHS) Office of Early Childhood (OEC) and is evaluated by the Social Work Research Center (SWRC) at Colorado State University (CSU). The Kempe Center for the Prevention and Treatment of Child Abuse and Neglect serves as the state intermediary.

BACKGROUND

SafeCare is an in-home behavioral parenting program that aims to prevent child maltreatment by teaching caregivers skills in three topic areas: home safety (to reduce household safety hazards and increase age-appropriate supervision); child health (to respond appropriately to child health needs, illness, and injury; and parent-child/parent-infant interaction (to promote positive parenting practices and appropriate responses to challenging child behaviors). SafeCare is included in the California Evidence-based Clearinghouse (CEBC), the Title IV-E Prevention Services Clearinghouse, and the HomVEE Clearinghouse (for SafeCare Augmented).

To assess potential impacts of the global COVID-19 pandemic on key performance measures, select SafeCare Colorado activities were analyzed for the time period of 1/1/2020 through 8/31/2020, and then compared to the same time period in the previous year to calculate year-over-year change.

METHODS

Secondary administrative data were securely received by the evaluation team from the SCC database, Salesforce, maintained by CDHS/OEC. The evaluation team identified the "COVID-19 time period" as SCC activities taking place between 1/1/2020 to 8/31/2020. This time period captures the months leading up to COVID-19 (1/1/2020 to 3/21/2020); the most intense periods of COVID-19 in Colorado, as measured by stay-at-home and safer-at-home orders (3/22/2020 to 7/17/2020); and a roughly six week "post-COVID" time period as restrictions eased (7/18/2020 to 8/31/2020). SCC activities that took place within this COVID-19 time period were then compared to activities unfolding during the same dates in the year prior (1/1/2019 to 8/31/2019) to examine year-over-year change.[1]

Analyses were conducted for main touchpoints in the program lifecycle; presentation of findings focus on primary areas where significant disruption to SCC trends were observed, namely: referrals, intakes, and topic completion. As this COVID-19 impact report is a supplemental brief, please see the "Descriptive Outcomes Evaluation Brief: SFY2020 Cohort" for data definitions and other analytical notes. This study was approved by the CSU Institutional Review Board.

FINDINGS

Referrals. It was anticipated that a decline in referrals would be observed for the most intense early periods of COVID-19. To examine this hypothesis further, year-over-year change in referrals was examined. Findings revealed an 18% drop (Figure 1) in SCC referrals, with a substantial change in April 2020 as stay-at-home orders were enacted in Colorado (Figure 2).

Intakes. It was similarly anticipated that a decline in intakes would be observed for the early COVID-19 time period. To examine this hypothesis further, year-over-year change in intakes was examined. Findings showed a 24% drop (Figure 1) in SCC intakes, with a substantial change being observed in April and May 2020, again reflecting the height of stay-at-home orders (Figure 2). It is worth noting that the month-to-month analysis[*] revealed that active referral declines increased for select early months of the COVID-19 time period, with a higher proportion of families actively declining SCC participation in March and April 2020 compared to in 2019. **This increase in active declines was then followed by a *decrease* in active declines, meaning a higher proportion of families were then actively accepting the program in comparison to the same time period in the previous year.**

Figure 1. Year-Over-Year Changes -- Summary
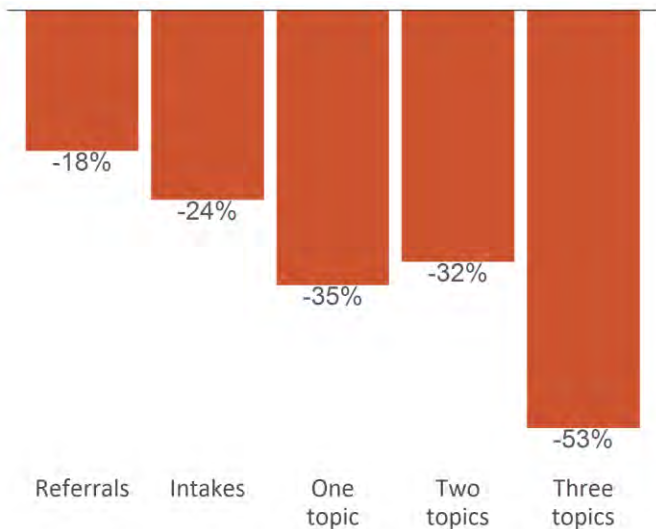
Topic Completion. As with referrals and intakes, topic completion was down during the COVID-19 time period compared to previous year data.[†] Year-over-year analysis revealed a 35% drop in one-topic completers, a 32% drop in two-topic completers, and a 53% drop in three-topic completers (Figure 1). It was hypothesized that in addition to a decrease in completion rates, time-to-topic completion would also become lengthier. This

analysis revealed that **median time to completion for each topic remained relatively unchanged in the year-over-year analysis, indicating some stability for families who did received SCC services during the evolving COVID-19 time period.**

Figure 2. Year-Over-Year Changes in Referrals and Intakes, by Month
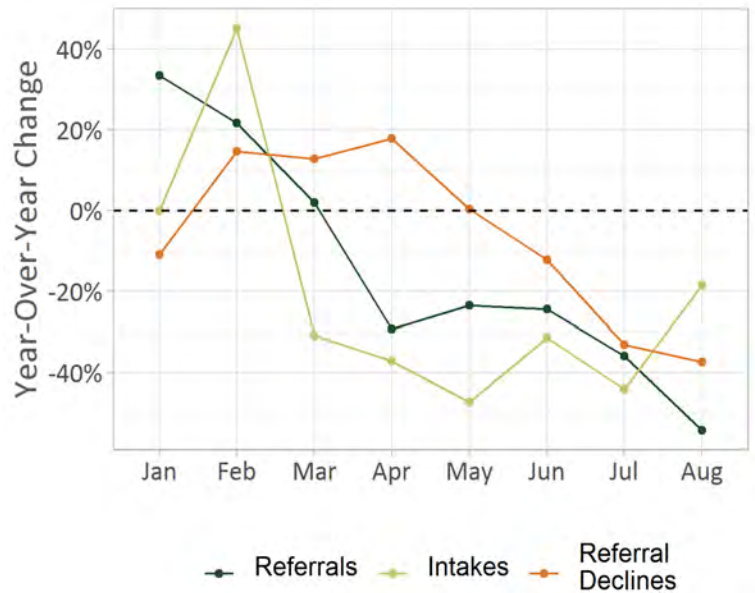
DISCUSSION

In this section, we discuss possible implications of findings from this preliminary analysis on impacts of COVID-19 for key performance metrics within SCC.

In examining year-over-year changes in referrals and intakes, it is not surprising that declines in both metrics were observed on-the-whole, given the massive disruption to health and human service programs that COVID-19 caused, including to the child welfare system. Referrals to child protective services during the pandemic were seen across Colorado and nationally, which can cause a ripple effect for programs like SCC that rely, in part, on child welfare referral sources for reaching families.[2]

The substantial dips in referrals and intakes in April and May reflect not only the advent of stay-at-home orders in Colorado, but also the time period in which home

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[*] The change in the graph is the percentage change within the percent of declines out of active responses.
[†] Completion was calculated for those SCC families with an intake starting in January 2019 and 2020, respectively, who then completed one or more topics by 8/31/2019 and 8/31/2020, respectively.

visiting programs had to rapidly change processes, protocols, and delivery mediums to account for ongoing public health orders and state mandates that prevented gatherings of nearly any kind. These requirements were acutely felt for home visiting programs like SafeCare, as the model rests on *in-home delivery* of services. In an extraordinary lift, home visiting programs across Colorado had to shift to telehealth/hybrid delivery and find creative new ways to connect with families (e.g., outdoor parks).[3] National guidance was issued by several home visiting programs, including for SafeCare from the [National SafeCare Training and Resource Center](#), and innovations in home visiting were catalyzed by national and local working groups, including the [Rapid Response Virtual Home Visiting collaborative](#). Initial declines in referrals and intakes during the early months of COVID-19 thus likely reflect not only service disruptions on-the-whole, but the time period necessary for SCC to build infrastructure for new forms of model delivery and other pivots.

The initial increase in the proportion of families actively declining participation in SCC after a referral, followed by a decrease in the proportion of active declines, as compared to the previous year, may in part reflect the ways in which families moved through the COVID-19 pandemic over the first six months. It is unsurprising that there was an uptick in active declines in the first few months, as families navigated public health restrictions and limited contact with any non-essential services to reduce transmission potential. Moreover, parents/caregivers suddenly became full-time caretakers, teachers, playmates, employees, housekeepers, partners, sports coaches, and more, all while navigating increasing rates of unemployment and the loss of financial stability and other concrete supports.[4] Participating in an in-home-turn-virtual parenting program may not have seemed feasible to fit in during early months of the pandemic. However, as the pandemic continued, parental/caregiver stress piled on, social isolation deepened, and families were cut-off from vital services (e.g., behavioral health treatment) and outlets (e.g., schools).[4] A growing body of literature[3] has positioned home visiting programs as a vital "lifeline" to families during the pandemic, given the approach integrates a trauma-informed lens, centers flexibility as an essential ingredient for success, facilitates crucial service connections, provides much

needed social and emotional support, and focuses on building within-family strengths and equipping parents with tools/skills needed to be successful during challenging times.[3] The drop in the proportion of active SCC declines observed for the later months of the COVID-19 period may be a refection of home visiting as a lifeline during the pandemic, in which parents increasingly sought out services to fill in critical gaps and meet the needs of their family.

Declines in one-, two-, and three-topic completers may reflect a combination of raw changes in the number of families participating in SafeCare (as an extension of less referrals/intakes) and the volatile external landscape families had to navigate, where program participation (and ultimate retention and completion) may be disrupted by changes in employment, child needs, family health, and other emergent priorities. Given these external factors, SCC sites may want to reach back out to families who participated in SafeCare Colorado during the COVID-19 time period, but did not complete, and re-invite their participation.

Collectively, results from this COVID-19 impact report illuminate key areas where the pandemic disrupted otherwise steady trends in the program's lifecycle. As health and human service providers, policymakers, and program leaders work on COVID-19 recovery efforts, it is critical that families with young children receive the ongoing support they need. Investments in home visiting programs like SCC are central to this goal.[5]

ACKNOWLEDGMENTS

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SafeCare Colorado

EQUITY IMPACT ANALYSIS BRIEF │ SFY2019-SFY2020 COHORTS

PROGRAM OVERVIEW

Prevention of child maltreatment requires delivery of evidence-based practices on community- and system-levels. SafeCare is an evidence-based program implemented in Colorado as part of statewide child maltreatment prevention efforts. The SafeCare Colorado (SCC) program is administered by the Colorado Department of Human Services (CDHS) Office of Early Childhood (OEC) and is evaluated by the Social Work Research Center (SWRC) at Colorado State University (CSU). The Kempe Center for the Prevention and Treatment of Child Abuse and Neglect serves as the state intermediary.

BACKGROUND

SafeCare is an in-home behavioral parenting program that aims to prevent child maltreatment by teaching caregivers skills in three topic areas: home safety (to reduce household safety hazards and increase age-appropriate supervision); child health (to respond appropriately to child health needs, illness, and injury; and parent-child/parent-infant interaction (to promote positive parenting practices and appropriate responses to challenging child behaviors). SafeCare is included in the California Evidence-based Clearinghouse (CEBC), the Title IV-E Prevention Services Clearinghouse, and the HomVEE Clearinghouse (for SafeCare Augmented).

As part of the descriptive evaluation component of SafeCare Colorado, a preliminary equity impact analysis on select sociodemographic and structural factors was conducted to identify any disparities and/or disproportionality in program participation, and to assess the extent to which SCC is reaching and retaining racially and culturally diverse families.

METHODS

Because this equity impact brief relies on subgroup analyses, data for SFY2019 and SFY2020 SCC participant cohorts were aggregated to improve sample size(s). To contextualize results and identify potential patterns of disproportionality/disparity, two levels of data were used: (1) State Level: this includes general population demographics for Colorado as well as Colorado-specific child maltreatment data; (2) SafeCare Level: this includes families who participated in SCC as well as disaggregation of participation by topic completion rates.

Level One data were accessed through publicly available data sources, specifically: (1) Demographic data for rates of child maltreatment and out-of-home placement were sourced from the National Child Abuse and Neglect Data System (NCANDS) and aggregated by the research organization Child Trends[1] (unless otherwise noted). Overall demographic data come from the 2019 American Community Survey (ACS) census data.[2]

Level Two data are secondary administrative data that were securely received by the evaluation team from the SCC database, Salesforce, maintained by CDHS/OEC. Representation is gauged by the proportion of families at each level.

As this brief is a supplement to the SFY19 and SFY20 cohort analyses, please see the *Descriptive Outcomes Evaluation Briefs for SFY19 and SFY20* for standard data definitions and other analytical notes. This study was approved by the CSU Institutional Review Board.

COLORADO
Office of Early Childhood
Department of Human Services

ANALYSIS HIGHLIGHTS

Presentation of findings focus on variation in SCC participation and topic completion by race and ethnicity, socioeconomic status, receipt of public benefits, caregiver age, and geography. Brief discussion accompanies each finding.

Analyses and findings reported here should be considered a starting place for exploration. As the SCC evaluation continues, the evaluation team will work with program stakeholders to refine analytical techniques, focus priorities, and to move findings into action in thoughtful ways.

Highlight #1. Reaching racially and culturally diverse families.

Figure 1 presents Colorado child maltreatment rates by race and ethnicity, followed by regional race and ethnicity data for children in Colorado (i.e., general population), and then the racial and ethnic composition of SafeCare participants. Hispanic, American Indian/Alaska Native, Black/African American, and Multiracial children were represented at a higher proportional rate in SCC compared to both the general population of children in Colorado as well as compared to the population of children experiencing maltreatment.

While this preliminary analysis indicates disproportionately in SCC participation, not all disproportionately is inherently negative. As a primary and secondary child maltreatment prevention program, SafeCare works to help alleviate root cause inequities, build family-level protective factors, and cultivate cultural and community strengths.[3]

The overrepresentation of children of color in SCC may reflect the program's commitment to racial and cultural inclusion. Moreover, this expansive reach can catalyze family strengthening efforts that have the potential to intercede with trends in overrepresentation of children of color in child welfare on-the-whole.[4] In other words, investing in "upstream" approaches like home visiting for racially and culturally diverse families can have the "downstream" implication of preventing involvement in

child welfare and advancing race equity in family well-being efforts.

Figure 1. Racial and Ethnic Representation in SafeCare Colorado
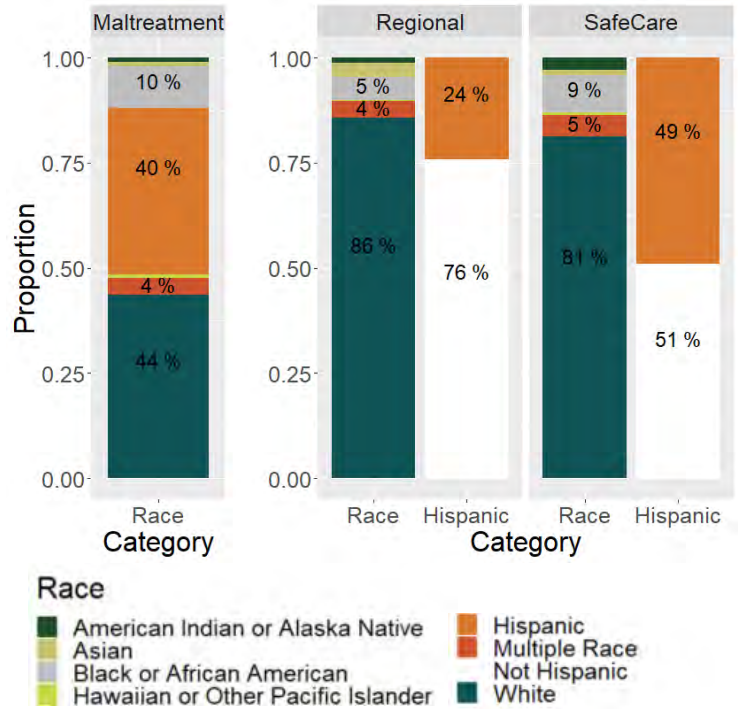
Highlight #2. Reducing the conflation of "poverty" and "neglect" in child welfare referrals.

Figure 2 presents data on state-level poverty rates for families with young children in Colorado, compared to poverty rates among Colorado children in out-of-home placement, SCC participants, and SCC three-topic completers. Children placed in out-of-home care and SCC participants experience poverty at similar rates, which were much higher than the statewide average. A large body of literature positions poverty as a risk factor for child welfare involvement.[5]

A more nuanced interpretation of this correlation suggests that in many ways, the child welfare system is set-up to punish poor families for being poor, conflating poverty with neglect and failing to provide the prevention-oriented services families need and deserve.[5] Given the high proportion of children in poverty that SCC reaches, the program is positioned to support families most at-risk for (poverty-related)

referrals of neglect by helping caregivers connect to vital support services (e.g., Colorado Community Response) and building protective factors. Alongside this strength comes a potential area of disparity that that this equity impact analysis uncovered. Specifically, as illustrated in Figure 2, Hispanic and Black/African American children experiencing poverty composed a smaller proportion of three-topic completers than their initial representation in the SCC population. Put another way, families with Hispanic or Black/African American children experiencing poverty were less likely to complete all three topics than those not experiencing poverty. Second, across the board, caregivers experiencing poverty were less likely to move from two-topic to three-topic completion, with the exception of White families (Figure 3).

Figure 2. Child Poverty in SafeCare Colorado
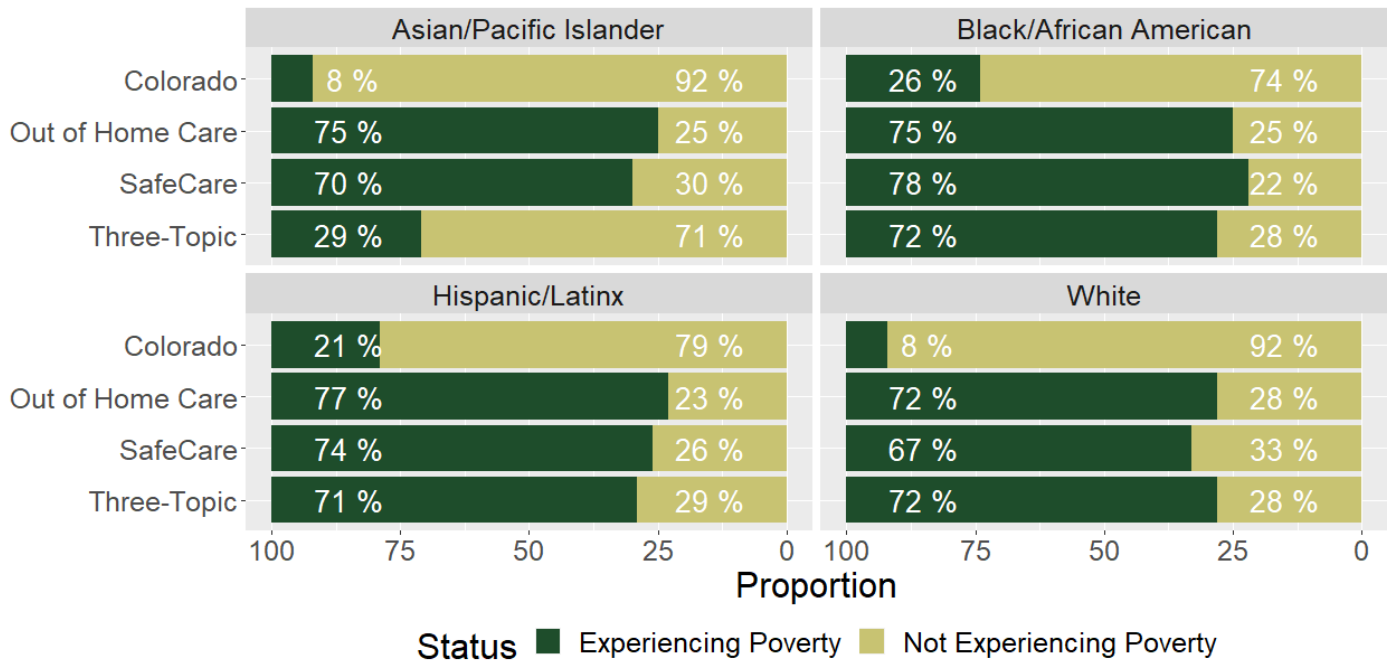
Figure 3. SCC Topic Completion & Poverty
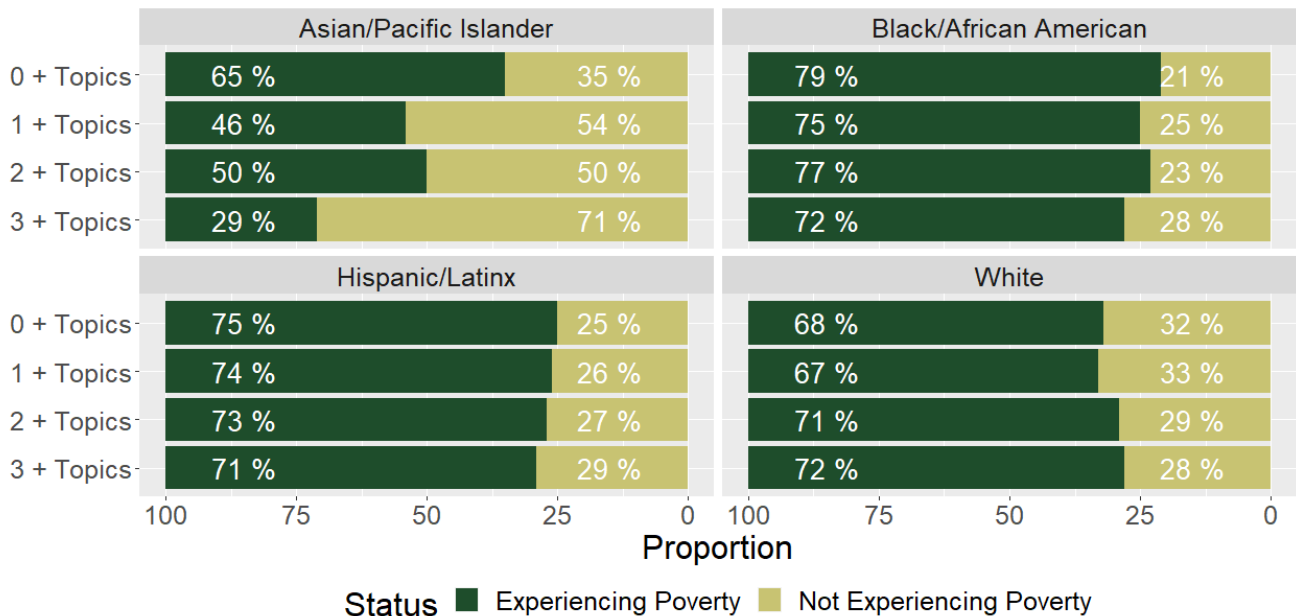
These findings illustrate an important intersection between race/ethnicity and poverty that can impede equitable program completion rates. SCC stakeholders must take care to address root cause inequities on all levels and turn the lens critically inward to examine the potential role of implicit bias in observed disparities around topic completion.

Finally, in addition to income levels, receipt of public benefits can serve as a proxy for concrete support needs. As displayed in Figure 4, families receiving public assistance were overrepresented in SCC compared to the general population of Colorado families with young children. This is not surprising in that receipt of public benefits is a targeted eligibility criteria for SCC. It is worth nothing that SafeCare families receiving WIC services and Medicaid were more likely to complete three topics than SafeCare families who were not receiving these services, indicating a potential buffering effect of concrete supports for retention in SCC.

Highlight #3. Supporting Younger Caregivers.

As illustrated in Figure 5, caregivers ages 20-24, 25-34, and 35-44 are the most represented in both raw numbers and proportion relative to the general population of Colorado adults. However, the representation of caregivers age 20-24 decreased as the program continued, meaning that they were less proportionately likely to complete each successive topic. Ultimately, only 21% of primary caregivers ages 20-24 completed three topics compared to 27% among other age ranges. This finding indicates a potential disparity in topic completion rates for younger caregivers and, like disparities seen at the intersection of race and poverty, requires continued investment by SCC stakeholders to equitable program outcomes.

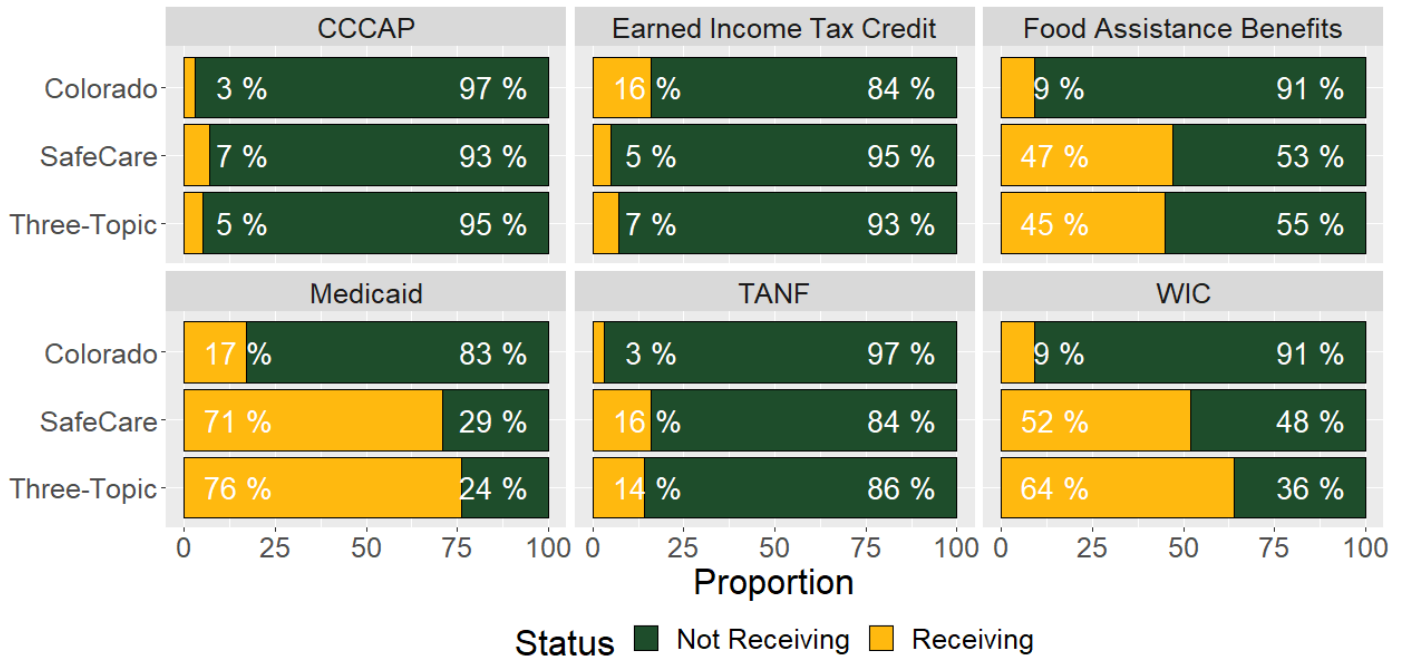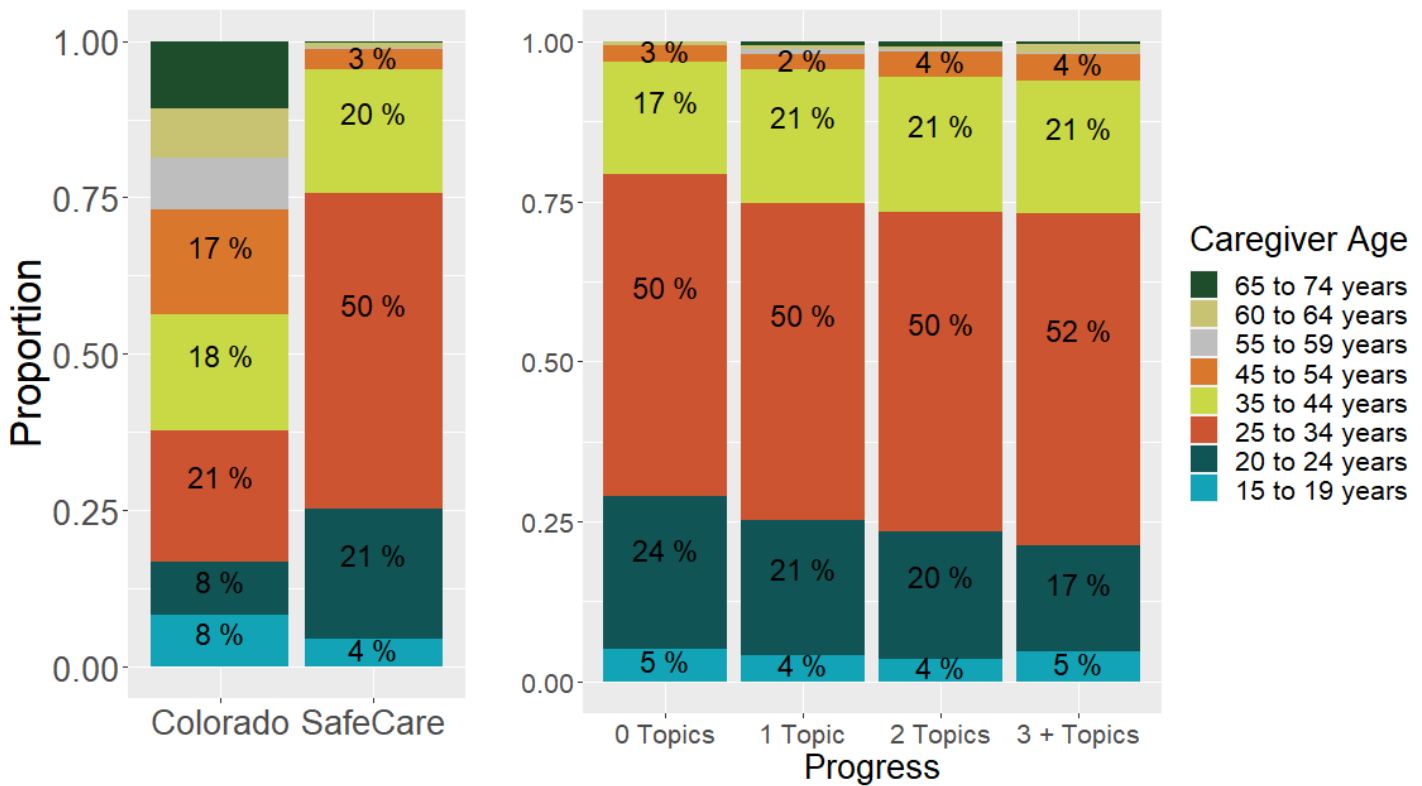*Figure 4. Public Benefit Receipt by SafeCare Colorado Families*

Figure 5. SCC Topic Completion, Participation, & Caregiver Age

Highlight #4. Reaching Rural and Frontier Communities

SCC participants were categorized into rural, urban, and frontier designations based on the county they lived in at intake. These same designations were then applied to the general geographic distribution for Colorado as well as for cases of child maltreatment in 2018, as reported by CDHS Division of Child Welfare.[*]

As illustrated in Figure 6, SCC has a slightly higher proportion of rural and frontier families, compared to both child maltreatment and general population distributions. Given social isolation is a documented risk factor for child maltreatment[3] and in light of the general under-serving[6] of rural/frontier communities, this overrepresentation of rural and frontier families in SCC is promising, demonstrating the strong presence of the program across Colorado.

In examining changes in geographic representation across the program lifecycle, however, the most substantial change was found in the ratio of rural to frontier residents. After at least one topic was completed, rural representation shrunk consistently as the program continued, while frontier representation grew. Ultimately, 45% of frontier families who started the program completed three or more topics, compared to only 22% of rural families. This is a noteworthy disparity that indicates another key area for SCC program stakeholders to invest in as issues of equity and access are centered during continuous quality improvement and data-informed learning.

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[*] Data Source: Kids Count Data Center (2018). Child abuse (rate per 1,000) in Colorado. Division of Child Welfare.

Figure 6. Rural, Frontier, and Urban Representation in SafeCare Colorado
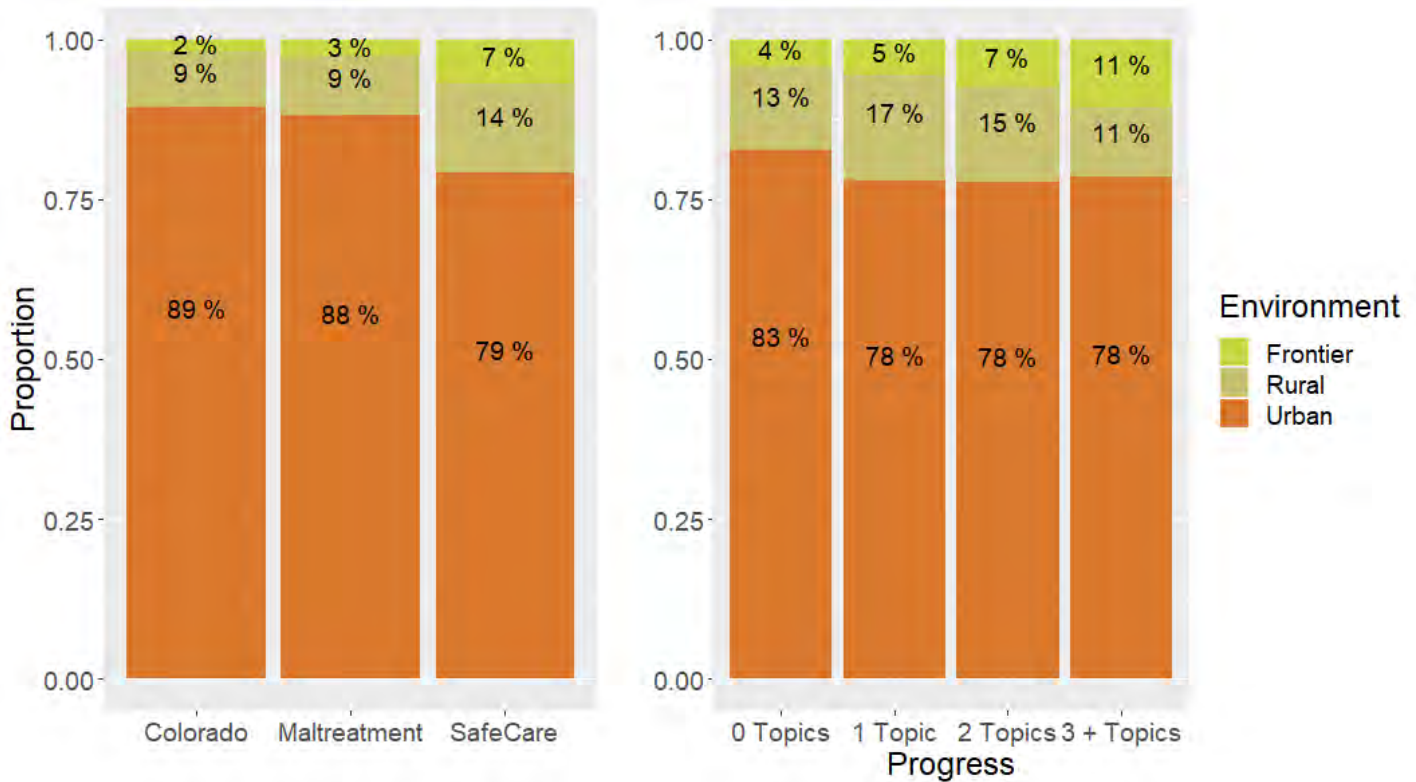
CONCLUSION

Findings from this preliminary equity impact analysis demonstrate that SafeCare Colorado is reaching target populations and providing critical support to strengthen families from across the state. As a primary and secondary prevention program, the ability to reach racially and culturally diverse families is crucial for reducing overrepresentation in child welfare involvement and advancing equitable family well-being.

Despite inclusive reach being strong, some findings also serve as early indicators of places where disparities may be experienced by SCC families and intentional investments to close these gaps remain vital. Future evaluation efforts will continue this equity impact work, deepening and broadening analyses in partnership with SCC stakeholders.

ACKNOWLEDGMENTS

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SafeCare Colorado

CHILD WELFARE OUTCOMES EVALUATION BRIEF | SFY2018-SFY2020 Cohorts

PROGRAM OVERVIEW

Prevention of child maltreatment requires delivery evidence-based practices on community- and system-levels. SafeCare is an evidence-based program implemented in Colorado as part of statewide child maltreatment prevention efforts. The SafeCare Colorado (SCC) program is administered by the Colorado Department of Human Services (CDHS) Office of Early Childhood (OEC) and is evaluated by the Social Work Research Center (SWRC) at Colorado State University (CSU). The Kempe Center for the Prevention and Treatment of Child Abuse and Neglect serves as the state intermediary.

BACKGROUND

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To evaluate the impact of SCC on subsequent child welfare involvement outcomes, a statistical analysis was conducted comparing SCC and non-SCC families that would have been potentially eligible for the program.

METHODS

SCC families that had an intake and exited the program between November 2017 and June 2020 were considered for the analysis. Subsequent involvement was observed over a comparable time period for comparison families that did not participate in SCC. Subsequent referrals, assessments, founded assessments, cases, and removals were the outcome measures.

SCC families were divided into six samples by topic completion and the two time periods after program completion, 12 and 24 months. For the comparison group, subsequent involvement was observed starting at six months after a child welfare referral, which is the average time to complete SCC. The samples for each group were restricted to those families with a prior assessment, as data obtained during the assessment were used in the analysis. Data were securely collected from Trails (Comprehensive Child Welfare Information System) for both SCC and non-SCC families. SCC families were identified from the OEC database, Salesforce.

To help reduce the bias of confounding variables resulting from the non-experimental nature of the study, propensity score matching (PSM) was used to construct samples that had a similar distribution of 21 selected characteristics between the SCC and non-SCC comparison groups[1] (shown in Table 1).

For each sample, subsequent child welfare involvement was modeled with logistic regression. To account for the large number of outcomes being evaluated, the Holm-Bonferroni multiple testing method was applied.[2] In some samples, the number of subsequent involvement incidents were too small for analysis and were excluded from the results.[3] This study was approved by the CSU Institutional Review Board.

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Table 1: PSM Matching Variables

Prior Involvement	Family Demographics & Structure	Case Characteristics
Prior caregiver case involvement (3 years)	County	Risk level
Prior caregiver assessments (3 years)	Caregiver year of birth	Physical abuse issue
Prior caregiver referrals (3 years)	Caregiver age at birth of first child	Recent receipt of SNAP (3 years)
Prior child neglect investigations	Child ethnicity	Recent receipt of TANF (3 years)
	Number of children in household	Recent receipt of Medicaid (3 years)
	Child year of birth	Domestic violence
	Caregiver relationship to child	Any caregiver substance use
		Caregiver abused as child
		Caregiver mental health problems
		Sex abuse issue

FINDINGS

The results of the analysis are summarized in Figure 1. After the multiple comparisons adjustment, subsequent referral and assessment rates for one-topic completers 24 months after program completion were significantly higher than for the non-SCC comparison group. **No other child welfare involvement outcomes were statistically significant.** Subsequent founded assessments and cases are not reported for two-topic completers at 12 and 24 months due to the small sample size. This is also the case for three-topic completers at 24 months, as well as for subsequent removal for all six samples. Table 2 shows the raw *p*-values for each outcome as well as the adjusted *p*-values.

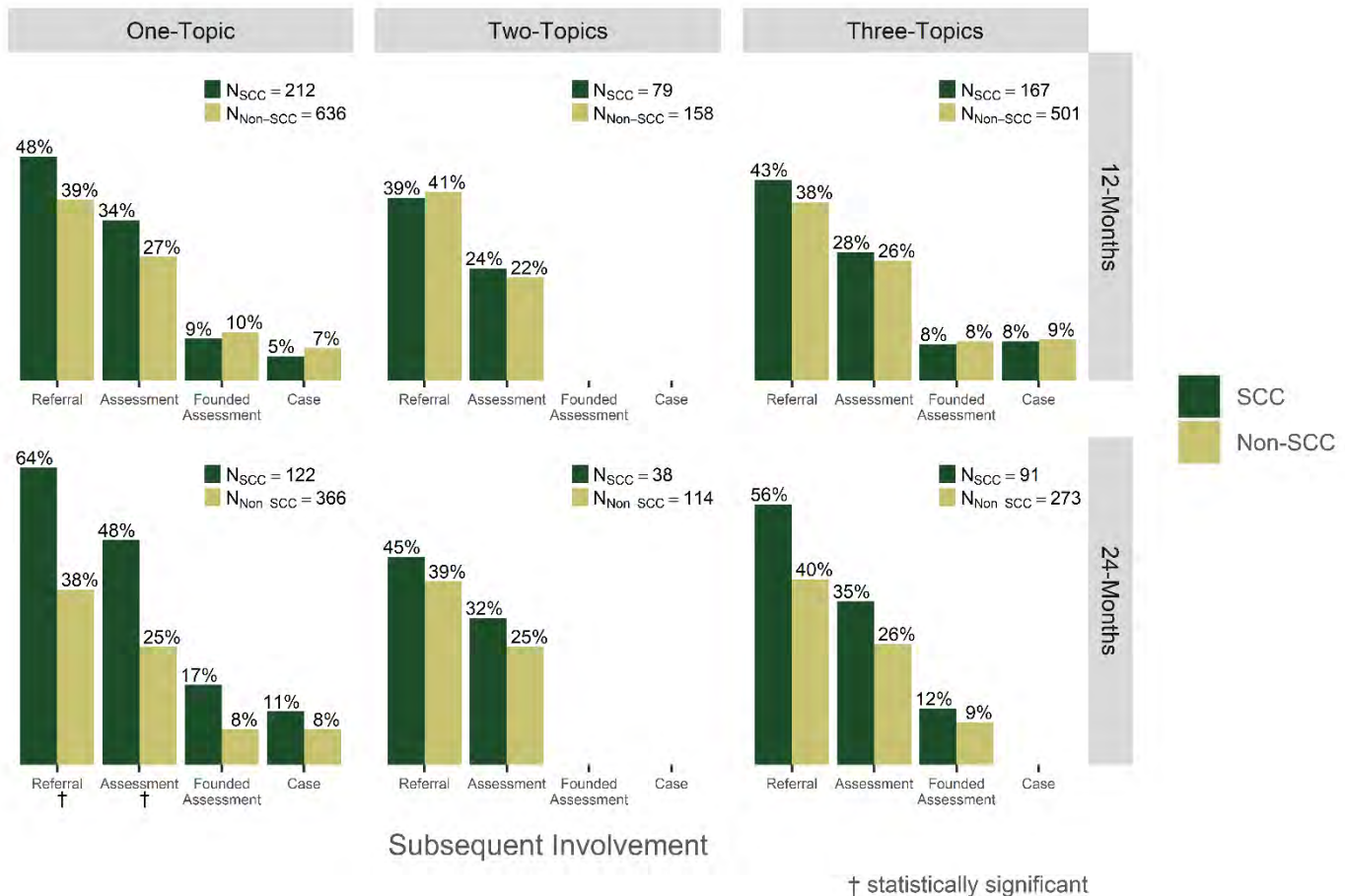## Figure 1: Subsequent Child Welfare Involvement by Dosage and Time

Table 2: Outcome p-values (p-value, adjusted p-value)

	One-Topic		Two-Topic		Three-Topic	
	12-months	24-months	12-months	24-months	12-months	24-months
Referral	(0.018, 0.462)	(<0.001, <0.001)	(0.851, >0.999)	(0.568, >0.999)	(0.273, >0.999)	(0.008, 0.210)
Assessment	(0.029, 0.715)	(<0.001, <0.001)	(0.743, >0.999)	(0.461, >0.999)	(0.648, >0.999)	(0.094, >0.999)
Founded Assessment	(0.553, >0.999)	(0.003, 0.084)			(0.807, >0.999)	(0.419, >0.999)
Case	(0.377, >0.999)	(0.195, >0.999)			(0.874, >0.999)	

DISCUSSION

The wider literature on home visiting prevention programs helps to contextualize findings from the one- and two-year outcome analyses. SafeCare uses as an eco-behavioral approach to the prevention and management of child maltreatment.[4] In practice, this means that multiple components of family functioning (i.e., parenting behaviors known to lead to child maltreatment) are targeted through three in-home topics (home safety, child health, and parent-child/parent-infant interaction).

Given this robust prevention approach, multiple intermediate and long-term outcomes should be considered in demonstrating the impact of SafeCare Colorado. For instance, intermediate outcomes include reduction in hazards, improvement in child health knowledge and skills, and improvement in the quality of parent-child/parent-infant interactions, all of which were found for SCC, as detailed in the SFY2019 and SFY2020 evaluation briefs.

When examining long-term child welfare outcomes, it is important to take a wide lens in interpreting results. For these outcome analyses, there are two primary limitations to the analysis that once thoughtfully considered, help to expand understanding of findings.

First, in order to establish comparison groups, only SCC participating families with a prior history of child welfare involvement were included in the PSM analysis, thus excluding all families without prior involvement.

Importantly, SafeCare is designed for both families with a history of child maltreatment and for families at-risk for child maltreatment. However, because of the data source used in the PSM analysis (Trails), only the former target population is captured in the 12- and 24-month follow-up analyses.

Furthermore, literature on other early childhood home visiting prevention programs demonstrates that families most likely to reap benefits are younger parents, first-time parents, and/or those who are introduced to the program prenatally (i.e., before the birth of the child).[5,6] Following, a common recommendation in prevention programming is to have a "target" group(s) during program implementation in order to maximize success.[7,8] Because SafeCare Colorado is implemented on a voluntary basis, such target groups are only one segment of the total SCC participating family population. The voluntary nature of the program means that meaningful differences in child welfare outcomes may be diluted and more difficult to detect without strict target groups used during programming.

The second limitation of the 24-month child welfare outcomes analysis involves the small sample sizes available for the evaluation, which compounds issues discussed in the first limitation above. The available SCC and comparison group sample sizes are likely too under-powered to detect small differences in child welfare outcomes between groups. Additionally, official child maltreatment rates do not reflect protective factors

that may be cultivated by the program being evaluated.[7]

In addition, inconsistency in child welfare findings across and within prevention programming is also associated with differences in program implementation (such as training, supervision, and fidelity), as well as study characteristics (such as target populations for service delivery and comparison groups).[9]

Taken together, these considerations have several implications for future SCC evaluations and the iterative evaluation-practice cycle. First, future evaluation efforts should explore opportunities to create well-matched comparison groups for both primary and secondary prevention populations and those with a history of maltreatment (tertiary prevention populations). Second, future evaluation efforts should consider sub-analyses at the level of target groups known from other prevention programming research to be most successful in the program (e.g., first-time parents, young parents). Third, future evaluation efforts should expand the range of outcomes measured to include long-term intermediate outcomes that reflect the continuum of negative parenting behaviors and that measure parent, family, and child well-being and protective factors.[7,10]

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