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A Cost Analysis of Colorado Community Response (CCR)

A Child Maltreatment Prevention Program Targeting Economic Security and Social Connections through Family-Driven Case Management

Policy Brief

REPORT HIGHLIGHTS

Three key findings resulted from the cost analysis:

- CCR is a lower cost child maltreatment prevention model at about $2,000 per family served
- Outreach challenges reduce CCR cost to benefit potentials
- Outreach challenges drive cost variation across sites

Recommendations to improve the cost effectiveness of CCR and maximize ROI include:

- Elevate CCR within the prevention continuum by expanding referral sources to improve program access while reducing costs
- Leverage best practices in outreach and increase site support

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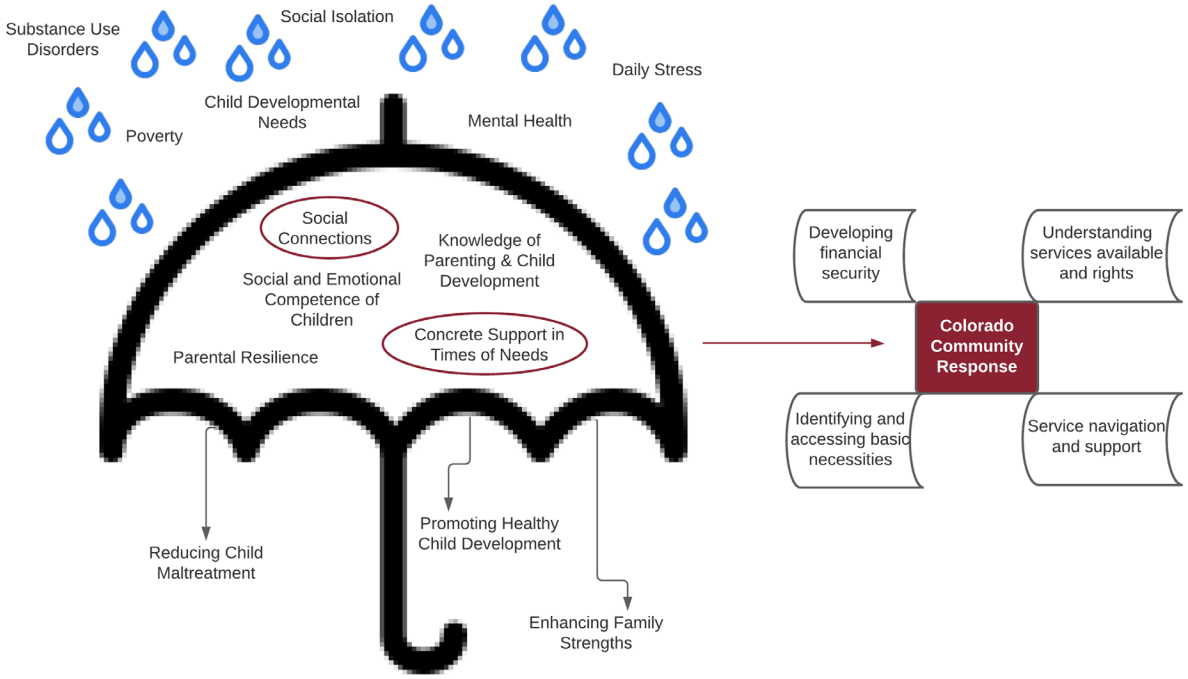
Introduction

The Center for the Study of Social Policy (CSSP) developed the Strengthening Families™ Protective Factors Framework as a research-informed approach to reducing child maltreatment, enhancing family strengths, and promoting healthy child development.[1] The approach rests on a robust body of literature that shows families thrive when five key protective factors are meaningfully present in their lives: (1) Parental resilience; (2) Social connections; (3) Knowledge of parenting and child development; (4) Concrete support in times of need; and (5) Social and emotional competence of children.

Colorado Community Response (CCR) is an innovative, voluntary program to prevent child maltreatment and strengthen families by targeting the protective factors of concrete support and social connections, leveraging a family-driven case management model with family goal setting at the center. Everyday actions can promote protective factors and act as a counterbalance to risk factors by buffering the impact of continuous and unbuffered stress (or "toxic stress"),[2, 3, 4] helping to ensure every family has the opportunity to thrive. As illustrated in Figure 1, CCR promotes everyday concrete support actions by increasing the financial stability and self-sufficiency of caregivers. Research has long demonstrated the link between economic insecurity and child maltreatment[5] and given the well-documented association between poverty and racial injustices,[6] economic security programs are also a promising approach to reducing racial and ethnic inequities.[7] In addition, the delivery of CCR is intentionally embedded into family resource and support centers to provide families wraparound opportunities to increase social connections and build social capital. In turn, CCR may also catalyze openings to nurture additional protective factors.

Figure 1: CCR's Unique Role in Increasing Protective Factors and Strengthening Families



Colorado Community Response Program Overview

CCR is administered by the Office of Early Childhood (OEC) within the Colorado Department of Human Services (CDHS) and implemented by community sites—typically non-profits, but sometimes county human service departments—across the state. Currently, caregivers are referred to CCR after being reported to the state's child abuse and neglect hotline and "screened out" by county child welfare staff because the allegations do not meet the statutory definition of abuse or neglect and/or the child is not at imminent risk of harm. The hallmarks of CCR are family-driven goal-setting and comprehensive, short-term (about four months) case management to help caregivers access formal and informal services and supports to meet their immediate concrete needs, create a foundation for long-term economic security, and build social capital for sustained well-being and connections. Individual caregivers are referred to CCR, but the benefits of participating accrue to whole families.

In 2014, CCR was piloted in 21 rural and suburban sites and was evaluated by the Social Work Research Center at Colorado State University. Results demonstrated promising outcomes for CCR participants relative to a matched-comparison sample that did not participate in CCR, including:

- significantly fewer child welfare founded assessments and out-of-home placements one year following program completion; and
- demonstrated improvements in parental resilience, social support, and knowledge of parenting, three of the core protective factors that reduce the likelihood of child maltreatment.

In 2017, CCR was expanded to three additional sites, including Denver and Colorado Springs. Expansion of the program brought the total number of CCR sites to 24. The Colorado Lab is currently leading a randomized control trial assessing the efficacy of CCR at reducing the number of referrals to child welfare that result in substantiated cases. Findings from this study are expected in 2023.

The present study examines the cost of the CCR program to the state. Once program impacts are available from the randomized control trial, this cost will be combined with the impact to generate a benefit-cost ratio that can be compared to other programs and inform future policy and practice investments.

Description of the Study

We conducted this cost analysis according to the ingredients method outlined by Levin and McEwan.[8] Under this method, every aspect of the program is assigned a value or cost. This approach requires an exhaustive review of the program and the resources required to provide services. We consulted the CCR program manual and members of the CCR implementation team to identify a list of ingredients to include in the study.

All CCR costs are incurred by the state and OEC distributes funding to sites to implement the program through grants. To inform potential expansion, we estimated costs associated with starting a new CCR site; we did not conduct a steady-state analysis to estimate costs associated with the maintenance of existing sites. Costs are estimated at the market value of the resource, not at the current costs incurred by OEC or CCR sites. Categories of costs examined included personnel services, travel, supplies and operating expenses, training and technical assistance, and indirect costs. We describe the data sources and methods used to assign each value or cost in detail in the technical report.

Key Findings

Finding #1 – CCR is a lower cost prevention model

> **Under reasonable assumptions, the cost of providing CCR is about $2,000 per family served, which is on par with or lower than other prevention programs.**

At $2,000 per family, CCR is lower than the average cost of other child abuse and neglect prevention programs. Maltreatment prevention programs vary widely in their approach, level of intensity, and setting, from more intensive subsidized kinship programs to home visiting services to outpatient settings and community-based supports. In examining the continuum, average costs per family identified in national research ranges from $360 to upwards of $8,500.[9, 10] For instance, for home visiting prevention programs, Healthy Families report a cost of $4,300 to $5,900 per family per year, while Home Instruction for Parents of Preschool Youngsters ranges from $1,800 to $3,900.[11] Parent-Child Interaction Therapy delivered in an outpatient setting averages $1,821 per family and $3,913 per family when delivered in-home[12] while Homebuilders is delivered in both home and community settings with an average cost of $3,547 per family.[13] CCR's lower cost is a result of a family-driven case management design that is light touch, short duration with a targeted focus of financial stability and concrete supports alongside building social capital.

Finding #2 – Outreach challenges reduce CCR benefit to cost potentials

> **Initial outreach to caregivers—who generally are not aware they have been reported to the Hotline—is time consuming and costly. Most caregivers who decline services simply disregard outreach rather than actively declining.**

Many more caregivers are referred to CCR than participate in the program. The latest available data suggests that only 23% of all referrals result in a family enrolling in the program, with 48% of all referrals being passive declines, meaning the caregiver simply does not respond to the invitation to participate. This low program uptake rate is a challenge shared by many prevention programs—especially for those that rely on referrals from child welfare—as families may be hesitant to engage in services for a variety of reasons, including: perceived stigma of being a "bad parent" in need of services, disagreeing with the need for services in cases of mandatory participation as part of open child welfare cases, mistrust of state systems, and/or incomplete understanding of why the referral is taking place.[14, 15, 16, 17, 18, 19] In the case of CCR, perceived stigma, mistrust, and incomplete understanding may all be at play in driving the low program uptake rate.

Understanding the CCR referral process illuminates this outreach challenge. Every week, the state sends CCR sites a list of caregivers referred to CCR through the Child Abuse and Neglect Hotline, along with available contact information. A CCR family advocate then "cold calls" those caregivers to offer services. These calls are difficult because caregivers usually are not aware they have been reported to the Hotline. For privacy reasons, family advocates don't have any information about the nature of the report other than that it was "screened out" (i.e., did not rise to the level of child welfare involvement).
Many people do not answer their phones when a call comes in from an unknown number, so CCR family advocates leave voice messages, send follow up postcards, and even drop by in person, leaving hang tags on door handles when no one is home. Caregivers who do answer the phone are naturally taken aback by these calls, feeling simultaneously defensive and suspicious of the caller. These feelings can be amplified

when caregivers are already distrustful of government. It is in this context that CCR family advocates must leverage their best interpersonal skills to positively engage caregivers. While there are some caregivers who actively decline CCR services after speaking with a family advocate, nearly half (48%) are never reached. Family advocates are expected to reach out twice by phone, once by mail, and stop by the residence once in person before considering the family a passive decline and closing out the referral.

These outreach challenges result in a lower than desired uptake rate (23%). As such, the full potential of CCR as a lower-cost prevention model with promising potential impacts on families cannot be actualized without explicit attention to improving outreach and enrollment success.

Finding #3 – Outreach challenges drive cost variation across sites

There is wide variation in outreach success by site, and outreach challenges increase per family costs.

Findings from the cost analysis demonstrate wide variation across sites in the amount of resources and time spent on outreach, which can drastically impact per family average costs. The cost of CCR per family served depends on the amount of time family advocates spend reaching out to caregivers and the rate at which outreach activities are converted to active participants. Many of the costs of providing CCR are fixed costs, or costs that are the same regardless of how many families are served. For example, every family advocate must have an office, hardware and software, and undergo training. Even the salary of a family advocate is a fixed cost because the salary must be paid whether or not the family advocate has a full caseload. Serving more families reduces the cost per family served by spreading the fixed costs out. Thus, CDHS recently established the expectation that CCR sites serve at least 40% of caregivers referred, and it is on this assumption that the cost of about $2,000 per family served is calculated (see Table 1).

Table 1: Percent of Families Served per 100 Outreach Attempts

Percent	20%	30%	40%	50%	60%
Cost per Family	$4,034	$2,690	$2,017	$1,614	$1,345

If family advocates are highly successful at engaging caregivers and serve 50% of families outreached[20] to, the per family cost of CCR drops by about $400. However, if family advocates struggle to engage caregivers, costs rapidly increase. When just 30% of caregivers outreached to are served, program cost increases by $673 per family; when serving just 20%, the cost increases by an additional $1,344 per family. This is because family advocates are spending the bulk of their time on unsuccessful outreach rather than actively serving families and because the fixed costs are spread over fewer families.

Implications & Recommendations

As discussed in the introduction, prior research provides encouraging results about the potential of CCR to reduce child maltreatment, and additional rigorous research is currently underway. This initial cost analysis bolsters the promise of a favorable benefit to cost ratio while also providing timely insight into opportunities to improve key processes that will facilitate CCR in reaching its full potential. To this end, we make two intersecting data-informed recommendations (Table 2) drawing on the promise of CCR as a lower cost child maltreatment prevention model that complements the existing array of prevention services and fills critical gaps in the Strengthening Families™ Protective Factors Framework.[21]

Table 2: Maximizing the Benefit to Cost Potential of CCR: Synthesis of Data-Informed Recommendations

Finding #1 – CCR is a lower cost prevention model	**Finding #2** – Outreach challenges reduce CCR benefit to cost potentials	**Finding #3** – Outreach challenges drive cost variation across CCR sites
Leverage by	*Mitigate by*	
Recommendation #1 – Elevate CCR within the prevention continuum by expanding referral sources to improve program access while reducing costs **Recommendation #2** – Leverage best practices in outreach and increase site support		

Recommendation #1 – Elevate CCR within the prevention continuum by expanding referral sources to improve program access while reducing costs

> **Expanding referral sources to other service providers, such as child care centers and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), as well as allowing self-referrals, can help overcome the outreach challenge inherent in child welfare as the sole referral source for CCR. By increasing program access, CCR can be further elevated within the prevention continuum and alongside other services, can wrap around families to catalyze long-term financial and social returns on investments (ROIs).**

Challenges related to the "cold call" outreach process CCR must engage due to its reliance on referrals from child welfare dampens the program's ability to reach its full benefit to cost potential. One strategy to address this persistent challenge is to expand referral pathways to further identify families who might benefit from CCR's family-driven, light touch, short duration, focused approach to case management. For example, families eligible for child care assistance or WIC are likely facing substantial economic challenges. Allowing providers in these venues to refer caregivers to CCR would increase program access, and outreach to caregivers from these referral sources may be less costly since contact information is likely to be up-to-date for receipt of public benefits. There may also be families not yet receiving benefits due to mistrust of state systems, lack of awareness of programs available, or low confidence in being able to navigate the service array. CCR can act as a vital hub to connect families with needed services that can provide such concrete supports while also building social capital and increasing social connections. Self-referrals and community-based referrals (such as from home visiting services, child care centers, and

Family Resource Centers) could help ensure additional access to CCR. Expanding referral sources can also increase community awareness of the program and, as a by-product, outreach to families referred from child welfare may become more successful as more families know about CCR and trust builds. Expanding referral pathways into CCR can have the dual benefit of increased access with lower program costs and, as a paired strategy to Recommendation #2, may prove fruitful in breaking through the program's persistent outreach challenge.

Additionally, with the focus on family goal setting, financial stability, and social connections, CCR serves as a unique value-add complement to the existing prevention continuum in Colorado. Previous research has demonstrated complex stressors and structural barriers as key impediments to enrollment, retention, and completion in voluntary prevention programs.[22] Drawing on Maslow's Hierarchy of Needs, previous research demonstrates that basic physiologic (e.g., food), safety (e.g., safe shelter), and social conditions (e.g., belonging) must be met before other engagements (e.g., participation in parenting classes) can be actualized.[23, 24] Because CCR targets these foundational conditions, its potential to catalyze long-term well-being is high. For example, a family participating in a voluntary home visitation program focused on child development and parent-child interactions, such as SafeCare® or Parents as Teachers, may struggle with consistent participation and drop out of the program before completion if basic need stressors are not first addressed. Attrition is costly to programs and reduces the full benefit of services for families. By providing families concrete supports to stabilize during crisis, creating paths for long-term economic security, and building social capital that promotes sustained well-being and connection opportunities, CCR can help families achieve the foundation necessary to fully engage other prevention services and maximize long-term returns on investment. To this end, CCR—alongside home visiting programs, child care providers, family resource centers, and other state funded initiatives—can meet child needs as they progressively unfold within these spaces and wrap around families to catalyze long-term financial and social returns on investments (ROIs). As such, CCR should be understood as a value-add complementary service when making strategic policy and practice decisions on prevention investments.

Recommendation #2 – Leverage best practices in outreach and increase site support

> **To address site variation in outreach success as a driver of cost, it is important that outreach best practices are leveraged and CCR sites receive substantial, ongoing support in their implementation efforts. Data sharing and use of a state intermediary are two promising practices to help fill this need.**

To address this driver of cost, it is important that CCR sites receive substantial, ongoing support in their implementation efforts and that ongoing challenges in outreach and successful program enrollment are addressed. Two practices that illustrate this potential are use of a state intermediary and data sharing. Other prevention programs targeting similar populations have state intermediaries with robust capacity to support sites. In Colorado, this includes: Invest in Kids supports the Nurse-Family Partnership, The Incredible Years, and Child First; Parent Possible supports Parents as Teachers and Home Instruction for Parents of Preschool Youngsters; and the Kempe Center supports SafeCare Colorado. Intermediaries support the training and coaching of staff, monitor program fidelity, support continuous quality improvement, and help sites address unexpected needs like transitioning to telehealth during the COVID-19 pandemic. Intermediaries also support community engagement, marketing, and advocacy to increase program access for those in need. Importantly, intermediaries stay abreast of challenges, opportunities, and innovative practices in the field and can facilitate the exchange of ideas across models and sites. Given

that referrals from child welfare are a shared challenge in the voluntary prevention landscape, use of a state intermediary could engage CCR and other prevention programs in Communities of Practice to make collective progress in outreach best practices. A state intermediary placed outside of the Department may also prove to be a cost-effective approach to increasing site support and ensuring the necessary content expertise in guiding program implementation.

A second example is found in momentum being gained around data sharing across human service systems for improving outreach, referral, and service coordination for families. In Colorado, there is leadership and resource support for the Joint Agency Interoperability (JAI) project to improve communication and data exchange across multiple, disparate IT systems. Such a shared information environment has the potential to provide better service coordination for families. Should CCR become embedded within JAI, additional pathways for referrals to and from the program could open up and outreach practices strengthened. As a result, the CCR program uptake rate may improve and the cost driver related to outreach challenges successfully addressed.

Conclusion

Within Colorado's prevention services array, CCR is uniquely positioned to advance the Strengthening Families Protective Factors Framework[25] by providing a lower cost, promising model that directly targets the protective factors of concrete supports in times of need and social connections. CCR does this by providing referrals and connections to a robust array of services in the community, while also helping families to develop the skills, tools, and confidence needed to successfully access, cultivate, and navigate informal and formal supports. Strengths-based approaches that promote within-family investments are vital. Through a lower cost family-driven case management model that connects families with concrete supports and increases opportunities for social connections—from safe living environments and healthy foods to medical services and economic security to building social capital—CCR can help minimize the stress families experience, ensure children and caregivers have the basic necessities they deserve, and cultivate self-efficacy as parents build new skills and connections that create long-term stability for their family. By expanding eligible referral sources, strategically addressing program outreach challenges, and elevating CCR within the prevention continuum, the benefit to cost potential of CCR can be fully actualized and collectively, family strengthening efforts catalyzed in shared commitment to racial, economic, and social justice for Colorado children, youth, and families.

> *Children don't grow up in programs… They grow up in families and in communities.*
>
> **~Dr. Urie Bronfenbrenner**
> **Cornell University**

Endnotes

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