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# NURSE-FAMILY PARTNERSHIP

## Child Maltreatment Prevention Strategy

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## Introduction and Executive Summary

The Families First Prevention Services Act (FFPSA) was signed into law on February 9th, 2018 as part of the Bipartisan Budget Act. It aims to prevent children from entering foster care by allowing federal reimbursement for mental health services, substance use treatment, and in-home parenting skill development. It also seeks to improve the well-being of children already in foster care by incentivizing states to reduce placement of children in congregate care.[1] Intervention programs that are rated as "well-supported" by the Health and Human Services (HHS) Clearinghouse are eligible for reimbursement under the Act. The law provides flexibility to states to invest their existing federal resources into prevention and early intervention services to strengthen families as well as reduce the need for foster care whenever it is safe to do so.[2]

With the flexibility to direct federal resources to prevention services, FFPSA provides states with the opportunity to implement upstream prevention strategies aimed at preventing initial incidences of child maltreatment, rather than after a substantiated child maltreatment case. While intervening after a substantiated finding can mitigate the recurrence of maltreatment and prevent out-of-home placement, it does not prevent the short- and long-term adverse child and adult outcomes shown to be associated with childhood incidences of maltreatment.

Primary prevention strategies that provide intervention services to high risk families before there is an incident of reported maltreatment can reduce child maltreatment in the most vulnerable age group. FFY 2019 data shows that infants and toddlers are victimized at the highest rates. Nationally, more than one third (34.2%) of victims are three years old or younger, totalling 224,670 children. Victims younger than one year accounted for 14.9 percent of all victims. Children under age one were victimized at the highest rate at 25.7 per 1,000 children among all children aged 17 or younger.[3]

Nurse Family Partnership (NFP) is an evidence-based prenatal home visiting program, classified as "well-supported" under the Department of Health and Human Services (HHS) Clearinghouse, that serves young, first time, low-income women and has a proven track record in reducing the incidence of child maltreatment and child maltreatment fatalities. Among well-supported home visiting programs, NFP is the most effective program in reducing incidence of child abuse and neglect. Because NFP targets pregnant high-risk women and provides services through age two of the child, its

services target the most vulnerable age group with the highest rates of child maltreatment.

Research shows that there is a strong association with specific parent and family risk factors and incidence of child maltreatment. Women within NFP's service population who exhibit the risk factors most strongly associated with child maltreatment discussed below should be considered eligible for prevention services under Title IV-E. These risk factors include: anxiety and low self-esteem; mental health and depression; unplanned pregnancy; history of victimization and maltreatment; substance abuse; spousal abuse/violence; unemployment; criminal behavior; and lack of social support. Additional risk factors collected by Administration for Children and Families National Child Abuse and Neglect Data Systems include inadequate housing, and intellectual and physical disabilities.

Providing evidenced-based prevention services to pregnant women exhibiting these risk factors can mitigate the parental and family risk factors shown to be associated with child maltreatment. This strategy would improve short- and long-term outcomes for children, families and communities, as well as reduce the long-term monetary costs to taxpayers and individuals associated with child maltreatment.

**Risk Factors Associated with Child Maltreatment**

There are several studies which have shown elevated rates of child maltreatment in populations affected by specific risk factors.

Those risk factors include maternal smoking, caregiver history of victimization, number of children within the family, maternal caregiver age, maternal caregiver education, paternity uncertainty, marital status, low birth weight, quality and duration of prenatal coverage, maternal mental health status, and weak social support. Six risk factors are often associated with elevated rates of child maltreatment: maternal caregiver age, maternal caregiver education attainment, low socioeconomic status, caregiver substance abuse, history of victimization (both as a child and as a product of domestic violence), and caregiver mental health status including stress and depression (particularly maternal).

Of the fifteen studies reviewed for this report, eight reported low socioeconomic status as being a statistically significant predictor of child maltreatment.[4,5,6,7,8,9,10,11] Young caregiver age was associated with increased risk of child maltreatment in three of the studies,[12,13,14] as was marital status and/or paternal uncertainty.[15,16,17] Children with working mothers and absent fathers are more likely to be subject to neglect and abuse, as are children

with two non-working parents or parents whose income is below 75 percent of the federal poverty level.[18] Nurse Family Partnership's target audience specifically focuses on these risk factors by working with young, low-income, often single mothers.

A number of research studies have also examined the relationship between parental and family risk factors and child abuse and neglect. The results of a 2009 meta-analysis of 155 studies found that intervening to prevent child maltreatment must include the assessment of risk factors that not only include parent-child interactions but also parental factors independent of child and family factors.[19] The parent-child risk factors most strongly associated with child maltreatment included parent perception of the child as a problem and parent-child relationships (i.e. poor parent-child communication, lack of empathy, etc.).

The parent characteristics independent of the child most strongly associated with child maltreatment included parental anger/hyper-reactivity, level of stress, and self-esteem. The family factors most associated with child maltreatment included low family cohesion and high family conflict. Other parental factors with strong levels of association included anxiety, mental health (psychopathology and depression), poor relationship with own parents, parents experienced childhood abuse, criminal behaviors, lack of social support, substance abuse, and unemployment.[20]

The National Child Abuse and Neglect Data Systems (NCANDS) collects data for nine child risk factors and 12 caregiver risk factors. The caregiver risk factors include alcohol abuse, drug abuse, intellectual disability, emotional disturbance, visual or hearing impairment, learning disability, physical disability, other medical conditions, domestic violence, inadequate housing, financial problems, and public assistance. For federal fiscal year (FFY) 2018, data were analyzed for two caregiver risk factors with the following NCANDS definitions: alcohol abuse and drug abuse. The national percentage of victims with the alcohol abuse caregiver risk factor increased from 11.6 in 2016 to 12.3 in 2018. From 2016 to 2018, there was an overall increase in the number of victims reported with the drug abuse caregiver risk factor. The national percentage of victims reported with the drug abuse caregiver risk factor increased from 28.9 in 2016 to 30.7 in 2018.[21]

## Prevention Can Prevent Child Maltreatment and the Associated Long Term Adverse Consequences and Costs

FFPSA allows states to allocate federal Title IV-E funding for evidence-based prevention services and programs with the intent of mitigating the need for out-of-home placement.[22] While many of the well-supported interventions that take effect after Child Protective Service (CPS) involvement can prevent out-of-home placement and, in some cases, reduce subsequent maltreatment, intervention that begins after an incident of child maltreatment may not mitigate the range of negative outcomes associated with maltreatment. Child maltreatment and physical abuse have been linked to several

long-term health consequences, including higher risk for diabetes, lung disease, functional limitations, as well as diminished executive functioning and cognitive skills, poor mental and emotional health, post traumatic stress, adult criminality, and more.[23] Adults with documented histories of childhood abuse and/or neglect have lower levels of education, employment, earnings, and fewer assets as adults.[24] Many children who are victims of abuse require special education services as well as early intervention services to address developmental delays. Maltreated children are also more likely to engage in juvenile delinquency and adult criminal behavior compared to children who do not experience abuse and neglect. Children who experience abuse are also disproportionately more likely to experience homelessness as adults.

The estimated average lifetime cost per victim of nonfatal child maltreatment is $264,593 after adjusting for inflation, including $41,133 in childhood health care costs; $13,267 in adult medical costs; $181,879 in productivity losses; $9,736 in child welfare costs; $8,501 in criminal justice costs; and $10,077 in special education costs.[25] The developmental and behavioral impact of child maltreatment is also likely to result in additional personal and societal costs that are not quantified above.[26]

In FFY2019, children who are less than one year old have the highest rate of victimization (25.7 per 1,000 children) among all children aged 17 or younger.[27] Among one year old children, this rate is 11.5 per 1,000 children, and victims who are two or three years old have rates of 11.7 and 10.0 victims per 1,000 children.[28] Nationally, more than one third (34.2%) of victims are 3 years old or younger, totalling 224,670 children. However, there were 97,879 victims younger than one year, accounting for 14.9 percent of all victims.

For fiscal year 2019, an estimated 1,840 children died of abuse and neglect (a rate of 2.50 per 100,000 children). This was an increase of 3.4 percent from the year 2018 national estimate of 1,780 child fatalities. Seventy (70.3%) percent of all child fatalities were younger than three years old, with nearly one-half (45.4%) of child fatalities being children under the age of one.[29]

Currently, within the HHS Clearinghouse, there are no non-home visiting interventions rated as “well-supported” or “supported” that specifically target the most at-risk populations, children aged zero to three. Several interventions, such as Parent-Child Interaction Therapy, Multisystemic Therapy, and HOMEBUILDERS™, have been shown to reduce substantiated or founded reports to CPS within their treatment groups,[30] but none of the interventions specifically target children aged zero to three and generally all intervene post-incident of abuse. In fact, the evidence for these programs in reducing child maltreatment recidivism is either based on treatment of older children or among unclassified ages. Because the aforementioned programs are typically implemented after there has been contact with the CPS system, an evaluation of the cost effectiveness of these programs should take into account the resources expended by

state agencies for CPS investigations and case worker assignment in addition to the costs of the programs themselves.

## Nurse Family Partnership is an Effective Prevention Strategy

As mentioned above, the national victimization rate is 2.57% among all children less than one year. However, children from low socioeconomic status (SES) families experienced maltreatment at more than five times the rate of other children.[31] NFP serves young pregnant low-income women and research shows that NFP is effective in reducing the incidence of child abuse and neglect as well as reducing childhood injuries. In long term follow-up studies, NFP is shown to reduce state-verified rates of child abuse and neglect by 48% with a 56% reduction in emergency visits for child injuries in the child's second year of life.[32] A recent analysis of NFP client data for the period 2018-19 reveals that 1.6% of NFP clients with infants up to age 12 months had a CPS referral.[33] Furthermore, NFP was the only program identified by the Federal Commission to Eliminate Child Abuse and Neglect Fatalities as proven to reduce child maltreatment fatalities.[34]

A cost-benefit analysis conducted by New Mexico on the returns of child welfare programs showed a benefit-cost ratio of $9.7 to $1 for NFP, a greater benefit-cost ratio when compared with other home visiting programs.[35] The fiscal and monetary benefits (to taxpayers and participants) associated with the reduction of child maltreatment equal 98% of the annual costs of the NFP program, as much as 30% to 70% higher than other home visiting programs.[36] In addition, a cost-effectiveness analysis shows NFP's program achieves reduction in child maltreatment at a 2.2 to 5.8 times lower cost per outcome when compared to other home visiting programs. (see Appendix A).

Among the interventions currently rated as "well-supported" under the HHS Clearinghouse, NFP is uniquely positioned as a prevention strategy to support at-risk populations. NFP's eligible target population aligns with the risk factors described above such as young, first time mothers and low socio-economic status. In an internal analysis of clients enrolled between 2016-2018, the median age at enrollment was 22 years old, and 80% of clients were single and never married.[39] In addition to young, pregnant foster youth, pregnant women that exhibit one or more of the following risk factors associated with child maltreatment should be considered as candidates for preventive services under Title IV-E Prevention Plans:

- Anxiety and low self-esteem
- Stress and depression
- Unplanned pregnancy
- History of victimization and maltreatment
- Substance abuse
- Spousal abuse/violence

- Unemployment
- Criminal behavior
- Lack of social support
- History of family conflict
- Inadequate housing
- Intellectual and physical disability

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# Appendix A.

**Table A. Comparison of Costs to Prevent Child Maltreatment Based on Programmatic Effect Sizes***

| | Program's effect size on child maltreatment reduction** | U.S. child maltreatment incidence rate per 1,000 children age <1 year old | Predicted incidence rate with program implementation based on programs's effect size | Predicted number of averted child maltreatment cases per 1,000 children | Annual programmatic cost per client | Annual programmatic cost per 1,000 clients | Estimated cost per averted maltreatment incident*** | Ratio of programmatic costs to NFP programmatic cost | Child maltreatment cases **not** averted if program is implemented instead of NFP |
|---|---|---|---|---|---|---|---|---|---|
| **NFP** | -0.353 | 25.7 | 16.6 | 9.1 | $12,437 | $12,437,000 | $,370,906 | 1 | |
| **PAT** | -0.061 | 25.7 | 24.1 | 1.6 | $4,702 | $4,702,000 | $2,999,298 | 2.2 | 7.5 |
| **HFA** | -0.026 | 25.7 | 25 | 0.7 | $5,342 | $5,342,000 | $7,994,612 | 5.8 | 8.4 |

**This table uses the Washington State Institute of Public Policy WSIPP meta-analysis of program effects for each of the listed programs. Individual analysis of each program can be found here http://www.wsipp.wa.gov/BenefitCost*

***Program effect size include data for children up to age 17. However, we assume the effect sizes for each program are comparable for children less than age one. This table uses adjusted effect sizes to reflect program implementation in the state of Washington. Unadjusted effect sizes for NFP is -0.621. Unadjusted effect sizes for PAT and HFA remain the same.*

****These numbers represent the cost of achieving 1 avoided child maltreatment in relation to NFP's cost.*

# Endnotes


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