

Invest in Kids:  
2019-2020 Report of  
Nurse-Family Partnership® in Colorado



# Mission

Invest in Kids partners with local communities to ensure the success of evidence-based programs that improve the health and well-being of Colorado's youngest children and families.

For over 21 years, Invest in Kids has successfully worked to support evidence-based prevention programs to ensure Colorado's children most affected by systemic and structural inequities are healthy, ready to learn, and able to succeed in life. Bridging the gap between research and practice, Invest in Kids provides the support necessary for Nurse-Family Partnership<sup>®</sup> and The Incredible Years<sup>®</sup> to realize significant outcomes and make the largest possible difference for over 17,000 Colorado children and families each year.



# Program Staff



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The program staff's work is made possible with invaluable support from Executive Director, Lisa Hill, and staff from the Development and Finance teams.

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# Executive Summary



The Nurse-Family Partnership® (NFP) is an evidenced-based, voluntary, community health program aimed at improving the lives of families struggling financially to get by who are expecting their first child. Clients are partnered with a registered nurse early in their pregnancy and receive home visits until their child turns two. The NFP model is based on evidence from three randomized, controlled trials and over 40 years of longitudinal research. NFP focuses on first-time parents. It is during the first pregnancy when the best chance exists to promote and impart positive health behaviors. NFP is delivered by registered nurses who are trusted and competent professionals able to provide health education and develop therapeutic relationships with clients.

Colorado NFP is sustained by 214 staff from 22 implementing agencies consisting of county public health departments, Federally Qualified Health Centers, hospitals, non-profits and a college of nursing. IIK intensively supports the staff at these implementing agencies to ensure the high-quality delivery of the program with fidelity to the NFP model.

4,630  
Client served

3,812  
Children served



## Pregnancy Outcomes\*

- 91% of babies were born full term
- 90% of babies were born at a healthy weight
- 82% of clients were screen for depression during pregnancy

## Child Health and Development

- 95% of clients initiated breastfeeding
- 54% of infants were screened for developmental delays at 10 months
- 93% of toddlers were fully immunized at age two<sup>!</sup>

## Economic Self-Sufficiency

- 83% of clients have not had a subsequent pregnancy 18 months postpartum
- 62% of clients 18 years old at intake were working at program completion
- 36% of clients without a high school diploma/GED at enrollment earned a diploma/GED by program completion; 18% were still enrolled in school

\*for clients who enrolled during pregnancy  
<sup>!</sup> For children with immunization data

Invest In Kids facilitated important innovations during the year. First, the REACH project was developed to streamline the referral process in the Denver Metro area to increase referrals, collaboration with referring partners and caseload. The Jacquelyn Wonder Fund was established to remove financial barriers to client's goal attainment and assists nurses with professional development costs. Lastly, with IIK's support, all NFP implementing agencies moved to telehealth delivery of the program in March 2020 due to the pandemic.

For every dollar invested in NFP in Colorado there is a \$7.90 cost savings to society<sup>1</sup>

# Introduction



Since 1999, Invest in Kids (IIK) worked in partnership with Colorado communities to deliver high quality, evidence-based programs to improve the health and well-being of young children and their families. Thanks to funding from the Colorado Trust, IIK was able to adopt The Nurse-Family Partnership<sup>®</sup> as our first program. Its objective is to strengthen families and get kids off to a healthy start based on finding from three randomized, controlled trials and over 40 years of longitudinal research conducted by Dr. David Olds.

Dr. Olds' research revealed that children participating in NFP were healthier, exhibited fewer injuries, developed better language and behavior skills, and had improved school-readiness compared to their peers; mothers experienced better health and employment. Specifically, his studies found<sup>2</sup>:

- 67% reduction in behavior and intellectual problems among children at age 6
- 61% fewer arrests of moms
- 56% reduction in ER visits for accidents and poisonings
- 48% reduction in child abuse and neglect
- 32% fewer subsequent pregnancies

For some children, their lives are compromised by families who can't afford the basics of life, unsafe neighborhoods, parental drug use or mental health issues. These experiences can have lasting impacts on children. Without help, many of these children will lack preparation for school or will experience abuse or neglect – all threatening their health and well-being and ultimately, our communities. With the right support, children who grow up in challenging circumstances can go on to achieve amazing life outcomes. Early childhood home visitation is one approach. As an evidence-based home visitation program, Nurse-Family Partnership gives children in Colorado a jumpstart in life.



**Home visit**

## Return on investment

Why is Nurse-Family Partnership one of the best investments the public can make? IIK bases our actions on evidence. A study was conducted by Ted Miller at the Pacific Institute for Research and Evaluation to investigate the cost savings of NFP. According to the study's findings, across all levels of government (state and federal), the total cost savings to government for each family enrolled in Colorado NFP will average \$24,282.<sup>3</sup>

Ted Miller's study estimates the following outcomes can be achieved in Colorado by implementing NFP.

Enrolling 1,000 low-income families in NFP in Colorado prevents<sup>4</sup>:

- 45 preterm births
- 98 closely-spaced, high risk 2<sup>nd</sup> pregnancies
- 253 child maltreatment incidents
- 3 infant deaths

## Overview of the Program

Nurse-Family Partnership (NFP) is an evidenced-based, voluntary, community health program aimed at improving the lives of families expecting their first child who face significant barriers. Clients are partnered with a registered nurse early in their pregnancy and receive home visits until their child turns two. NFP focuses on first-time parents. It is during the first pregnancy when the best chance exists to promote and teach positive health behaviors. NFP is delivered by registered nurses who are trusted and competent professionals able to provide health education and develop therapeutic relationships with clients. The three main goals of the NFP program are to:



Improve pregnancy outcomes by helping women engage in good preventative health practices, including prenatal care from their healthcare providers, improving their diets and reducing their use of cigarettes, alcohol and drugs.



Improve child health and development by helping parents provide responsible and competent care



Improve the economic self-sufficiency of the family by helping parents develop a vision for their own future, plan future pregnancies, continue their education and find work.

*"There is a magic window during pregnancy. It's a time when the desire to be a good mother and raise a healthy, happy child creates motivation to overcome incredible obstacles including poverty, instability or abuse with the help of a well-trained nurse". - David Olds, Founder of NFP*



NFP National Service Office provides training and the tools to help guide the nurse home visitor's practice. NFP developed visit-to-visit guidelines to create a framework for the visits and maintain consistency in how the program is delivered. The guidelines also assist with delivery fundamental information to the client.

## Invest in Kids' Value Added

In service to our mission of improving the health and well-being of Colorado's children and families, Invest in Kids (IIK) plays an innovative role in our partnerships with communities to deliver evidence-based programs (EBPs). Implementation science research indicates that it takes much more than solely adopting an EBP to ensure that it is delivered with a high level of quality and competence, and that the intended societal benefits of the program are realized. IIK is dedicated to maximizing the impact of our EBPs in Colorado by providing a strong foundation of implementation supports that help ensure each program's effectiveness for children and families, in both the short and long-term.

The Colorado launch pad for Dr. David Olds' rigorously researched nurse home visitation program, IIK was founded in 1999 and has since helped to put more than 30,000 families on a path toward self-sufficiency with ripple effects through multiple generation and the communities in which they live. IIK also become the model for nationwide replication of what was later named Nurse-Family Partnership.

IIK advocates for NFP at both the local and state level in Colorado. It secures and safeguards dedicated funding streams, introduces NFP to community leaders and stakeholders, and fosters trust and authentic collaboration to support the initiatives' development and expansion in all 64 of the counties where NFP now flourishes.

### Specific IIK activities that support high-quality delivery of NFP include:



Ensuring that community leaders and stakeholders have the knowledge, skills and support needed to **sustain the program**



**Protecting state funding** for Nurse-Family Partnership through education and advocacy



**Providing ongoing support and training** to nurse home visitors and their supervisors in delivering Nurse-Family Partnership to diverse communities and families



Assisting Nurse-Family Partnership teams to **interpret data** to support nursing practice, monitor program implementation and develop quality improvement projects



**Monitoring fidelity** and quality improvement projects for all implementing agencies

# Outcomes



## Pregnancy Outcomes\*



91% of babies were born full term

Premature births can have long-term effects on the child including behavioral problems, intellectual and developmental disabilities and health problems.



90% of babies were born at a healthy weight

Healthy babies are better equipped to learn and build core capabilities necessary for school readiness.



82% of clients were screened for depression during pregnancy

Maternal depression can impact the health and development of a child

## Child Health and Development



95% of clients initiated breastfeeding

54% of clients continue to breastfeed at infant age 6 months

Breast milk benefits the infant's growth and development, immune system and general health.



71% of infants were screened for developmental delays at 10 months

It's important to identify possible delays in developmental milestones early and get support.



93% of toddlers were fully immunized at age two<sup>1</sup>

## Economic Self-Sufficiency



83% of clients have not had a subsequent pregnancy at 18 months postpartum

Birth space can have an impact on the mother's ability to return to school or work.



62% of client 18 years old at intake were working at program completion



36% of clients without a high school diploma/GED at enrollment earned a diploma/GED by program completion; 18% were still enrolled in school

\*for clients who enrolled during pregnancy

<sup>1</sup>for children with immunization data

## Client Story



Devonie was 15 and in high school when she found out she was pregnant. She lived with her grandparents who had adopted her and her sister (her mother was in and out of jail and drug/alcohol rehab for Devonie's entire life. Devonie dropped out of high school and moved in with her boyfriend to an apartment after their son was born. She worked at Subway, but wanted to go back to school. She decided to become a medical assistant. She stated, "you helped me not feel scared." Also, when I asked her what she liked best about Nurse-Family Partnership, she stated "All of the information, the what to do and the what not to do. You really helped me have a healthy pregnancy." Devonie was concerned about her son's language skills and I did a screening to identify possible delays. She followed up with my referral and a speech therapist comes to her home once a week to help her toddler with his speech. Her son, Josiah is making great progress. Devonie is now working full-time as a medical assistant.

# Who we serve



NFP seeks to serve women in Colorado who face significant barriers to having a healthy pregnancy such as access to healthy foods, adequate health care, unsafe neighborhood or health problems. NFP clients face social economic disparities of income, education and employment and may not have access to all the resources they need during their pregnancy.

All clients in the Colorado NFP program are:

### First-time moms

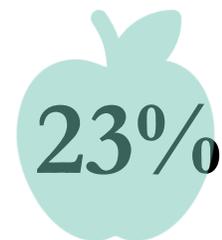
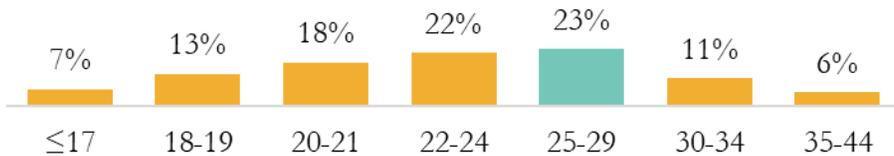
- The best chance to promote and teach positive health and development behaviors exists during a first pregnancy.

### Low-income (≤200% of the Federal Poverty Level)

- Dr. David Olds’ research has shown that lower-resourced women receive more benefit from the program than women with higher incomes.

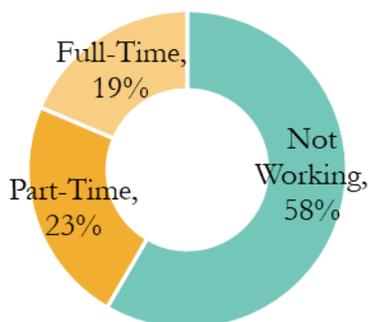
Colorado NFP Served 4,630 clients

The majority of clients were in their 20's when they enrolled in NFP. And the highest percentage were between 25-29.

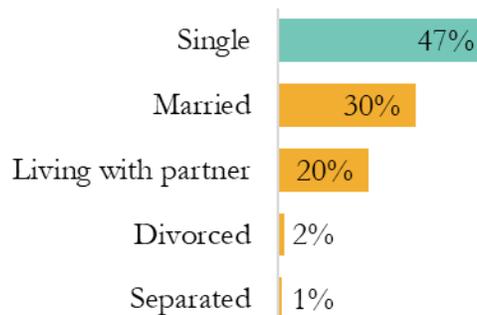


Have not completed high school/GED

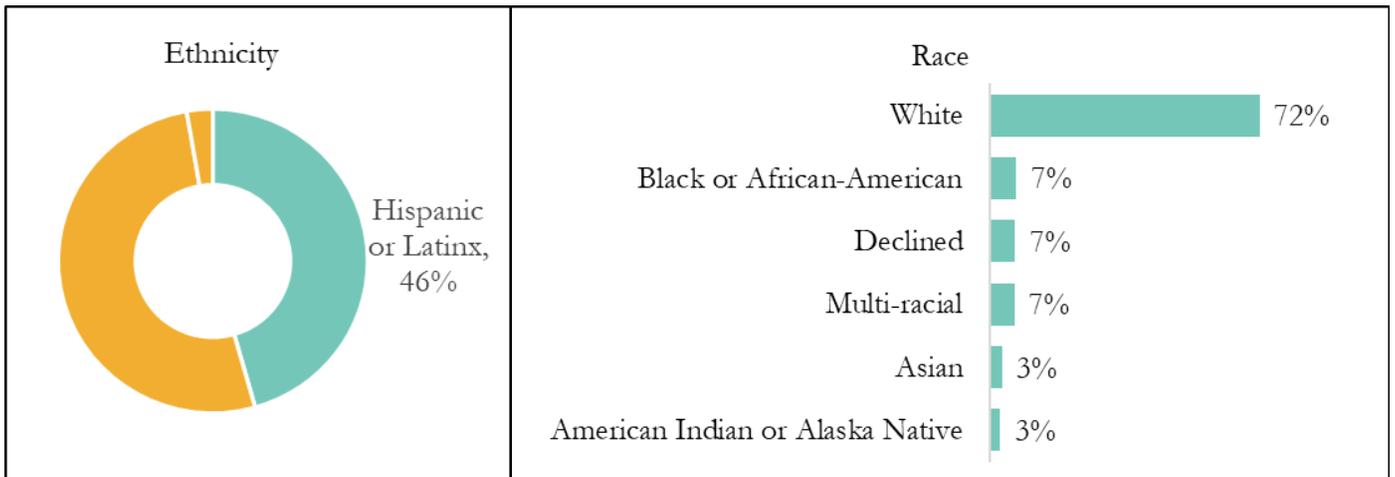
The majority of NFP clients were **not working** when they enrolled in the program.



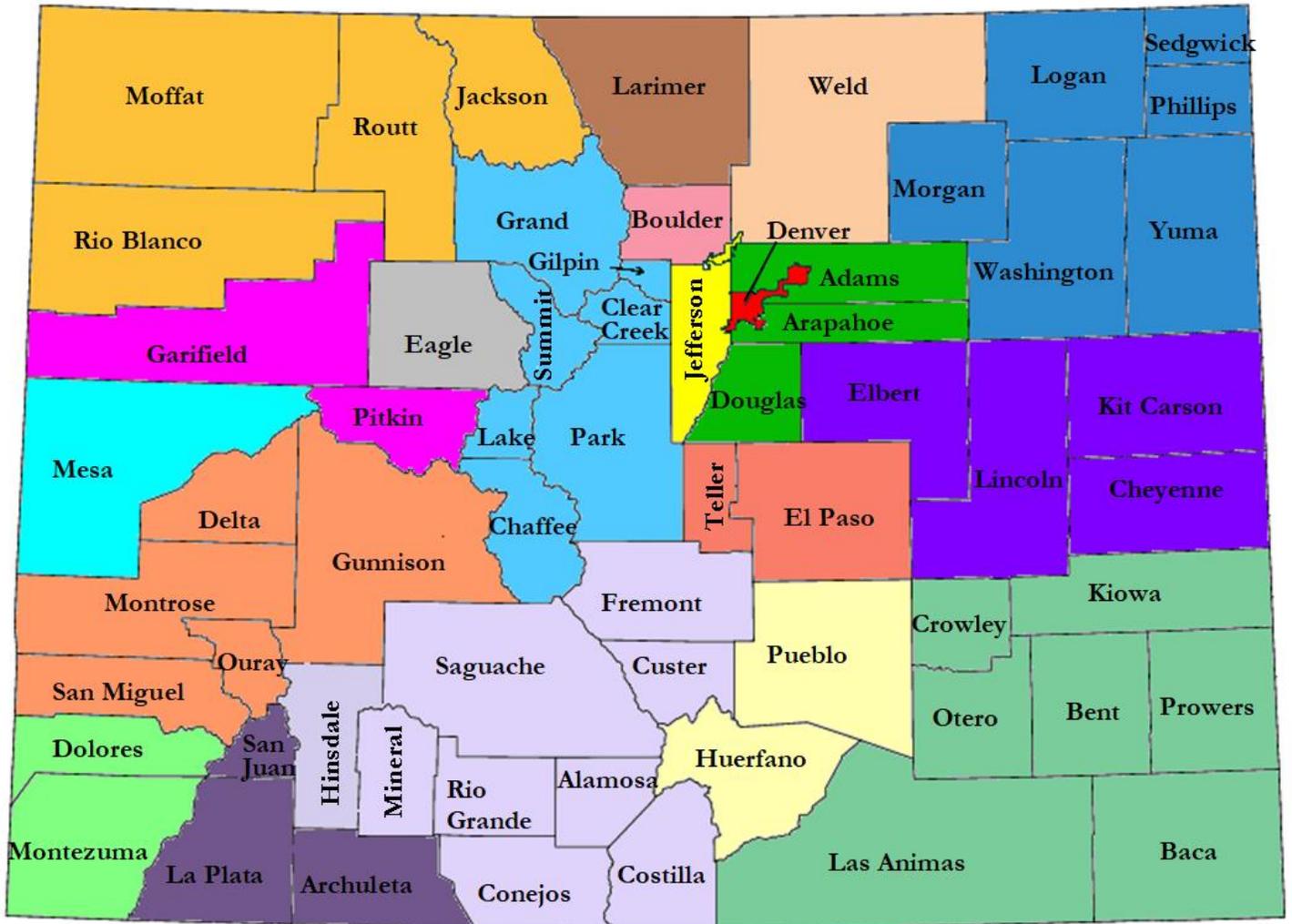
The majority of NFP clients are **single** when they enrolled in the program



Ethnicity and race are asked as separate questions following the format stipulated by the Federal Government (US Census and Office of Management and Budget).



# NFP Implementing Agencies



- |   |  |   |  |   |  |
|---|--|---|--|---|--|
|  | Adams NFP (Tri-County Health and Centura Health)<br>Arapahoe/Douglas NFP (Tri-County)                                      |  | Intermountain NFP<br>(Summit County Public Health)                                 |  | Northwest NFP<br>(Northwest Colorado Health)                                 |
|  | Boulder County NFP<br>(Boulder County Health Dept.)  |  | Jefferson/Broomfield Counties NFP<br>(Jefferson County Health Dept.)               |  | Pueblo/Huerfano Counties NFP<br>(Pueblo Community Health Center)             |
|  | Denver County NFP<br>(Denver Health)   |  | Kit Carson NFP<br>(Kit Carson Health and Human Services)                           |  | Region 10 NFP<br>(Montrose County Dept. of Health and Human Services)        |
|  | Eagle County NFP (Eagle County Health and Human Services)  |  | Larimer County NFP<br>(Larimer County Department of Public Health and Environment) |  | San Juan NFP<br>(San Juan Basin Health Department through Healthy Kids)      |
|  | El Paso County NFP<br>(El Paso County Department of Public Health and Environment (200) & Beth-El College of Nursing (85)) |  | Mesa County NFP<br>(Mesa County Department of Public Health and Environment)       |  | San Luis Valley NFP<br>(Valley-Wide Health Systems, Inc.)                    |
|  | Family Visitor NFP<br>(Basalt/EI Jebel area of Eagle County served by this site)   |  | Montezuma NFP<br>(Montezuma County Health Dept.)                                   |  | Southeast Colorado NFP<br>(Prowers County Nursing Service)                   |
|   |  |  | Northeast NFP<br>(Regional Home Visitation Program dba Baby Bear Hugs)             |  | Weld County NFP<br>(Weld County Department of Public Health and Environment) |

# Fidelity



Nurse-Family Partnership requires specific criteria or elements for implementing the program. These standards include training of the nurses, who is eligible for the program, how the program is implemented, organizational and community supports. Nurse-Family Partnership has 19 model elements. When the program is implemented in accordance with these model elements, implementing agencies can have a high level of confidence that results will be comparable to those measured in the research trials.

Ensuring we continue to have that impact relies on following a blueprint with every client of what was done in the research trials. The 19 model elements at the core of the NFP program serve as this blueprint. We use "fidelity" to refer to how closely a given NFP site adheres to those model elements, thereby replicating the practices proven to lead to the best outcomes for clients.

What makes NFP unique is the wealth of evidence proving that every dollar spent on it truly has an impact. IIK's promise to sustain that impact means we must ensure that Colorado's implementation of the program is always true to the model elements. We measure fidelity so we can say with confidence that the service we provide fosters the best interest of clients in ways proven to be most effective.

# Innovations

## **REACH project**

In 2019, IIK and the Denver Metropolitan area NFP implementing agencies of Centura Health, Denver Health, Jefferson County and Tri-County met to develop a central outreach and referral system. Their intent was to increase community partnerships, increase referrals, increase caseload and to build nurse/provider relationships, all while decreasing duplication of effort and decreasing burden on nurses to do outreach. This referral system is referred to as “REACH” or Referral Express and Central Hub. A position was funded through the Maternal, Infant, and Early Childhood Home Visiting (MIECHV) and commenced Oct. 1, 2019 for a 1-year pilot. The mid-project evaluation showed great progress toward the goals. The position will move to Centura Health and will be funded through Tobacco Master Settlement funds beginning October 2020.

## **Jacquelyn Wonder Fund**

Thanks to Jerry Conover and family, Invest in Kids launched its first-ever grant fund to specifically provide support to families participating in Nurse-Family Partnership. The Jacquelyn Wonder Fund, created to honor the memory of Jacquelyn Wonder, provides \$100,000 for unmet needs experienced by the families being served by NFP, as well as educational and professional development needs for NFP’s nurses. This focused approach to philanthropy uniquely reaches both the client and service provider, allowing skilled nurses to directly impact families based on their biggest needs. These funds were especially helpful during the COVID-19 pandemic. Invest in Kids was able to provide financial resources to 215 clients who were negatively impacted by the pandemic.

*“To Jerry Conover, I would just like to say with my deepest appreciation, thank you for the help you have provided myself and my family. Your generosity has helped me be able to provide a place for us to live at a time when I was unsure how I was going to do this and be able to provide necessities for my newborn son. We greatly appreciate your help and hope that one day we will be in a better position to be able to help a family in need as you have done for us.”*

**- NFP Client**

## **Support for Nurses during the COVID-19 Pandemic**

On March 26, 2020, the governor of Colorado issued a Stay-at-Home order due to the COVID-19 pandemic. NFP Nurse home visitors quickly pivoted from conducting in person visits with client to telehealth visits. Even though nurses were able to continue to see clients, it was a struggle to adjust to working from home. For many NFP nurses there were additional challenges of having their own children at home, clients who many not have the necessary resources (computers, internet, etc.) for telehealth or they were pulled to assist with COVID-19 duties at their agency. All these stresses have impacted the NFP workforce. Invest in Kids stepped up to support NFP teams by providing additional consultation to supervisors. The IIK-led supervisor community of practice provides a frequent opportunity for supervisors to interact regularly to share challenges and concerns and then to brainstorm solutions and to support one another. In addition, a workforce survey was sent out to the Colorado NFP teams to determine strengths and challenges that the teams may be facing during this crisis.

The results of the survey were provided to the supervisors for each team during a meeting. During this meeting, an expert in behavior health provided tips for stress release and work-life balance and helped to build the capacity of supervisors to support teams during this uncertain time.

**Nurse conducting a telehealth visit with a client**



# Appendices

## A. Funding

Funding for the NFP program in Colorado is provided by state Tobacco Master Settlement funds, Medicaid reimbursement and federal home visiting funds. The Tobacco Master Settlements funds finances 24 of the 27 teams that implement NFP in Colorado. The remaining three teams receive funding through the Maternal, Infant, and Early Childhood Home Visiting (MIECHV) program. The MIECHV Program is administered by the Health Resources and Services Administration (HRSA) a division of the U.S. Department of Health and Human Services.

Tobacco Master Settlement funds (state fiscal year July 1, 2019-June 30, 2020)  
budget \$21,004,045

MIECHV funding (federal fiscal year October 1, 2019-September 30, 2020)  
budget \$2,467,686



## B. Partners

IIK started NFP replication in Colorado by working in partnership with local communities to identify, introduce, and then to implement the program with fidelity to ensure success. All NFP sites are required to have local advisory boards which grew out of these initial partnerships. These advisory boards provide a support network for NFP staff and clients, facilitate awareness of NFP in the community, provide assistance in developing relationships with referral sources and service providers, assess and respond to program implementation challenges, identify client resources and gaps in client services, and generate the support needed to sustain NFP over time.

The management of NFP in Colorado is accomplished with a four-partner team: The Colorado Department of Human Services (CDHS), the Nurse-Family Partnership National Service Office (NFPNSO), the University of Colorado, and Invest in Kids (IIK).

<p><b>Nurse-Family Partnership National Services Office's role in Colorado</b></p> <ul style="list-style-type: none"> <li>• Initial nurse and supervisor training</li> <li>• Visit-to-visit guidelines</li> <li>• Marketing resources and materials</li> <li>• Data collection system</li> <li>• Program implementation and outcome reports</li> </ul> 	<p><b>Invest in Kids' role in Colorado</b></p> <ul style="list-style-type: none"> <li>• Community awareness</li> <li>• Program advocacy</li> <li>• Site development and expansion</li> <li>• Clinical support and consultation</li> <li>• Program implementation support</li> <li>• Quality improvement management</li> </ul> 
<p><b>Colorado Department of Human Services' role in Colorado</b></p> <ul style="list-style-type: none"> <li>• Fiscal agent</li> <li>• Annual grant application</li> <li>• Annual state Tobacco MSA appropriation</li> <li>• Contracts including funding conditions</li> <li>• Finances and site budgets</li> <li>• Federal funding and associated contracts</li> </ul>	<p><b>College of Nursing, University of Colorado Anschutz Medical Campus' role in Colorado</b></p> <ul style="list-style-type: none"> <li>• The Nurse Home Visitor Act requires that the University of Colorado select, evaluates and monitors sites. The University subcontracts these responsibilities to the NFP National Services Office and Invest in Kids.</li> </ul>

## C. References

1. Societal Return on Investment in Nurse-Family Partnership Services in Colorado. Ted R Miller, PhD, developed this fact sheet and the cost model underpinning it. This calculator was funded in part by NIDA grant 1-R01 DA021624. Fact Sheet Date: 2/21/2019
2. Nurse-Family Partnership. Research Trails and Outcomes: The Gold Standard of Evidence. Available at <https://www.nursefamilypartnership.org/wp-content/uploads/2020/01/Research-Trials-and-Outcomes.pdf> Accessed on 6/5/2020.
3. Miller, T.R. (2015). Projected outcomes of Nurse-Family Partnership home visitation during 1996-2013, USA. *Prevention Science*. 16 (6). 765-777. This number relies on a state-specific return on investment calculator derived by Dr. Miller from published national estimates to project state-specific outcomes and associated return on investment. The calculator is revised periodically to reflect major research updates (latest revision: 12/22/2018).
4. Life Status and Financial Outcomes of Nurse-Family Partnership in Colorado. Ted R Miller, PhD, developed this fact sheet and the cost model underpinning it. This calculator was funded in part by NIDA grant 1-R01 DA021624.