



Child Maltreatment Re-reporting, Recurrence, and Foster Care Re-entry in Hennepin County

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Final Report

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Abstract

Hennepin County has invested significant resources toward improving its child welfare system and addressing its most rooted and long-standing challenges, including high rates of maltreatment re-reporting, recurrence, and foster care re-entry. As part of this effort, the county partnered with researchers from the University of Minnesota to identify key factors related to maltreatment re-reporting, recurrence, and foster care re-entry among children involved with Hennepin County Child Protective Services (CPS). Results of the research study revealed three broad areas for practice and policy improvement: administration, child welfare implementation and coordination, and use of Structured Decision Making (SDM) tools. Specific intervention opportunities within these areas include:

- »Assigning and maintaining one consistent primary caseworker
- »Conducting comprehensive assessments, and better coordination with systems outside of CPS
- »Developing mechanisms to track the provision of children’s mental health services when families are referred to a community agency
- »Focusing on ways to reduce racial and ethnic disparities, including developing opportunities and new tools to capture diverse family strengths and needs
- »Building off of successful practices implemented in cases of sexual abuse
- »Safely reducing the number of children entering short-term placements
- »Utilizing Continuous Quality Improvement (CQI) processes to better understand family needs and service provision, workforce and case assignment processes, and implementation of new practice models

Prior to the end of the research study, Hennepin County began to reform its child welfare processes; as part of this effort, numerous changes have been made to practice and policy, some of which overlap with recommendations of the current study. Additional recommendations beyond those currently being implemented may be utilized by Hennepin County in tailoring its child protection response moving forward, as a means of safely reducing re-reporting, recurrence, and re-entry into foster care.

Child Maltreatment Re-reporting, Recurrence, and Foster Care Re-entry in Hennepin County

This report summarizes findings from a study conducted by researchers at the University of Minnesota, in partnership with program staff at the Hennepin County Human Services and Public Health Department (HSPHD). The study was designed to understand and attend to individual characteristics and pressing systemic issues influencing child maltreatment re-reporting, recurrence, and foster care re-entry in Hennepin County. This study focused on these outcomes during 2014-2017, a time period in which HSPHD experienced significant system change and practice shifts.

Background

In 2015, there were approximately 1,284,387 children in Minnesota, representing 23% of the state's population. In order to protect this large portion of the population, the Department of Human Services and local child welfare agencies work together to respond to allegations of maltreatment and abuse, and to help support families in safely caring for their children. In 2015, local child protection agencies in Minnesota received 78,178 reports of child maltreatment, of which 16,580 (21%) were received by Hennepin County. After proceeding through the screening and assessment process, these statewide reports resulted in the involvement of 31,634 children with local CPS agencies – an alleged victimization rate of two out of every 100 Minnesotan children. In Hennepin County, 7,895 children were documented as alleged victims of child maltreatment – a rate of three out of every 100 children.

The U.S. Department of Health and Human Services evaluates child welfare service delivery via Child and Family Service Reviews (CFSR). A variety of measures are used in the CFSR to assess how children in each state are being served. While the CFSR is administered by the federal government, Minnesota also administers its own version of the CFSR on an annual basis. Three CFSR measures were of particular interest to this study; two federal measures (maltreatment recurrence and foster care re-entry) and one state measure (maltreatment re-reporting). As currently defined and utilized by the state and federal government, these measures have several significant limitations. For example, these measures do not take into account the effect of policy, staffing, or procedures that may change over time at the local, state, and national levels, which limit their ability to inform policies, procedures, and service provision at the local (county) level. These measures also do not capture all

maltreatment re-reporting, recurrence, and foster care re-entry that are experienced by children in Minnesota. Some outcomes are not counted, such as foster care placements shorter than eight days, or inter-county experiences of maltreatment re-reporting, recurrence, and foster care re-entry. Thus, the maltreatment re-reporting, recurrence, and foster care re-entry measured by the Minnesota Department of Human Services (following federal definitions) is likely an underestimate of these experiences.

Based upon 2015 data (reported in 2016), a collaborative proposal was developed between the University of Minnesota and Hennepin County to study the aforementioned CFSR outcomes for children involved with Hennepin County HSPHD during a four-year timeframe (2014-2017). Operationalizing these measures under the advisement of Hennepin County and an advisory board of community stakeholders allowed Hennepin County to develop meaningful measures that will better assist in programmatic changes moving forward.

PROBLEM

Hennepin County has invested significant resources toward improving its child welfare system and addressing its most rooted and long-standing challenges, including high rates of maltreatment re-reporting, recurrence, and foster care re-entry. The goal of this investment has been to transform the county's child protection system by improving prevention and early intervention efforts, and broadening its focus on child well-being. The focus on child well-being is rooted in research evidence linking child maltreatment to both short-term and long-term outcomes. For example, research has shown that re-entry into foster care disrupts the continuity of a child's physical care and is traumatic for a child's overall social-emotional growth and development and relational well-being.

Since 2015, reports of alleged child maltreatment have increased by 16 percent and the number of children in out-of-home placement has increased by 37 percent. According to CFSR measures, the incidence of maltreatment re-reporting, recurrence, and foster care re-entry also worsened between 2015 and 2017. In 2015, the maltreatment re-reporting rate was 18.7% (worse than the performance standard of 15.2%); this rate increased to 25.6% in 2017. The statistics indicate that during this timeframe, one out of every four children who were investigated or assessed for maltreatment experienced a subsequent maltreatment investigation or assessment within one year. While Hennepin County met the performance standard for maltreatment recurrence in 2015 (9.1% or less), the rate of maltreatment recurrence increased to 13.7% in 2017. Foster care re-entry rates also increased during this period. In 2015, the foster care re-entry rate was 15.1% (higher than the 8.3% performance standard); this rate increased to 15.5% in 2017. As the rates of maltreatment re-reporting and recurrence increased, so did foster care re-entry. Some populations were affected more than others. In particular, Native American and African American/Black children disproportionately experienced these outcomes.

CURRENT STUDY

Hennepin County and the University of Minnesota have a history of partnership spanning more than 14 years. In 2016, the Hennepin University Partnership (HUP) began hosting biannual café style “mixers” (spring and fall) - three-hour events focused on issues of mutual interest to Hennepin County and the University of Minnesota. In August 2017, the focus of the mixer was on concepts and research questions pertaining to child well-being. The Hennepin County and University of Minnesota team that authored the current report submitted a study proposal titled *“Identifying factors associated with child maltreatment re-reporting, recurrence, and foster care re-entry”* for the 2017 Hennepin-University Partnership Collaborative Grant Initiative and was awarded \$40,000. The purpose of the study was to identify key factors related to maltreatment re-reporting, recurrence, and foster care re-entry among children involved with Hennepin County Child Protective Services between 2014 and 2016. Those key factors, in the context of best practice and research support, were to be utilized by Hennepin County in tailoring child protection response moving forward as a means of safely reducing re-reporting, recurrence, and re-entry into foster care.

Through an examination of integrated administrative data (further detail below), and in the context of practice and policy change, this study sought to answer the following questions:

- » What are the characteristics of families who experience maltreatment re-reporting, recurrence, and foster care re-entry?
- » What are the risk and protective factors for maltreatment re-reporting, recurrence, and foster care re-entry?
- » What are the patterns of maltreatment re-reporting, recurrence, and foster care re-entry over time?

The study aligned with Hennepin County’s goals of developing, implementing, and sustaining their child well-being practice model while enhancing the quality of shared decision-making and promoting population health. The HUP team leveraged Hennepin County’s child protection practice history, the practice insight of Hennepin County team members, and the research expertise of University of Minnesota team members to examine key ecological factors associated with maltreatment re-reporting, recurrence, and foster care re-entry: child, case, cross-system involvement, family, and educational characteristics. The goal of this study was to generate research evidence that could inform policy, procedures, and services for children and families, with an added benefit of contributing to the achievement of state and national performance standards. The knowledge gained from the study was also intended to provide more clarity on the issue of racial disparities within the Hennepin County child welfare system and support current CQI activities. Lastly, there was potential for the study to result in future collaborations, including CQI case reviews and the development of prevention and intervention services.

Methods

COMMITTEE STRUCTURE

The governance structure for the study was comprised of two primary groups. The first group was a steering committee, consisting of the University of Minnesota Research Team and the Hennepin County Program Team. The second group was a Stakeholder Advisory Committee, including public and private service providers representing multiple disciplines and diverse communities.

Steering committee. The steering committee met bi-weekly over the course of 2018 with the purpose of connecting

research to practice. Activities included: gathering information about the nature and quality of data available given current county practices and policies, investigating additional sources of data for integration, identifying and engaging Advisory Board members and other important stakeholders for feedback and consultation, and providing insight into research findings.

Hennepin County program team. The program team met throughout 2018 with the purpose of reviewing and documenting policy and organizational changes that occurred within the Hennepin County Child Protection Program during 2014-2017. It was pertinent for the program team to construct a timeline (see Appendix A) of procedural and structural changes that occurred during the study timeframe to better understand potential effects of these changes on the study outcomes. Thus, the program team consulted with a variety of stakeholders to gain a thorough understanding of practice changes during this period.

University of Minnesota research team. The research team met bi-weekly throughout 2018 and monthly thereafter, with the purpose of finalizing the study design, addressing data quality issues, integrating data, and conducting analysis. The research team also met with specific members of the program team on an ad hoc basis to inquire about data and documentation issues as they arose.

Stakeholder advisory board. The steering committee convened an advisory board comprised of a diverse group of community professionals as well as internal Hennepin County staff who were knowledgeable about research and child welfare (see Appendix B). The advisory board met with the steering committee twice over the course of the study. The purpose of the advisory board was to advise the steering committee about:

- » The adequacy of the research questions in addressing pressing issues faced by families;
- » Specific areas for study exploration, including advice about data sources (including data from the Social Services Information System [SSIS] and Minnesota- Linking Information for Kids (Minn-LInK) project data [explained in further detail below] that could be integrated to assess relationships with outcomes of interest);
- » Practices and policies implemented during the study time frame;
- » Areas for further examination, including a deeper look at study outcomes by race and ethnicity, patterns of strengths

and protective factors, patterns of challenges and needs, and services provided; and

- » Potential explanations of study findings and their implications for practice and policy changes.

The steering committee followed advisory board recommendations, taking the following steps:

- » All data was disaggregated and reported by race and ethnicity for each of the outcomes as a means of focusing on racial disproportionality and disparities;
- » Patterns of strengths and protective factors and patterns of challenges and needs were further identified using:
 - The SSIS Structured Decision Making Tools: Risk Assessment Tool and the Strength and Needs Decision tool, and
 - Maltreatment Allegations.
- » Practices and policies that were in place or which changed during the time frame were identified, summarized, and documented. A timeline of events (see Appendix A) was generated by the program team.
- » Attempts to identify the services that were delivered to families and children in the study were made at the individual and/or case level; reliable administrative data that reports this element of practice did not exist, representing a significant deficit in the available administrative data.

DATA INTEGRATION VIA MINN-LINK

This study relied upon integrated secondary data from the Minn-LInK project which utilizes statewide administrative data from multiple agencies, including the Minnesota Departments of Human Services (DHS) and Education (MDE), to answer questions about the effects of policies, programs, and practice on the well-being of children in Minnesota. Data-sharing agreements allowed the use of identified data for the purpose of conducting research regarding families and children in Minnesota. The University's Institutional Review Board approved the use of these secondary data, and all identifiers were removed from the dataset once cross-system matching was achieved (de-identification).

The existence of the Minn-LInK project allowed the current study to overcome some of the challenges of

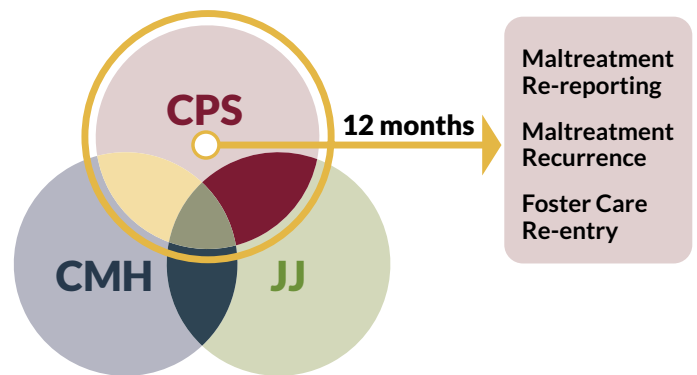
splintered systems (and therefore splintered data) by providing established processes and protocols to (a) acquire administrative data for research purposes, (b) store and utilize sensitive data while ensuring data confidentiality and security, and (c) effectively integrate data across systems that do not share child-level, unique identifiers. However, policy and practice research has rarely been the primary focus of administrative data collection. While this reality did not prohibit the successful design, implementation, and completion of research, it did present researchers with unique challenges related to study design and timeframe for study group selection that occurred after the data had been collected. Instances in which data system conditions drove the structure of this study have been noted in this report.

The final data used for this study included: state-wide child protection, out-of-home placement, and children's mental health records; Hennepin County workforce records; and statewide student academic records and academic disciplinary records. These data were used in accordance with data sharing agreements between the Minn-LInK project at the University of Minnesota and the aforementioned state and local agencies.

SAMPLE

Given the vast practice and policy changes that occurred during the study timeframe, the research team answered the study research questions using three separate cohorts of children for each outcome of interest. These cohorts were developed as "entry" cohorts and represented children who came into contact with Hennepin County CPS during 2014, 2015, and 2016, respectively. Cohorts were generated without replacement; children were assigned to the first cohort within a sample in which they were eligible and were excluded from assignment from other cohorts within that sample. A 12-month observation window was used to identify outcomes of interest following the conclusion of the maltreatment report (for maltreatment re-reporting and recurrence), or exit from out-of-home care (for foster care re-entry). See Figure 1.

Figure 1. Sampling frame for cohorts utilized in analyses



Note: CPS=Child Protective Services, CMS=Children's Mental Health, JJ=Juvenile Justice

Maltreatment re-reporting sample. The sample generated for the analyses of re-reporting included children who were alleged victims in an accepted maltreatment report that was opened in 2014, 2015, or 2016 in Hennepin County. Children involved in maltreatment reports receiving either a Family Investigation or Family Assessment response were included. Children involved in maltreatment reports that culminated without a one-year period of follow-up at the time of the study were excluded from the sample. Characteristics of this sample can be seen in Appendix D, Table D1.

Maltreatment recurrence sample. The sample generated for the analyses of recurrence included both reports which began as Family Assessment but were transferred to Family Investigation as well as reports which began as Family Investigations. Children who were substantiated victims in a maltreatment report that was opened in 2014, 2015, or 2016 in Hennepin County were included. Because substantiated maltreatment was a criterion of the sample, only children involved in maltreatment reports receiving a Family Investigation response were included. For these reasons, the maltreatment recurrence sample represents a subset of the maltreatment re-reporting sample. Children involved in maltreatment reports that culminated without a one-year period of follow-up at the time of the study were excluded from the sample. Characteristics of this sample can be seen in Appendix D, Table D2.

Foster care re-entry sample. The sample utilized for analyses of foster care re-entry included children who entered out-of-home care (inclusive of all placement settings) due to maltreatment in 2014, 2015, or 2016 in

Hennepin County (see Figure 1); for this reason, the foster care re-entry sample largely overlaps with the maltreatment re-reporting sample but does not do so entirely. Children that remained in care and those that exited care without a one-year period of follow-up at the time of the study were excluded from the sample. Characteristics of this sample can be seen in Appendix D, Table D3.

MEASURES

A selection of measures was used to understand how characteristics of the child, case, cross-system involvement, family, and educational characteristics were associated with outcomes of interest. As noted previously, these measures were taken from data that was integrated across several child- and family-serving systems, including statewide child protection records, Hennepin County workforce records, statewide student academic records, and statewide student academic disciplinary records.

Outcome measures. The research team focused on three outcomes for this study: maltreatment re-reporting, maltreatment recurrence, and foster care re-entry. For each of these outcomes, the initial CPS involvement of the child is referred to as the index event.

Maltreatment re-reporting. Maltreatment re-reporting was defined as (1) a child's involvement as an alleged victim in a maltreatment report that resulted in a Hennepin County CPS response (i.e., a maltreatment case was opened), and (2) the report followed a previous accepted report as an alleged victim in an accepted maltreatment report in Minnesota. Maltreatment re-reporting included reports that received either a Family Investigation (traditional) or Family Assessment (differential) response. To be counted as maltreatment re-reporting, the subsequent report must have occurred within 12 months of closure of the index maltreatment report; subsequent report(s) of maltreatment that occurred while the index report was open and those that occurred within 14 days of closure of the index report were not counted as re-reporting. The measure of re-reporting differs from the Minnesota CFSR (and the Minnesota Child Welfare Dashboard) in that it counts subsequent involvement in all Minnesota counties as re-reporting, not just subsequent involvement in Hennepin County. This variable was coded dichotomously (0 = no re-report, 1 = re-report) for each cohort.

Maltreatment recurrence. Maltreatment recurrence was defined as (1) a child's involvement as a substantiated victim

of a maltreatment report in Hennepin County followed by (2) subsequent involvement of the same child as a substantiated victim in a subsequent maltreatment investigation in Minnesota. Because substantiation of maltreatment is a criterion for recurrence, only reports that received a Family Investigation response were included. To be counted as maltreatment recurrence, the subsequent report must have occurred within 12 months of closure of the index maltreatment report; subsequent report(s) of maltreatment that occurred while the index report was open and those that occurred within 14 days of closure of the index report were not counted as recurrent maltreatment. This measure differs from that used in the CFSR (and the Minnesota Child Welfare Dashboard) in that it counts subsequent substantiation across all Minnesota counties, not just subsequent substantiation in Hennepin County. This variable was coded dichotomously (0=no recurrence, 1=recurrence) for each cohort.

Foster care re-entry. Re-entry was defined as (1) a child's placement into out-of-home care for maltreatment related reasons in Hennepin County followed by (2) a subsequent placement into out-of-home care for maltreatment, children's mental health, or juvenile justice reasons in Minnesota. To be counted as re-entry, the subsequent placement must have occurred within 12 months of the child's exit from the index placement. Only children who were discharged from their index placement to reunification, living with a relative, or guardianship (excluding adoption) were included. Children in extended foster care (i.e., those who exited foster care at age 18 or more) were not included. This measure differs from that used in the CFSR (and the Minnesota Child Welfare Dashboard) in that it counts subsequent placement experiences across all Minnesota counties as re-entry, not just subsequent placement experiences in Hennepin County. Unlike the CFSR, the research team included children who were placed in foster care for less than eight days. This variable was coded dichotomously (0 = no re-entry, 1 = re-entry) for each cohort.

Explanatory variables. Explanatory variables were used to identify contributing factors to maltreatment re-reporting, recurrence, and foster care re-entry. These variables were grouped into five categories: child characteristics, case characteristics, cross-system involvement, family characteristics, and educational characteristics. These variables are listed in Table 1 for brevity; a more detailed description of each variable can be found in Appendix C.

Table 1. Explanatory variables

Child Characteristics	Case Characteristics	Cross-system Involvement	Family Characteristics	Educational Characteristics
Child Age	Imminent danger	History of child mental health case	Number of children in the home	Special education at index
Child Race	Mandatory reporter	Concurrent child mental health case	Age of youngest child	Special education in history
Child Ethnicity	Relationship of reporter to family	Subsequent child mental health case	Child in the home has a developmental disability/emotional impairment	Primary language at index
Child Gender	Prior CPS reports accepted	History of child mental health out-of-home placement	Number of adults in the home	Primary language in history
	CPS case management services needed	History of juvenile justice out-of-home placement	Age of primary caregiver	Free/reduced lunch at index
	Received CPS case management	Concurrent child mental health out-of-home placement	Either caregiver has a history of domestic violence	Free/reduced lunch in history
	CPS case management services needed/received	Concurrent juvenile justice out-of-home placement	Either caregiver has/had an alcohol or drug problem during the last 12 months	Homeless/McKinney Vento at index
	Allegation type	Subsequent child mental health out-of-home placement	Primary caregiver has/had mental health problem	Homeless/McKinney Vento in history
	Allegation at outcome	Subsequent juvenile justice out-of-home placement	Either caregiver was abused as a child	Disciplinary Actions
	Allegation paired (index vs. subsequent CPS report)		Primary caregiver lacks parenting skills	
	Allegation detail		Either caregiver employs harmful and/or developmentally inappropriate discipline	
	Allegation detail at outcome		Either caregiver's parenting style is over-controlling	
	Alleged offender		Child in the home has a developmental disability or History of delinquency	
	Alleged offender at outcome		Alleged offender is an unmarried partner of primary caregiver	

Child Characteristics	Case Characteristics	Cross-system Involvement	Family Characteristics	Educational Characteristics
	Alleged offender paired 1-1		Father, Stepfather, Boyfriend, or Male Roommates Provides Unsupervised Childcare to a Child < 3 years	
	Time in continuous placement		Father, Stepfather, Boyfriend, or Male Roommates is Employed	
	Number of prior continuous placements		Initial SDM Risk Score	
	Number of location settings in index placement		Initial SDM Risk Level	
	Reason for removal		Either Caregiver has had an Alcohol or Drug Problem Since Last Assessment/Reassessment	
	Reason for removal at outcome		Caregiver(s) has Experienced Domestic Violence Since Last Assessment/Reassessment	
	Reason for removal paired 1-1		Child in the Home Has a Developmental Disability/Emotional Impairment	
	Trial home visit		Caregiver Treatment/ Training Programs	
	Number of Primary Case Workers		Final Risk Reassessment Score	
			Final Risk Reassessment Level	
			Household relationship/ domestic violence	
			Resource management/ basic needs	
			Alcohol and other drug use	
			Mental health and coping skills	
			Social support system	
			Physical health	
			Parenting skills	

ANALYTIC STRATEGY

A variety of analytic methods were used to answer the research questions for this study, including descriptive statistics, linear regression, latent class analysis (LCA), and survival analysis. Descriptive statistics were used to understand the basic patterns of each explanatory and outcome variable as well as to assess the characteristics of children in CPS who experienced maltreatment re-reporting, recurrence, and foster care re-entry (Appendix D, Tables D1-D3.) A series of bi-variate, linear regressions were calculated to identify risk and protective factors for inclusion in adjusted analyses of maltreatment re-reporting, recurrence, and foster care re-entry. Survival analysis, specifically life tables and survival curves, were used to understand patterns of maltreatment re-reporting, recurrence, and foster care re-entry over time. Multivariate logistic regression analyses (informed by the bi-variate, linear regression analyses) were used to assess whether the previously-identified risk and protective factors predicted maltreatment re-reporting, recurrence, and foster care re-entry. These multivariate regression analyses were carried out as a series of five steps in which categories of the predictor variables (child characteristics, case characteristics, cross-system involvement, family characteristics, and educational characteristics) were added sequentially. For analyses of maltreatment re-reporting and recurrence, child characteristics were added to the first multivariable model based solely on content knowledge. Then, statistically significant explanatory variables from the bi-variate, linear regressions were added, starting with case characteristics and followed by cross-system characteristics, family characteristics, and education characteristics. Some explanatory variables were not applicable to the full sample (e.g., some SDM assessments were not applicable to all children, some children were not of school-age, etc.). Therefore, four models are presented for each of these outcomes in the appendices; the variables used in these models and the sample of children upon which the models are based are noted in Table 2.

Table 2. Explanatory variables and samples utilized in multiple regression analyses

Model	Core Explanatory Variables	Additional Explanatory Variables	Sample
1	Child characteristics, index case characteristics, multisystem involvement & family characteristics (SDM)	None	All children
1.1		Risk Reassessment (SDM)	All children with a completed risk reassessment
1.2		Strengths and Needs (SDM)	All children with a completed strengths and needs assessment
2		Educational variables	School-aged children

**Note. Due to sample size limitations for re-entry analysis, the research team ran seven separate regression models. Each model included child characteristics and one additional category of explanatory variables (e.g., child characteristics plus index case characteristics, child characteristics plus educational variables, etc.).*

All analyses of maltreatment re-reporting and recurrence were stratified by cohorts (2014, 2015, 2016), and by race/ethnicity with the exception of LCA. Stratification was used to better assess the associated effect of policy and practice changes over time on these outcomes, and to assess differences in child welfare system experiences by members of various racial/ethnic communities. Although stratification for foster care re-entry would have been ideal, sample size was too small.

Latent Class Analysis of Structured Decision Making (SDM) risk factors was used to identify subgroups within the population of youth who experienced either a re-report of maltreatment or maltreatment recurrence during the study period. SDM variables included: “Child in the home has a developmental disability/emotional impairment;” “Either caregiver has a history of domestic violence;” “Either caregiver has/had an alcohol or drug problem in the last 12 months;” “Primary caregiver has/had a mental health problem;” and “Primary caregiver lacks parenting skills.” Small sample sizes did not permit LCA for foster care re-entry.

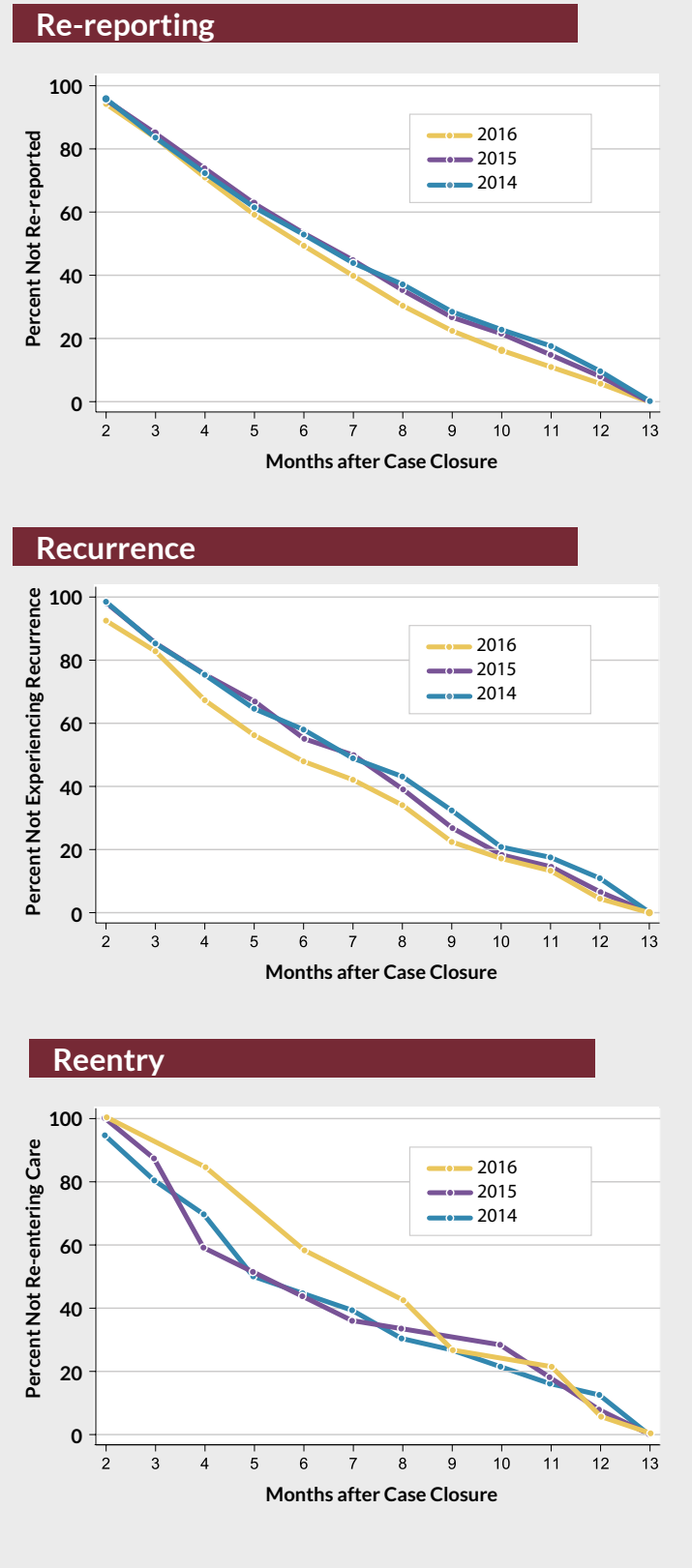
Findings

This section of the report describes key research findings through the lens of the practice and policy contexts at play when data were collected. Details on specific Hennepin County practices are included throughout this section of the report and are referenced again in the conclusion and recommendations sections in the context of Hennepin County’s ongoing work to address issues and practices identified in this study.

Researchers answered study questions using a variety of analytic techniques (as described above), however, providing a detailed description of the findings from each analysis individually would prohibit a succinct and meaningful report. As such, key themes with implications for county practice and planning are presented in the following section. All odds ratios (e.g., statements about increased or decreased likelihood of experiencing a particular outcome) noted in this report represent findings from multiple logistic regression analyses that include the full sample.

Patterns of maltreatment re-reporting, recurrence, and foster care re-entry over time were analyzed to provide further context about the key outcomes of interest. As shown in Figure 2, children experienced maltreatment re-reporting, recurrence, and foster care re-entry at a steady rate over time. That is, there weren’t periods of time at which large numbers of children experienced subsequent CPS involvement or foster care re-entry.

Figure 2. Maltreatment re-reporting, recurrence, and foster care re-entry over time



Themes identified in the current study appeared to fall across three main areas: administration, implementation and coordination of child welfare practice, and instrumentation and resources.

ADMINISTRATION

Number of primary case workers. While the administration of a dynamic and multi-faceted social service system is bound to impact the outcomes and experiences of children and families, researchers found one administrative aspect particularly significant. In general, the **more primary caseworkers** assigned to a case during the provision of case management services, the more likely that those children 1) were re-reported for maltreatment, 2) experienced maltreatment recurrence, and 3) re-entered foster care. While this was not the case for all children in all years of the study, children receiving case management services and having two (2014) or three (2016) workers or more were respectively 1.7 and 1.6 times more likely to experience a re-report than children with one primary caseworker. Similarly, children in families receiving case management services with two or more primary caseworkers (2014) were 2.2 times more likely to experience maltreatment recurrence than children with one primary case worker, and children in families receiving case management services and having four or more primary caseworkers (2014-2016) were 3.3 times more likely to experience re-entry than children with one primary caseworker. Results of the full analysis can be found in Appendices 3.1 to 3.3.

During the time frame of this study, Hennepin County Child Protection experienced a relatively high rate of staff turnover, along with an increased number of maltreatment reports. Increases in these areas can be traced back to a high profile child death in the state, resulting in subsequent large-scale system reform efforts which modified statewide screening guidelines. Caseloads rose substantially with the increased numbers of reports received, and the workforce was challenged to address this surge in workload. In response, Hennepin County developed and began to implement a new protocol which monitored and evaluated the assignment of cases and considered the readiness and capacity of each worker. Additionally, county staff began to implement a new case transfer process to facilitate a smooth transition of cases from investigations to ongoing case management. Information about the reasons for child protection involvement, the current caseload sizes of workers, and whether the case would have court

involvement was used by supervisors to determine case assignments; supervisors used the same processes to transfer cases (within and across units) between workers as well. It was thought that the case transition process would support worker readiness and effective family engagement, reducing worker stress and overwhelm. In addition, these processes were intended to help stabilize the workforce and reduce families experiencing multiple workers during their involvement with the county. However, during the implementation of these processes, high caseloads and turnover created instability and thus may have compromised the fidelity of implementation during this period.

IMPLEMENTATION AND COORDINATION OF CHILD WELFARE PRACTICES

Coordination of screening, assessment, and service planning and delivery. Study findings pointed to the need for further coordination and solicitation of information within and across CPS screening, assessment, and service planning and delivery. There are a number of factors that have significant impacts on child well-being which are often known to professionals within Hennepin County (e.g., Hennepin County professionals working outside of CPS, affiliated professionals working in school systems, etc.), but are not captured within SSIS in a consistent, easily accessible manner. Children's mental health was one important factor that emerged across analyses, but information about children's mental health is often captured within siloed service and data systems, or not captured at all. While receipt of special education services did not arise as a significant risk or protective factor for the outcomes of interest, a large proportion of children served by Hennepin County CPS had an active IEP (26-42%, depending on cohort) at the time of the index report. Receipt of county-based children's mental health case management did, however, emerge as a risk factor for both re-reporting and recurrence. For example, children with a history of receiving mental health case management from the county were 1.3 (2015) times more likely to experience re-reporting than children without county-based children's mental health case management; children concurrently receiving mental health case management through the county were nearly twice as likely (2014 & 2015) to experience re-reporting; and children who received mental health case management through the county following their index CPS report were 1.5 to two times (2014, 2015, and 2016) more likely to experience re-reporting.

Other risk factors for outcomes of interest known to the school system included homelessness and involvement in school disciplinary events. In fact, children receiving McKinney-Vento services for homelessness were 1.2 times more likely to be re-reported (2014-2016). The odds of experiencing re-entry increased by 1.2 times for each disciplinary event (resulting in-school suspension for those receiving special education or out-of-school suspension or expulsion for the general student population) in which a child was involved. Conversely, children whose home primary language was a language other than English were approximately 1.5 times less likely to experience a re-report of maltreatment and 5.3 times less likely to re-enter foster care.

Comprehensive assessments are critical to ensuring quality service provision for children and families that come into contact with child protection. This study revealed that Hennepin County assessments could benefit from the inclusion of information that was not part of standard practice during the study timeframe. Data sharing limitations across social and educational systems negatively impacted Hennepin County's ability to complete robust assessments during the study timeframe, and remain barriers to this day. Even in instances where experienced workers could access some of this data, the aforementioned workload strains also prevented this information and cross-system collaboration from being adequately utilized. During the study period and in an effort to manage the unprecedented increases in workloads, Hennepin County did not conduct comprehensive assessments, but rather focused maltreatment investigations and assessments squarely on presenting allegations. If the workforce had the ability to access, review, and consider children's mental health data, disability data, and educational records, child protection workers would be better positioned to develop individualized and more appropriately tailored service plans for children and their families. This information could provide workers with a platform for increased cross-system collaboration to better address the needs of children and families, and thus reduce maltreatment recurrence and subsequent child protection involvement.

Need vs. receipt of case management services. This study revealed that in the vast majority of cases, a family's need for and receipt of CPS case management services was in alignment; however, researchers found instances in which 1) the need for case management services was indicated but services were not received by the family, and 2) the need was not indicated but services were received. The odds of

experiencing maltreatment re-reporting and recurrence significantly increased when the need for case management was not indicated but services were provided. Specifically, this study found that the odds of experiencing maltreatment re-reporting were 1.5 (2015) to nearly two times (2016) higher, and the odds of experiencing maltreatment recurrence were 2.7 times (2016) higher in those cases where case management was not indicated as being needed but services were provided (as compared to case management not being needed nor provided). Additionally, the odds of experiencing recurrence when case management was indicated as being needed but not received was 1.6 times (2016) higher than for families that didn't need or receive these services.

Reasons for this misalignment could, quite simply, be documentation and/or communication issues that have significant impact on experiencing subsequent CPS involvement. To better understand the circumstances in which misalignment occurred, the research team conducted a small case review in coordination with Hennepin County. First, this review revealed that some of the discordant nature of these cases was due to the fact that an ongoing case management case for the family was already open when the index maltreatment report was concluded. Therefore, a new case management case was not opened as a result of the index report even when the worker stated there was a need, rather, the need was referred to the existing case management case. Second, if a predatory offender was the subject of the report, case management services may have been indicated as needed but the case may not have been opened if the offender was removed from the home and the family was receiving services outside of CPS. The review also highlighted cases in which there was a documented need but case management services were refused by the family, and conversely, instances in which workers didn't think there was a need but families requested services. Finally, in a few cases, the documented need did not match what was described in the case closing or referral summary (i.e., some data error). It is important to note that while there were very few cases that were discordant, these instances were associated with an increased likelihood of experiencing subsequent CPS involvement.

The findings in this area were challenging to fully disentangle given the practice and policy context at Hennepin County at the time of this study. While the aforementioned workload challenges could certainly account for increased data/documentation errors (e.g., less time for documentation given conflicting requirements of staff, less experienced

workers entering the workforce, etc.), these challenges do not fully explain the findings. It is unclear (given the data available) the extent to which assessment outcomes were aligned with the needs of families, especially in cases with multiple workers involved. For example, the process by which family assessments and needs are documented, communicated, and addressed in instances in which a subsequent maltreatment report is received for a family that has an existing CPS case open changed during the study period, and likely varied by worker, unit, and allegation. Some of the biggest differences that occurred during the study timeframe involved reports of exposure to predatory offenders, domestic violence, and educational neglect; in these instances, the provision of case management services may not have matched the need that was documented as a result of the investigation. For example, during the study timeframe, policy required that a maltreatment report be made and investigated in cases in which a predatory offender had a child or was exposed to a child; the rights of parents who were predatory offenders were then terminated (even in cases in which children were not exposed to [e.g., were not living with] the predatory offender). In these instances, the case record may have shown that the child and his/her family did not need on-going child protection services; however, the case may have opened in CPS case management to process the TPR of the predatory offender parent. Without consistent processes (and data to evaluate these processes), as well as statutory requirements that align practice in these instances, family needs may go unmet and may be unrecognized by the county.

In addition, during the period of the study, families may have refused services when they were referred to on-going case management through Family Assessment; study findings revealed that these families were more likely to experience subsequent child protection involvement. Hennepin County Family Assessment practices at the time of the study included the utilization of community organizations to both invite families to engage in on-going services and manage the delivery of those services when families agreed to participate. However, this design may have led to increased numbers of families refusing services than they would have if Hennepin County managed the on-going services in Family Assessment, and therefore increased subsequent CPS involvement. Since this time, Hennepin County has transferred the operation of Family Assessment case management in-house, rather than relying on community organizations to carry out this aspect of work.

Reasons for CPS involvement. Study findings revealed that children who experience re-reporting, recurrence, and re-entry often come back into the child protection system for the **same reasons** as were presented in their initial child protection case with the county. Approximately one out of every three children who experienced a re-report returned for the same reason(s) as their initial involvement with Hennepin county CPS. For children that experienced a re-report, 33-37% of the allegation types (e.g., physical abuse, neglect, etc.) and 44-48% of the allegation details (e.g., threatened injury, failure to protect, chronic and severe use alcohol/controlled substances, etc.) were shared between the initial and subsequent child protection reports, depending on the cohort. For children that experienced maltreatment recurrence, 65-80% of the allegation types and 34-66% of the allegation details were shared between the initial and subsequent child protection reports, depending on the cohort. For children that experienced re-entry, 50-78% of all of the reasons for placement were shared between the initial and subsequent placements, depending on the cohort. (See Appendix D, Tables D1-D3.)

The challenges faced by families who become involved in Hennepin County child protection are often complex and difficult to address. Often these challenges require a multi-system response, which may result in competing service plans, involvement of numerous professionals, and time-limited services. These elements, in combination with assessments that are not comprehensive, can result in coordination of insufficient or mismatched services. This could result in unaddressed child and family needs and repeated child protection system involvement. Without effectively addressing or resolving the issues that brought the family to the attention of child protection to begin with, and without adequate time to assess the family's sustained improvement, the family is likely to return with the same allegations of maltreatment. The aforementioned increase in caseloads and time pressures experienced within Hennepin County, together with staff turnover, may have also exacerbated these issues. Repeat involvement for the same issues also calls into question the effectiveness of county and community services themselves as well as other components of the child welfare system, such as the courts, current laws, and other providers that work to meet the needs of families.

Racial and ethnic disparities. Racial and ethnic disparities were prevalent in this study's findings. Disparities for particular groups of children - namely Black and American Indian/Alaskan Native children - worsened over time. Black

children were 1.2 times more likely (2016) to experience maltreatment re-reporting and 1.7 times more likely (2016) to experience maltreatment recurrence than White children. American Indian/Alaskan Native children were nearly twice as likely (1.6 times in 2014, 1.7 times in 2015, and 2.0 times in 2016) to experience maltreatment re-reporting and recurrence (2 times in 2016 for re-reporting and 2.1 times in 2016 for recurrence) than White children. Multiracial children were almost one and a half times more likely (1.3 times in 2014, 1.5 times in 2015, and 1.3 times in 2016) to experience re-reporting than White children. Asian children were 1.6 times (2016) *less* likely to experience re-reporting than White children. (While the patterns of disparities for re-entry were similar to those of re-reporting and recurrence, they were not statistically significant, likely due to the small sample sizes available for re-entry analysis.)

The research team further stratified the analysis by racial/ethnic group to better understand risk and protective factors unique to these groups. Findings revealed that risk and protective factors were not always shared across racial/ethnic groups; in fact, these factors varied greatly across different racial and ethnic groups (see Appendix D, Tables D7-D9 and Appendix E, Figures E1-E3). While numerous risk factors emerged for some groups, others had few. Perhaps more importantly, the analysis revealed a lack of protective factors (i.e., factors that decrease risk for subsequent CPS involvement) for some racial/ethnic groups. It is critical to understand that analysis was conducted with administrative data (which is typically utilized in case service delivery and evaluation of child welfare outcomes at the local and national levels), and not all factors that result in risk or protections were available. Therefore, the findings do *not* suggest that some groups are lacking protective factors or that other groups carry more risks. Rather, the findings imply that there are likely differences in experiences for children within and outside of the child protection system *and* that the data documented in the course of the provision of CPS case management services likely does not appropriately capture some of the factors that are crucial for understanding and predicting subsequent CPS involvement across racial/ethnic communities. For example, the Structured Decision Making (SDM) tools employed within child protection do not capture risks or protective factors that are unique to each of the wide variety of communities served by Hennepin County. This is particularly true for Native American/Alaskan Native and Black children and their families.

These findings underscore an urgent need for appropriate assessments in consideration of culture and community. This study integrated existing administrative data for the purposes of understanding maltreatment re-reporting, recurrence, and foster care re-entry. The data systems and tools made available to the practice community by the state have not been designed to adequately capture risk and protective factors that may be present in and across families in diverse communities. While some risk and protective factors are captured within the Structured Decision Making tools, the factors present are not shared as risk or protective factors in the same way for all communities served within Hennepin County. Thus, the picture presented by SDM (e.g., Strengths and Needs) is incomplete and is exclusionary for some communities - yet it is one of the few tools available to workers. In moving forward, Hennepin County must work with the state to consider how this is playing out in practice with families and to assess potential for culture/class bias in screening, assessment, and decision-making. Hennepin County must also look beyond the tool itself and consider how to best meet staff training needs for consistent implementation across the agency.

Sexual abuse. Study findings revealed that children with an allegation of **sexual abuse** in their index case were approximately three times (2015 & 2016) less likely to experience maltreatment recurrence and re-entry (2014-2016) compared to children without allegations of sexual abuse (See Appendix D, Tables D5-D6.)

There are many reasons the data revealed children alleged to be victims of sexual abuse are less likely to experience maltreatment recurrence and re-entry. As a program, Hennepin County child protection services' goal is to identify and match the appropriate resources to address sexual abuse for children and their families. The resources are available in Hennepin County and allow for in-depth programming to appropriately assess and address the behaviors and social determinants to foster wellbeing for children, including but not limited to providers that specialize in services for victims of sexual abuse, non-offending caregivers, and offending caregivers. Hennepin County also works with the courts to protect children in sexual abuse cases by seeking separation of victims from their perpetrators. Sexual abuse cases are often open for longer periods of time than other cases due to criminal investigations and the time it takes for services to support change within the family system. Lastly, there is an agreed upon consensus and alliance of the community

and professionals that sexual abuse is egregious and that appropriate services and resources need to effectively address the issues presented in an effort to reduce the likelihood of recurrence for any child.

Unmarried partner of parent is the alleged offender.

Study findings revealed that the odds of experiencing maltreatment re-reporting were approximately one and a half times higher (1.4 times in 2015 and 1.5 times in 2016) when an unmarried partner of the parent was named as the alleged offender in the index report. The pattern was similar but stronger for maltreatment recurrence where the odds of experiencing maltreatment recurrence were more than twice as high (3.8 times in 2015 and 2.1 times in 2016) when an unmarried partner of the parent was named as the alleged offender in the index report.

The Hennepin County practice community recognizes the fact that when an unmarried partner of the parent is the alleged offender, the risk for children statistically increases. The SDM risk assessment also lists this as a risk factor for subsequent abuse. During the study timeframe, reports of exposure to predatory offenders were required to be investigated by CPS. This may have contributed to increased re-reporting and recurrence for some children, as both exposure and being born to a predatory offender were grounds for automatic maltreatment reporting and subsequent investigation (e.g., resulting in multiple maltreatment reports for children and families). This was true even when the unmarried partner/alleged offender was the parent of children in other households that were not the subject of the original report.

Initial placement experience (Re-entry). Findings bring to light two important considerations about the initial placement experiences of children. First, **short initial out-of-home care** experiences were identified as a risk factor for children's re-entry into care. In fact, children whose initial out-of-home care lasted 30 days or less were 5.7 times (2014-2016) more likely to experience re-entry than those who were in care one year or longer. Second, **trial home visits** served as a protective factor for children's re-entry into care. Children who received a trial home visit were three times less likely (2014-2016) to experience re-entry than those who did not receive a trial home visit. (See Appendix D, Table D6).

At the time of the study, initial placements were often made by people outside of the child protection system (e.g., police response). Foster care placements were often the

result of not having a Hennepin County child protection worker present to explore family or alternate safety resources. When the county was able to respond, safe living arrangements outside of the foster care system could be made. This resulted in relatively short placements, but perhaps did not fully address the underlying issues and therefore children came back into placement within 12 months. Hennepin County requested trial home visits during this timeframe for all cases in which the child returned to the home from which they were removed and a CHIPS adjudication was in place. Not all requests, however, were granted by the Court possibly due to time-to-permanency requirements.

INSTRUMENTATION AND RESOURCES

SDM risk assessment level. Study findings revealed that the initial SDM risk assessment level was a significant predictor of both re-reporting and re-entry. Children in families with a "moderate" risk level were approximately one and a half times more likely to experience maltreatment re-reporting (1.8 times in 2014, 1.5 times in 2015, and 1.3 times in 2016) and 3.6 times more likely to experience foster care re-entry than children in families with low risk levels. Similarly, children in families with a "high" risk level were approximately two times more likely to experience maltreatment re-reporting (2.2 times in 2014, 1.7 times in 2015, and 1.6 times in 2016) and 2.6 times more likely to experience foster care re-entry than children in families with low risk levels. (See Appendix D, Tables D4-D6.)

Not only were initial risk levels predictive of maltreatment re-reporting, and foster care reentry, but final risk levels were also predictive of subsequent child protection system involvement. Children in families with a "moderate" risk level at case closure were approximately two times more likely to experience maltreatment re-reporting (2.1 times in 2014 and 1.7 times in 2015), nearly two times more likely to experience maltreatment recurrence (1.8 times in 2015, and 1.7 times in 2016), and 3.6 times more likely to experience re-entry than children in families with a low risk level at case closure. Children in families with a "high" risk level at case closure were approximately two times more likely to experience maltreatment re-reporting (2.4 times in 2014, 2.2 times in 2015, and 1.8 in 2016), more than two times more likely to experience maltreatment recurrence (3.4 times in 2015, and 2.0 times in 2016), and 2.6 times more likely to experience re-entry than children in families with a low risk level at case closure. (See Appendix D, Tables D4-D6.)

During the study timeframe, there was a concerning level of staff turnover and high caseloads. There was also an inconsistency in the utilization of SDM for case closure decisions, and identifying service needs and community resources prior to case closing. Consistent implementation of SDM was affected by inadequate training at the start of a social worker’s coming into child protection and a lack of updated and refreshed training periodically. Also, Hennepin County’s policies and practices regarding utilization of physical office space could have also significantly contributed to SDM inconsistencies. These policies and practices permitted staff to work off-site and away from regular, routine contact with colleagues and supervision, and likely affected the implementation of SDM. Different interpretations of SDM requirements by workers, coupled with little opportunity for discussion about how the elements of the tools should be entered, resulted in both inconsistent data entry and inconsistent utilization of the SDM to support decision-making.

Patterns of child and family characteristics & subsequent CPS involvement. Latent class analysis (LCA) was used to better understand the shared characteristics among children who experienced maltreatment re-reporting and among children who experienced re-entry. This analysis differs from analyses that assess the contribution of any one characteristic in predicting an outcome in that LCA can be used to form groups of cases (i.e., latent classes) that exhibit shared characteristics. The benefit of utilizing this approach is that there may be particular characteristics or experiences among children and their families that tend to co-occur. Understanding these patterns can help inform service planning and intervention delivery both within and across systems.

Re-reporting - three risk profiles. Three latent risk classes were identified using information obtained from the initial SDM risk assessment (Table 3). Each case from the re-reporting sample has a probability of membership in a latent risk class based on intervenable risk factors that were selected from the SDM. Class 1 accounted for 56% of the sample that experienced re-reporting and could be characterized primarily by “*Few Identified Challenges.*” A history of domestic violence was identified in 38% of cases and child disability in 23% of cases; however, low rates of parenting skill deficits (14%), caregiver mental health issues (10%), or caregiver history of drug and alcohol problems (8%) were documented at the conclusion of the index investigation. Class 2 accounted for 26% of the sample and could be characterized primarily by “*Mental Health and Domestic*

Violence” challenges. In these families, high rates of caregiver mental health issues (68%) and history of domestic violence (63%) were documented by caseworkers. Parenting skill deficits (45%) and child disability (45%) were identified in just under one-half of these cases, and low rates of caregiver history of drug and alcohol problems (5%) were observed. Class 3 accounted for only 18% of the sample and could be characterized primarily by “*Drug and Alcohol and Domestic Violence*” challenges. Caregiver history of drug and alcohol abuse were identified in every case (100%). Caregiver history of domestic violence (68%) was also documented by caseworkers at high rates. Caregiver mental health (54%) and parenting challenges (53%) were documented in more than half of cases. Rates of child disability were lower (20%) for this class. A post-hoc analysis suggested the classes identified by LCA differed according to child age, race, and maltreatment type, with a higher proportion of children aged 0 - 1, American Indian/Alaskan Native children, and children referred for neglect in Class 3, “*Drug and Alcohol and Domestic Violence*” challenges. Allegations of physical abuse and mental/emotional abuse were higher among Class 1, “*Few Identified Challenges.*”

Table 3. Risk factors for children experiencing maltreatment re-report by class (2014-2016, N=4,369)

	Full Sample	Class 1: Few Identified Challenges	Class 2: Mental Health and Domestic Violence	Class 3: Drug and Alcohol and Domestic Violence
Probability of Class		.56	.26	.18
Risk Factor				
Child's Disability	.28	.23	.45	.20
Domestic Violence	.51	.38	.63	.68
Caregiver Drug & Alcohol	.24	.08	.05	1.00
Caregiver Mental Health	.33	.10	.68	.54
Parenting Skill Deficits	.29	.14	.45	.53

Estimated means for a three-class model of latent risk classification: Re-reporting

Maltreatment recurrence - three latent risk profiles. Three latent classes (or profiles) of families experiencing maltreatment recurrence were identified (Table 4). Each case from the recurrence sample has a probability of membership in a latent risk class based on intervenable risk factors that were selected from the SDM. Class 1 accounted for 48% of the sample that experienced recurrence and could be characterized primarily by “*Few Identified Challenges*.” A history of domestic violence was identified in 54% of cases in this group. Moderate rates of parenting skill deficits (37%), caregiver history of drug and alcohol problems (37%), and lower rates of child disability (26%) were also documented. Class 2 accounted for 15% of the sample and could be characterized primarily by “*Mental Health*” challenges, with caregiver mental health issues documented in 100% of these cases. Caregiver history of drug and alcohol problems (43%), parenting skill deficits (37%), and child disability (35%) were documented at low to moderate rates, although domestic violence was not present among this group. Class 3 accounted for 37% of the sample and could be characterized by “*Domestic Violence, Mental Health, and Parenting*” challenges. All cases (100%) in this group were documented as having a history of domestic violence. High rates of caregiver mental health (82%) and parenting skill deficits (61%) were also identified. Moderate rates of caregiver history of drug and alcohol problems (47%) and child disability (31%) were documented. A post-hoc analysis suggested the classes identified by LCA did not differ by any of the sample covariate.

Table 4. Risk factors for children experiencing maltreatment recurrence by class (2014-2016, N=694)

	Full Sample	Class 1: Few Identified Challenges	Class 2: Caregiver Mental Health	Class 3: Domestic Violence, Mental Health, and Parenting
Probability of Class		.48	.15	.37
Risk Factors				
Child's Disability	.29	.26	.35	.31
Domestic Violence	.63	.54	.00	1.0
Caregiver Drug & Alcohol	.37	.28	.43	.47
Caregiver Mental Health	.46	.00	1.0	.82
Parenting Skill Deficits	.46	.37	.37	.61

Probability of class membership and estimated means for modifiable risks: Recurrence

The practice context of Hennepin County at the time of this study remains an important factor throughout this report and provides a foundational understanding of factors experienced by families with subsequent CPS involvement. The application of LCA in this study, however, provides unique insight into maltreatment re-reporting and recurrence by focusing on the clustering of risk factors for families that experience subsequent CPS involvement rather than focusing on the individual risk factors themselves. The tools available to Hennepin County during the study timeframe did not allow for this view of family risk factors; in addition, many of these risk factors are historical in nature (e.g., either caregiver has a history of domestic violence). While some of the aforementioned practices and challenges may have had a direct impact on these results (e.g., new workers' inability to adequately assess or identify risk factors), the practice context that is most relevant to this analysis is that of the future. As such, implications for practice and policy are presented in the conclusions and recommendations section of this report.

Study Limitations

All research has strengths and limitations. This was an ambitious study, utilizing complex data to answer numerous questions, and its limitations merit description. First, the data source for this study consisted of integrated, administrative data from human service and educational data systems. The primary purposes of the data in these systems were documentation, ensuring accountability, billing, and reporting (e.g., number of children served, outcomes experienced, etc.); the data were not collected for the primary purpose of research. Thus, our research was limited to existing instrumentation and administrative data challenges. The reliability, accuracy, and consistency of data entry and the definitions of variable fields may have changed over time, or may have been emphasized differently by workers and supervisors within and across units. Therefore, this study may be missing data on aspects of life affecting each outcome, but not collected due to the structure of the administrative data system. An example is the homelessness indicator; this variable was only available for school age children, and only flagged when a child was receiving McKinney-Vento services in school (e.g., transportation); children whose homelessness status was unknown to the school, and those not in need of services would not have been flagged as homeless in the data. Therefore, the indicator was specific to those receiving services for homelessness but not sensitive to all children who were homeless. Another limitation of this study was the inability to bring in additional data that are stored within data systems due to the structure in which data were stored. For example, a wealth of information existed qualitatively in case notes and in other county data systems (e.g., billing records). These data were unavailable for inclusion in the current study due to the nature of the data (e.g., reading case notes for even a sample of more than 6,000 cases was outside the scope of this study; data was also not consistently recorded in county records across the full sample - particularly cases managed through outside contracts or those that were paid for by various funding sources, such as private insurance, Medicaid, Hennepin County; etc.). Finally, this study included historical data for each person in the sample dating back to 2000. The instrumentation and fidelity in documentation is vital to ensure correct interpretation of results, but it is difficult to discern the quality of the data given the study period length and consistent change across the child welfare system.

Conclusion & Recommendations

The purpose of this study was to identify and understand key factors related to maltreatment re-reporting, recurrence, and foster care re-entry among children involved with Hennepin County Child Protective Services. Understanding the key factors through this study will support Hennepin County improve its child protection response moving forward, as a means of safely reducing maltreatment re-reporting, recurrence, and re-entry into foster care. This study had many strengths which position it to inform Hennepin County's practice and policy efforts. First, the study was developed and carried out as a true collaboration between Hennepin County and the University of Minnesota. This collaboration allowed for insight into multiple components of the child welfare system in Hennepin County, including: fidelity on SDM tools, standard practices for screening of child protection cases, shifts in the handling of cases over time, and targeting risk and protective factors that caseworkers see on a daily basis. Although the analysis was conducted by University of Minnesota researchers (via the Minn-LInK project), the Hennepin County team provided critical insights and feedback about the factors used in analysis and implications of study findings. Second, this study relied on integrated, administrative data from a variety of sources, including child protection, children's mental health, education, and child welfare workforce data. The integration of these data sources provided additional insight into re-reporting, recurrence, and foster care re-entry that are not often available to researchers or practitioners. In addition, utilizing data that is familiar to administrators, supervisors, workers, and county analysts allows for ease of translation and on-going evaluation of the outcomes over time, even after the study has concluded.

Hennepin County has instituted a number of changes to improve outcomes for children and families in the child protection system during and since the study period. These changes, as well as recommendations stemming from the findings of this study for additional consideration are presented below. Descriptions of changes undertaken by Hennepin County and further recommendations are presented across the areas of administration, implementation and coordination of child welfare practice and services, Structured Decision Making (SDM) tools, collaboration with other public and tribal child serving systems, community, private service providers, and advocacy groups.

ADMINISTRATION

Prior to the release of preliminary findings from this study, Hennepin County implemented a number of changes that bolstered their administrative practices within child welfare. The Hennepin County Board invested significant funds to hire additional staff, increasing the workforce by 42% since 2016. Hennepin County also implemented a variety of initiatives to stabilize the child welfare workforce, which has resulted in a reduction of turnover rates from 15.6% in 2015 to 8.8% in 2017. These efforts further resulted in smaller caseloads among child welfare staff. While the research team did not have adequate data about caseload sizes during the study period to include in analysis, Hennepin County noted that high caseloads were a significant factor to consider with respect to study findings; thus, recommendations from this study warrant continued attention to caseload sizes and standards. Finally, Hennepin County established a Continuous Quality Improvement (CQI) Child Welfare Data Unit to focus on outcomes for children. The unit works with the Hennepin County Child Well-being Advisory Committee to report on foundational child welfare metrics. The unit also works with Child Welfare program staff, supervisors and leadership on priority CQI projects and performance through building interactive tools and data dashboards. Findings of the current study support on-going use of these CQI processes and/or partnerships with external entities (e.g., KVC, University of Minnesota, etc.) to examine not only what can be improved but also what is working well, such as responding well to cases of sexual abuse, in an effort to bring those successful practices to other areas.

Hennepin County also implemented a number of changes following preliminary study findings to improve administrative practices within the agency. As a result of study findings, the HUP team recommended that the county conduct subsequent analyses to understand patterns of workforce turnover and caseload sizes over time up until present day; these analyses are imperative to assessing whether the changes Hennepin County made will result in fewer disruptions for families (due to lower turnover) and ultimately, better experiences and outcomes. Hennepin County is continuing this work, and reporting associated findings to the Hennepin Child Well-being Advisory Committee. Hennepin County has also begun participating in a Hennepin-wide *Advancing Racial Equity* training to address the racial disparities that were illustrated by the current study and have continued to persist over time.

In light of the findings of the study, we further recommend that Hennepin County revisit its case assignment protocol.

Due to the inundation of cases during the study period, assignment practices based on worker readiness and capacity drifted. Fidelity to this and the case transfer process should be scheduled for periodic review to ensure ongoing practice adherence and effectiveness. Additionally, we recommend that the CQI processes implemented within the county be augmented to: 1) identify appropriateness and comprehensiveness of assessments; 2) identify appropriateness and comprehensiveness of services provided; 3) assess the ways in which Hennepin County Health and Human Service areas are collaborating within the county and with external partners; and, 4) conduct a subsequent analysis to better understand issues and reasons behind cases that return to CPS repeatedly for the same allegations (i.e., cases in which the presenting issues for the initial and subsequent CPS involvement were the same). Developed partnerships with external entities, such as KVC or the University of Minnesota, could also be leveraged to do this work.

IMPLEMENTATION AND COORDINATION OF CHILD WELFARE PRACTICE AND SERVICES

Prior to the release of preliminary findings from this study, Hennepin County implemented a number of practice changes that sought to better meet the needs of the children and families with whom they work. Much of Hennepin County's work in this area has been designed to engage families as partners throughout the child protection process. Hennepin County has specifically developed processes to support family engagement during decision-making, including during critical family meetings, case planning meetings, and Family Group Decision-Making (FGDM). The intention is to utilize these opportunities to serve as a frontline resource for families and child protection staff. This will allow families to build upon their own support networks during times of crisis and develop skills to respond to their own situational needs, thus preventing future maltreatment. Hennepin County has also worked with local police jurisdiction to build pilot collaborations with rapid intake response staff. Pilots have proven beneficial to police by having child welfare staff onsite at times in which child removal by law enforcement may occur. This child welfare presence further benefits children, families, and Hennepin County as workers may intervene to support alternative arrangements for children who are in need of care, reducing placements and re-entry for children, as appropriate to child safety and family resources. Finally, Hennepin County has worked to provide a more accurate picture of re-reporting

and re-entry by refining case assignment processes in accordance with State mandate and guidance for intake and screening. As a result, Hennepin County is no longer automatically assigning predatory offender reports as separate investigation cases, which had been the previous strategy for managing backlogged cases. Rather, these reports are referred to the open investigation and addressed at the same time as the initial report.

Hennepin County also implemented a number of practice and policy changes following preliminary study findings as a means of better supporting children and families in child welfare. Independent from the current study, Hennepin County has adopted the KVC Health Systems Safe & Connected™ Information Sharing & Consultation Framework®, which provides a structured way to make decisions with and for children, youth, and families (<https://www.kvc.org>). The framework includes focus on the child's family and culture, as well as on collaboration with all involved service providers and institutions working with the child(ren) and family. The framework also promotes critical thinking and collaboration to ensure a balanced assessment of risk with the outcomes of improved child safety, well-being, and permanency. The county has been building collaboration and teamwork to help share responsibility, and provide a check on bias when difficult decisions are necessary. The framework now guides the daily practice of Hennepin County child and family services staff. Hennepin County anticipates that as use of the framework increases and expertise in the principles behind it grows, the number of children needing out-of-home placement will be reduced; practice improvements are also expected to reduce re-reporting, repeat maltreatment, and racial disparities. Hennepin County has also utilized the KVC Safe & Connected framework to guide practice in group supervision with frontline workers. This approach to supervision allows staff to take additional time to consider ideas from colleagues for alternate case management strategies, and support better overall practice. As implementation grows, it will be imperative for the county to conduct ongoing evaluations of the fidelity to this model to ensure that core tenets of the framework are being followed (including collaborations with service providers and families, attention to family culture, and critical thinking about child welfare decision-making), and that the practice is in fact leading to intended outcomes.

Hennepin County has also made changes to its assessment processes to better meet the needs of children and families in child welfare. In particular, the county is keeping cases

open longer in the assessment and investigation phase. This change provides the opportunity for more comprehensive family assessment, informed decision-making, and improved service provision.

Moreover, Hennepin County has begun to develop and implement a process for managing cases when a family is already involved in child protective services and a subsequent maltreatment allegation is received and accepted. When fully implemented, this process will not only provide a more accurate picture of re-reporting and recurrence by bundling allegations of the same incident together; it will also provide an opportunity for additional coordination of case planning and service provision for children and families. For example, if a case is open for educational neglect (a high volume allegation type in Hennepin County) and a new report of educational neglect is received (on the same student), the new report is screened out but the information contained within the report is sent to the on-going worker. Additionally, all educational neglect cases are being served through the Family Assessment response. Not only are these changes more appropriate to the type of allegation, but they will reduce the artificial inflation of re-reporting rates due to multiple reports of the same incident throughout the school year. Another change is the way in which domestic violence is handled within the county. If a case is open in case management for domestic violence and a new report of domestic violence between the same two parties is received, the new report is screened out and the relevant information contained within the report is sent to the ongoing worker. If, however, a different party is involved, the report would be screened as a new report. Reports containing *only* domestic violence allegations in families with young children are sent to the Parent Support Outreach Program (PSOP).

Additionally, Hennepin County is collaborating with other agencies to introduce and pass legislation that would alter current data sharing regulations and restrictions in order to provide child protection agencies with the access to information from other child serving systems that is needed to reduce child protection system involvement for subsequent maltreatment. In light of the findings of the study, we further recommend that Hennepin County revisit the way in which data related to children's mental health case management are captured within the county documentation system (SSIS). This study was only able to integrate children's mental health case management data for cases managed directly by the county. However, Hennepin County oversees children's mental health services for *many*

more children than are identified in SSIS. Given this deficit in data collection, it is unclear the proportion of these children that experience subsequent CPS involvement. The recommendation moving forward is that the county develop a systematic process for documenting children's mental health cases that are referred and outsourced to community agencies through contracts with the county.

It is further recommended that Hennepin County develop protocols and tools to include in its comprehensive assessment of children, and any involvement they have in children's mental health services, disability services, special education services, and experiences of homelessness, as these experiences significantly increased the rates of subsequent CPS involvement. Assessment protocols currently lack a focus on children's involvement in, and services received, from other child service settings. This lack of information may contribute to ineffective case planning and sub-optimal case outcomes.

Finally, results of this study support the need to conduct additional investigation into cases in which the documented need for ongoing CPS services does not match the documented receipt of those services, as these cases experienced significantly higher rates of subsequent CPS involvement than others. This investigation is necessary to better understand the nuances of the cases, and the needs of those families involved. In particular, Hennepin County would benefit from a thorough evaluation of Family Assessment case management now that those services are being provided directly by the county. This would help understand the proportion of families that accept ongoing services, the reasons for which families choose not to engage in Family Assessment case management services, and the outcomes of families by need and engagement. Additional investigation into other cases where needs and receipt of services may not match would also be beneficial to the county to further illustrate opportunities for improved practices and policies (e.g., case transfer policies).

STRUCTURED DECISION MAKING (SDM) TOOLS

The current study revealed the need for Hennepin County to develop a shared process for utilizing SDM in practice and in decision-making. Effectively using SDM tools in child welfare practice requires a focus on fidelity to a defined process with regular opportunities for in-person consultation and

refresher training, both which require staff and supervisor's consistent ability to connect face-to-face for in-depth discussion.

Results of the LCA in the current study provide important considerations for child welfare screening, assessment, and intervention in Hennepin County. The largest group of children that experienced maltreatment re-reporting was characterized by "*Few Identified Challenges*." Low rates of caregiver mental health issues, caregiver drug and alcohol problems, and parenting skill deficits were identified in the initial CPS assessment for approximately one half of re-reported families. One potential explanation for this is that mental health, drug and alcohol, or parenting skill deficits were truly not present in the index case. A second potential explanation is that those risk factors were present, but under-identified by the caseworker in the index report. A third potential explanation is that a set of unobserved or unmeasured variables were responsible for families being re-reported to child protection. One way to explore this further would be to include data from subsequent SDM assessments (e.g., data from the assessment conducted at the conclusion of the maltreatment re-report investigation) to examine the presence or absence of these risk factors at later assessments. While this was not possible in the current study, it may be something that Hennepin County wishes to do in the future.

The LCA also suggested that families of children who experience maltreatment recurrence also tend to have complex challenges crossing multiple domains. With the exception of low rates of problems in the "*Few Identified Challenges*" group, moderate to high rates of parenting challenges, domestic violence, drug and alcohol, mental health, and child disability were present at varying rates. The clustering of risk factors across cases of children who experience maltreatment recurrence underscore the complex challenges presented to child welfare professionals, and indicates a need to provide targeted, evidence-based services for common maltreatment related problems such as mental health, drug and alcohol, and parenting challenges as well as domestic violence and disability related factors. Additional factors important within each family's community and culture were not available to this study, but may be documented in case notes. Thus, Hennepin County may wish to take a deeper look at such factors in consideration of these findings and their on-going work.

COLLABORATION WITH OTHER PUBLIC AND TRIBAL CHILD SERVING SYSTEMS, COMMUNITY, PRIVATE SERVICE PROVIDERS, AND ADVOCACY GROUPS

Hennepin County has created partnerships with organizations and key stakeholders in the community in an attempt to promote greater collaboration in its work with children and families. As previously noted, Hennepin County has implemented some practice changes to address the challenges presented by short-term placements by teaming with local police departments to have immediate access to social workers who partner on situations that might result in the placement of children in Hennepin’s shelter system. This partnership works to support and enhance the resources of the family system, and informal resources available to the family in crisis, so the impact of trauma is lessened. The results of the current study support this practice change; yet, assessing the effectiveness of this new practice in reducing the number of children in care and the need for short term placements will remain critical.

Hennepin County has also partnered with community agencies to support their racial equity work within child welfare. The county partnered with the African American Coalition on Child Protection in North Minneapolis on pilot projects, such as the Caregiver Families Project, to increase the number of stable relatives and kinship homes available. Another partner project was with NAACP Minneapolis on mandated reporter training to help intake staff and mandated reporters be aware of and mitigate unconscious bias as it relates to intake reporting decisions. Additionally, the Hennepin County Board has established a permanent Child Well-being Advisory Committee to provide outside perspective and accountability for Hennepin’s child welfare system and child well-being focus.

While Hennepin County’s practice of partnering with local law enforcement has been implemented, additional recommendations stemming from this partnership should be further considered. First, Hennepin County would benefit from a more thorough understanding of the reasons for which short-term placements are used. For example, if the reason for short-term placement is for issues other than alleged child maltreatment, stronger practices that prevent

entry into the foster care system should be considered. If, however, the reason is alleged child maltreatment, the county should more closely examine the quality of assessments that are completed on these short-term placements. In addition, Hennepin County may wish to extend its partnership with the court system to ensure that members fully understand the benefits of a trial home visit as a protective factor; conversations about this practice with all court system stakeholders would likely increase its use in appropriate circumstances.

In light of the findings of the study, we further recommend that Hennepin County work closely and consider engaging key partners (e.g., University researchers, KVC, etc.) to ensure that services are provided in a targeted and consistent manner to improve circumstances for children and their families, and reduce subsequent CPS involvement. These efforts may include reviewing contracts with community providers to ensure they are implementing results-oriented interventions (as opposed to compliance-based processes which require individuals to complete a specific number of sessions, particular services, etc.), assessing appropriateness and comprehensiveness of services offered across various locations and communities, and investigating service providers’ capacity for service provision (e.g., wait times).

CONCLUSION

Despite the many challenges of the child welfare system, Hennepin County recognizes the opportunities to reform its child protection services and adopt a child well-being approach, designed to prevent child abuse and neglect. Early identification, prevention, and intervention efforts are underway to create a more holistic method of engaging families, older youth, and children. While many of the recommendations noted within this report can be implemented through practice and policy change within Hennepin County, some external policy change and or practice guidance by the State is needed. In addition to impacting current practice and outcomes experienced by children and families, this research-based report can be used for future planning to include robust utilization of opportunities such as the Families First Prevention Services Act and other system improvements.

Appendix A

POLICY AND PRACTICE CHANGES IN HENNEPIN COUNTY 2013-2017

YEAR	DHS	Hennepin County
2013	<p>DHS Bulletins:</p> <ul style="list-style-type: none"> • PSOP statewide implementation (July) <p>Children & Family Services Policy/Procedure:</p> <ul style="list-style-type: none"> • PSOP/Child Welfare pilot cases- procedure on referring cases (Feb) • Family Assessment and Traditional Investigations assigned rule (May) • Family Assessment case management outlined (Nov) 	
2014		<p>Hennepin County Board requests comprehensive review by Casey Family (Feb)</p> <p>Governor Task Force on the Protection of Children established (Sept)</p> <p>Designated a centralized location for screeners (Dec)</p> <p>Stopped hiring “new” CSW (Child Services Workers)- continue to fill current FTEs when vacated no new FTE assigned.</p> <p>Stopped paying child care services for kin/relative foster parents</p>
2015	<p>DHS Bulletins:</p> <ul style="list-style-type: none"> • Child Protection Allocation (July); • Child Safety Practice guidance that Family Assessment is not voluntary • Historical Child Protection involvement in screening decision (Feb); <p>Child & Family Services Policy/Procedure</p> <ul style="list-style-type: none"> • PSOP implemented (Nov) 	<p>Hennepin County Board</p> <ul style="list-style-type: none"> • Receives Casey Report/Recommendations (June) • Allocates money for additional staff (July) • Establishes oversight committee and workgroup (July) <p>Loss of utilization of Juvenile Detention Center (Sept)</p> <p>Loss of Children’s Service Workers (FTE reduction)</p> <ul style="list-style-type: none"> • Restructured work • Moved work to Child Protection Social Workers <p>Child Fatality and Near Fatality Review implementation (Feb)-- Updated</p> <p>Funding for foster care child care reinstated limited (Summer)</p> <p>Implementation of Infant Court Team (Summer)</p> <p>Community Specialist to focus on education of kids in foster care (Summer)</p> <p>Northstar implementation</p>

YEAR	DHS	Hennepin County
2016	<p>DHS Bulletins:</p> <ul style="list-style-type: none"> • PSOP updated guidelines (Feb) • MN Best Practice in Family Assessment: Best Practices protocols issued (Oct) • Revised Intake Screening guidelines: DV must meet maltreatment criteria (Dec) • Revised Guidelines: (Dec) <ul style="list-style-type: none"> » Added considerations for reports regarding child found without adult supervision » Clarified agencies should receive, document, and screen all reports of child maltreatment including reports beyond three year reporting requirement » Added policy guidance around after hour coverage » Added clarity when new allegations occurs during assessment and investigation –new face to face rquired » Added intake questions to assist in identifying sexually exploited youth 	<p>Oversight Committee approved new practice model (July)</p> <p>New intake screening and path assignments guideline implemented (Jan)</p> <p>Creation of the Data Unit</p> <p>Child Protection moving to regionalization</p> <p>Child Protection Screening unit moved out of the Health Services Building</p> <p>New focus on child-well being</p> <p>Shelter reports weekly (increase of 15 institutional beds)</p> <p>Hennepin County Board approves Child Well-being Practice Model (April)</p>
2017	<p>DHS Bulletins:</p> <ul style="list-style-type: none"> • Early Learning scholarships for under age 5 in foster care (July) • Full Implementation: Justice for victims of trafficking act of 2015-funding included (July) • Appropriation of funds for additional staffing to improve child safety assessments, foster care, and permanency practice standards (July) • Foster care re-entry for 18-21 olds (July) • McKenna’s law- counsel for age 10 and up • Required department to design and implement a co-ordinated program to reduce the need for placement changes of children/youth in foster care, adoption placement, transfer of permanent legal and physical custody (July) • MN Best Practices for Child Protection facility investigations established protocols to agencies to investigate (March) • Corrected after-hours Child Protection coverage (May) <ul style="list-style-type: none"> » Must be available 24/7 » Imminent danger- no later than 24 hours 	<p>RRT (Rapid Response Team) up and running (Dec)</p> <p>Juvenile Court Division Bench Changed</p>

Appendix B

STAKEHOLDER ADVISORY BOARD MEMBERS

Carolyn Crook

Intake Social Work Unit Supervisor, Hennepin County (former)

Jennifer DeCubellis

Assistant Deputy County Administrator, Hennepin County Human Services and Public Health Department (former)

Kathie Doty

Director, Hennepin-University Partnership (HUP)

Dr. Anne Gearity

Assistant Professor, Department of Psychiatry and Behavioral Sciences, University of Minnesota

Jamie Halpern

Human Services Area Manager, Hennepin County Human Services and Public Health Department (former)

Jeff Hayden

Senator, Minnesota State Senate

Carlton Jenkins

Superintendent, Robbinsdale Area Schools

Gail Korst-Meyer

Foster Parent, Hennepin County

Karen Kugler

Prosecutor, Ramsey County Attorney's Office

Laurie Kusek

Guardian ad Litem Program Manager, Fourth Judicial District

Michelle Lefebvre

Services Delivery Administrator, Hennepin County Human Services and Public Health Department

Lori Ohmann

Executive Vice President and Chief Operating Officer, Catholic Charities of St. Paul and Minneapolis

Susan Palchick

Director, Hennepin County Public Health

Cynthia Slowiak

Human Services Area Manager of Children's Mental Health, Hennepin County Human Services and Public Health Department

Lolita Ulloa

Assistant County Attorney, Hennepin County Attorney's Office

Genu Vang

Child Protection Social Work Unit Supervisor, Hennepin County Human Services and Public Health Department

Jodi Wentland

Assistant County Administrator of Human Services, Hennepin County Human Services and Public Health Department

Noya Woodrich

Deputy Commissioner, Minneapolis Health Department

Joanna Woolman

Associate Professor of Law and Executive Director of the Institute to Transform Child Protection, Mitchell-Hamline School of Law

Tim Zuel

Be@School Program Manager, Hennepin County Attorney's Office (former)

Appendix C

EXPLANATORY VARIABLE DEFINITIONS BY CATEGORY

Variable	Source	Description	Response Options
Child Characteristics			
Child Age	SSIS	The age of the child at index event (in years)	Years (continuous)
Child Race	SSIS	The race of the child using the most recent information available	<ul style="list-style-type: none"> • White • Black • American Indian/Alaskan Native • Asian • Pacific Islander • Multi-racial
Child Ethnicity	SSIS	The ethnicity of the child using the most recent information available	Hispanic, Non-hispanic
Child Gender	SSIS	The gender of the child using the most recent information available	Male, Female
Case Characteristics			
Number of Primary Case Workers	SSIS	Number of primary case workers among those who have experienced case management services	1,2,3,4+
Imminent danger	SSIS	Denotes if imminent danger was indicated on the index report	Yes, No
Mandatory reporter	SSIS	Denotes if the reporter was mandatory for the index report	Yes, No
Relationship of reporter	SSIS	Denotes the relationship of the reporter to the family for the index case	<ul style="list-style-type: none"> • Human and social service staff • Family and friends • Other professional • Anonymous/Other • Alleged victim • Alleged offender
Prior reports	SSIS	The number of accepted CPS reports prior to the index case	1,2,3,4, 5+
Services needed	SSIS	Denotes whether CPS case management services were needed, as indicated for the index case	Yes, No
Received case management	SSIS	Denotes whether case management services were received for the index case	Yes, No
CPS services needed/received	Created	Combines service needed variable and received case management variables	<ul style="list-style-type: none"> • Services needed and case management received • Services needed and no case management received • No services needed and case management received • No serviced needed and no case management received
Allegation	SSIS	Denotes the maltreatment allegation(s) for the index case	<ul style="list-style-type: none"> • Neglect • physical abuse • sexual abuse • mental injury and emotional harm

Variable	Source	Description	Response Options
Allegation at outcome	SSIS	Denotes the allegation(s) for the outcome case, if applicable (i.e., at re-report)	<ul style="list-style-type: none"> • Neglect • physical abuse • sexual abuse • mental injury and emotional harm
Allegation paired 1-1	Created	Comparison of allegation(s) for index case and allegation(s) at outcome; if applicable are the same between index and outcome, the allegations are coded as concordant	Concordant, Discordant
Allegation detail	SSIS	Denotes the allegation detail(s) for the index case	<ul style="list-style-type: none"> • Simple physical abuse • Aggravated physical abuse • Unreasonable confinement or restraint • Threatened injury • Sexual abuse or incest • Sexual exploitation or prostitution • Threatened sexual abuse • Inadequate supervision • Disregard for safety • Inadequate provision for physical needs • Inadequate provision for medical needs (failure to provide health, medical, or other care) • Inadequate care for emotional needs/behavioral problem • Inadequate attention to educational needs (Failure to ensure education) • Abandonment • Expulsion from home • Prenatal exposure to a controlled substance • Prenatal exposure to alcohol • Threatening with weapon • Shaking a child under three • Striking a child under age 18 months • Giving poison or harmful substances • Domestic violence • Rejecting • Isolating • Other neglect • Terrorizing • Corrupting • Failure to protect from serious endangerment • Failure to thrive • Chronic and severe use of alcohol/controlled substances • Infant medical neglect-withholding nutrition, hydration, treatment • Access to alcohol, controlled substance, or prescription drugs • Environmental hazards • Methamphetamine related environmental hazard • Predatory offense status • Prior involuntary TPR or TPLPC • Stringing and injuring a child age 1 up to 4 on the face or head • Striking a child with a closed fist • Subjected to or failed to protect from egregious harm • Threatened physical abuse • Throwing, kicking, burning, biting, or cutting a child • Unreasonable interference with a child's breathing • Other
Allegation detail at outcome	SSIS	Denotes the allegation detail(s) for the outcome case, if applicable (i.e., at re-report)	Same categories as above allegation detail

Variable	Source	Description	Response Options
Alleged offender	SSIS	Denotes the alleged offender for the index case	<ul style="list-style-type: none"> • Parent • professionals • other relative (non-foster parents) • relative (foster parents) • non-relative (foster parents) • unmarried partner of parent • friends and neighbors • siblings • other/sex traffickers • unknown/missing
Alleged offender at outcome	SSIS	Denotes the alleged offender in the outcome case, if applicable (i.e., at re-report)	<ul style="list-style-type: none"> • Parent • professionals • other relative (non-foster parents) • relative (foster parents) • non-relative (foster parents) • unmarried partner of parent • friends and neighbors • siblings • other/sex traffickers • unknown/missing
Alleged offender paired 1-1	Created	Combines offender at index case and offender at outcome case	Concordant, Discordant
Time in continuous placement	SSIS	Denotes the time spent in continuous placement (days) for the index out-of-home placement	
Number of prior continuous placements	SSIS	Denotes the number of continuous placements experienced prior to the index out-of-home placement	0,1,2,3+
Number of location settings in index placement	SSIS	Denotes the number of location settings for the index out-of-home placement (i.e., placement instability)	1,2,3,4,5+
Reason for removal	SSIS	Denotes the reason(s) for removal for the index out-of-home placement	<ul style="list-style-type: none"> • Abandonment • Alleged neglect • Alleged physical abuse • Alleged sexual abuse • Caretaker's inability to cope (illness or other) • Child alcohol abuse • Child drug abuse • Child's behavior problem • Child's disability • Death of parent(s) • Inadequate housing • Incarceration of parents • Parental alcohol abuse • Parental drug abuse • Relinquishment or termination of parental rights • Safe place for Newborns relinquishment of parental rights • Caretaker's inability to cope - physical health • Caretaker's inability to cope - mental health • Child's mental illness • Child's behavior problem - delinquency • Child's behavior problem - family conflict
Reason for removal at outcome	SSIS	Denotes the reason(s) for removal for re-entry into out-of-home placement	Same categories as reason for removal above.

Variable	Source	Description	Response Options
Reason for removal paired 1-1	Created	Comparison of reason (s) for removal at index out-of-home placement and reason(s) for removal at re-entry, if applicable; if applicable are the same between index and outcome, the reasons are coded as concordant	Concordant, Discordant
Trial home visit	SSIS	Denotes if there was a trial home visit in the index out-of-home placement	Yes, No
Cross System Characteristics			
History of child mental health case	SSIS	Denotes if the child had a county-based, children's mental health case opened prior to the index case	Yes, No
Concurrent child mental health case	SSIS	Denotes if the child had a concurrent county-based, children's mental health case open during the index case	Yes, No
Subsequent child mental health case	SSIS	Denotes if the child had a county-based, children's mental health case opened after the index case closed	Yes, No
History of child mental health out-of-home placement	SSIS	Denotes if the child had an out-of-home placement for child mental health reasons prior to the index case	Yes, No
History of juvenile justice out-of-home placement	SSIS	Denotes if the child had an out-of-home placement for juvenile justice reasons prior to the index case	Yes, No
Concurrent child mental health out-of-home placement	SSIS	Denotes if the child had a concurrent out-of-home placement for child mental health reasons during the index case	Yes, No
Concurrent juvenile justice out-of-home placement	SSIS	Denotes if the child had a concurrent out-of-home placement for juvenile justice reasons during the index case	Yes, No
Subsequent child mental health out-of-home placement	SSIS	Denotes if the child had a subsequent mental health out-of-home placement case after the follow-up period to the index case	Yes, No
Subsequent juvenile justice out-of-home placement	SSIS	Denotes if the child had an out-of-home placement for subsequent juvenile justice reasons after the index case closed	Yes, No
Family Characteristic: Risk Assessments			
Number of children in the home	SSIS (SDM)	Denotes the number of children in the home at the first risk assessment	One, Two or more
Age of youngest child	SSIS (SDM)	Denotes the age of youngest child	Three or older, Two or younger
Child in the home has a developmental disability/emotional impairment	SSIS (SDM)	Denotes if a child in the home has a developmental disability/emotional impairment	Yes, No
Number of adults in the home	SSIS (SDM)	Denotes the number of adults in the home	Two or more, One or none
Age of primary caregiver	SSIS (SDM)	Denotes the age of primary caregiver	30 or older, 29 or younger
Either caregiver has a history of domestic violence	SSIS (SDM)	Denotes if either caregiver has a history of domestic violence	Yes, No

Variable	Source	Description	Response Options
Either caregiver has/had an alcohol or drug problem during the last 12 months	SSIS (SDM)	Denotes if either caregiver has/had an alcohol or drug problem during the last 12 months	Yes, No
Primary caregiver has/had mental health problem	SSIS (SDM)	Denotes if the primary caregiver has/had mental health problem	Yes, No
Either caregiver was abused as a child	SSIS (SDM)	Denotes if either caregiver was abused as a child	Yes, No
Primary caregiver lacks parenting skills	SSIS (SDM)	Denotes if the primary caregiver lacks parenting skills	Yes, No
Either caregiver employs harmful and/or developmentally inappropriate discipline	SSIS (SDM)	Denotes if either caregiver employs harmful and/or developmentally inappropriate discipline	Yes, No
Either caregiver's parenting style is over-controlling	SSIS (SDM)	Denotes if either caregiver's parenting style is over-controlling	Yes, No
Child in the home has a developmental disability or history of delinquency	SSIS (SDM)	Denotes if a child in the home has a developmental disability or history of delinquency	No, Developmental disability including emotional impairment, History of delinquency, Developmental disability including emotional impairment and history of delinquency.
Alleged offender is an unmarried partner of primary caregiver	SSIS (SDM)	Denotes if the alleged offender is an unmarried partner of primary caregiver	Yes, No
Father, Stepfather, Boyfriend, or Male Roommates Provides Unsupervised Childcare to a Child < 3 years	SSIS (SDM)	Denotes if the father, Stepfather, Boyfriend, or Male Roommates Provides Unsupervised Childcare to a Child < 3 years	Yes, No, Not applicable—no father, stepfather, boyfriend, or male roommate in the home
Father, Stepfather, Boyfriend, or Male Roommates is Employed	SSIS (SDM)	Denotes if the father, Stepfather, Boyfriend, or Male Roommates is Employed	Yes, No, Not applicable—no father, stepfather, boyfriend, or male roommate in the home
Initial SDM Risk Score	SSIS (SDM)	Denotes the SDM Risk Score at index	0-12
Initial SDM Risk Level	SSIS (SDM)	Denotes the SDM Risk Level at index	Low, Medium, High
Family Characteristic: Risk Re-assessment			
Either Caregiver has had an Alcohol or Drug Problem Since Last Assessment/Reassessment	SSIS (SDM)	Denotes if either caregiver has had an alcohol or drug problem since last assessment/reassessment	Yes, No
Caregiver(s) has Experienced Domestic Violence Since Last Assessment/Reassessment	SSIS (SDM)	Denotes if either caregiver had experienced domestic violence since last assessment/reassessment	Yes, No
Child in the Home Has a Developmental Disability/Emotional Impairment	SSIS (SDM)	Denotes if a child in the home has a developmental disability/emotional impairment	Yes, No

Variable	Source	Description	Response Options
Caregiver Treatment/ Training Programs	SSIS (SDM)	Denotes caregiver treatment/training programs	<ul style="list-style-type: none"> • Primary: Successfully completed all recommended programs or actively participating in programs; pursuing objectives detailed in case plan, • Primary: Minimal participation in pursuing case plan objectives, • Primary: Refuses involvement in programs or failed to comply/participate as required • Secondary: Successfully completed all recommended programs or actively participating in programs; pursuing objectives detailed in case plan • Secondary: Minimal participation in pursuing case plan objectives • Secondary: Refuses involvement in programs or failed to comply/participate as required
Risk Re-assessment Score	SSIS (SDM)	Denotes the final SDM Risk Score	-1-14
Final risk score	SSIS (SDM)	Denotes the final SDM Risk Level	Low, Medium, High
Family Characteristics: Strengths and Needs			
Household relationship/ domestic violence	SSIS (SDM)	Denotes the social worker taking into account the family's perspective, the child's perspective where appropriate, worker observations, collateral contacts, and available records what is the household relationship/domestic violence	<ul style="list-style-type: none"> • Supportive • Minor or occasional discord • Frequent discord or some domestic violence • Chronic discord or severe domestic violence
Resource management/ basic needs	SSIS (SDM)	Denotes the social worker taking into account the family's perspective, the child's perspective where appropriate, worker observations, collateral contacts, and available records what is the resource management/ basic needs	Resources are sufficient to meet basic needs and are adequately managed, Resources may be limited but are adequately managed, Resources are insufficient or not well managed, No resources or resources are severely limited and/or mismanaged
Alcohol and other drug use	SSIS (SDM)	Denotes the social worker taking into account the family's perspective, the child's perspective where appropriate, worker observations, collateral contacts, and available records what is the alcohol and other drug use of the primary caregiver (Substances: alcohol, illegal drugs, inhalants, prescription/over-the-counter medications)	Promotes and demonstrates a healthy understanding of alcohol and drugs, Alcohol or prescribed medication use/no use, Alcohol or drug abuse, Chronic alcohol or drug abuse
Mental health and coping skills	SSIS (SDM)	Denotes the social worker taking into account the family's perspective, the child's perspective where appropriate, worker observations, collateral contacts, and available records what is the mental health and coping skills of the primary caregiver	<ul style="list-style-type: none"> • Strong coping skills • Adequate coping skills • Mild to moderate symptoms • Chronic/severe symptoms
Social support system	SSIS (SDM)	Denotes the social worker taking into account the family's perspective, the child's perspective where appropriate, worker observations, collateral contacts, and available records what is the social support system of the primary caregiver	<ul style="list-style-type: none"> • Strong support system • Adequate support system • Limited support system • No support system
Physical health	SSIS (SDM)	Denotes the social worker taking into account the family's perspective, the child's perspective where appropriate, worker observations, collateral contacts, and available records what is the physical health of the primary caregiver	<ul style="list-style-type: none"> • No physical health issues and preventive health care is practiced • Health issues do not affect family functioning • Health concerns/disabilities affect family functioning • Serious health concerns/disabilities result in inability to care for the child

Variable	Source	Description	Response Options
Parenting skills	SSIS (SDM)	Denotes the social worker taking into account the family's perspective, the child's perspective where appropriate, worker observations, collateral contacts, and available records what is the parenting skills of the primary caregiver	
Education Characteristics			
Special education at index	MDE	Denotes if the child qualified for special education during the same year as the index case	Yes, No
Special education in history	MDE	Denotes if the child qualified for special education prior to the index case	Yes, No
Primary language at index	MDE	Denotes what the primary home language during the same year as the index case	English, Languages other than English
Primary language in history	MDE	Denotes what the primary home language prior to the index case	English, Languages other than English
Free/reduced lunch at index	MDE	Denotes if the child qualified for free/reduced lunch during the same year as the index case	Yes, No
Free/reduced lunch in history	MDE	Denotes if the child qualified for free/reduced lunch prior to the index case	Yes, No
Homeless/McKinney Vento at index	MDE	Denotes if the child qualified for McKinney Vento during the same year as the index case	Yes, No
Homeless/McKinney Vento in history	MDE	Denotes if the child qualified for McKinney Vento prior to the index case	Yes, No
Disciplinary Actions	MDE	Denotes the number of disciplinary actions during the same year as the index case	Count

SSIS - Social Services Information System; SDM - Structured Decision Making; MDE - Minnesota Department of Education

Appendix D: Key Findings (Tables)

**TABLE D1.
DESCRIPTIVE CHARACTERISTICS FOR MALTREATMENT RE-REPORTING**

	2014 (N=6,082)		2015 (N=6,448)		2016 (N=7,565)	
	Yes % (n)	No % (n)	Yes % (n)	No % (n)	Yes % (n)	No % (n)
Overall	19.71 (1,199)	80.29 (4,883)	23.59 (1,521)	76.41 (4,927)	22.08 (1,670)	77.92 (5,895)
Sex						
Female	47.12 (565)	49.83 (2,433)	51.22 (779)	49.4 (2,434)	49.94 (834)	50.09 (2,953)
Male	52.88 (634)	50.17 (2,450)	48.78 (742)	50.6 (2,493)	50.06 (836)	49.91 (2,942)
Race						
White	25.94 (309)	31.61 (1,527)	27.4 (414)	33.15 (1,588)	27.64 (455)	35.44 (2,013)
Black	46.1 (549)	46.5 (2,246)	43.68 (660)	44.20 (2,116)	47.27 (778)	44.35 (2,519)
AI/AN	14.19 (169)	8.57 (414)	14.1 (213)	8.31 (398)	13.3 (219)	6.78 (385)
Asian	1.85 (22)	3.98 (192)	2.85 (43)	5.18 (248)	2 (33)	4.84 (275)
Multi-racial	11.92 (142)	9.28 (448)	11.91 (180)	9 (430)	9.78 (161)	8.56 (486)
Hispanic						
Yes	13.89 (166)	15.5 (754)	13.14 (199)	14.7 (713)	13.39 (222)	14.64 (849)
No	86.11 (1,029)	84.5 (4,111)	86.86 (1,315)	85.3 (4,137)	86.61 (1,436)	85.36 (4,949)
Age at Index Categories						
0-1 yrs	20.95 (207)	79.05 (781)	20.78 (239)	79.22 (911)	23.08 (309)	76.92 (1,030)
2-5 yrs	18.84 (295)	81.16 (1,271)	25.7 (394)	74.3 (1,139)	23.47 (392)	76.53 (1,278)
6-9 yrs	22.56 (383)	77.44 (1,315)	25.16 (440)	74.84 (1,309)	22.97 (461)	77.03 (1,546)
10-13 yrs	18.01 (203)	81.99 (924)	24.11 (290)	75.89 (913)	19.46 (294)	80.54 (1,217)
14 + yrs	16.06 (111)	83.94 (580)	19.8 (156)	80.2 (632)	20.78 (212)	79.22 (808)
Number of prior reports						
0	74.67 (3,646)	56.63 (679)	71.79 (1,092)	83.42 (4,110)	80.42 (1,343)	87.65 (5,167)
1	15.44 (754)	23.77 (285)	16.5 (251)	10.84 (534)	12.1 (202)	8.46 (499)
2	5.88 (287)	10.51 (126)	6.57 (100)	3.53 (174)	4.31 (72)	2.27 (134)
3	2.09 (102)	5.17 (62)	2.7 (41)	1.26 (62)	1.8 (30)	0.98 (58)
4	1.04 (51)	2.17 (26)	1.12 (17)	0.59 (29)	1.8 (30)	0.98 (58)
5+	0.87 (43)	1.74(21)	1.32 (20)	0.36 (18)	1.38(23)	0.63 (37)
Mandated Reporter type						
Mandated	75.9 (910)	76.16 (3,719)	74.03 (1,126)	75.68 (3,728)	74.55 (1,245)	75.64 (4,459)
Non-mandated	24.1 (289)	23.84 (1,164)	25.97 (395)	24.32 (1,198)	25.45 (425)	24.36 (1,436)
Imminent Danger at index report						
Yes	2.27 (110)	2.26 (27)	2.62 (128)	1.46 (22)	2.29 (38)	1.66 (97)
No	97.73 (4,733)	97.74 (1,167)	97.38 (4,760)	98.54 (1,488)	97.71 (1,622)	98.34 (5,762)
Allegation at index report						
Neglect (not medical neglect)	71.27 (903)	66.75 (3443)	62.69 (1,050)	59.03 (3,131)	47.03 (910)	41.00 (2,753)
Physical abuse	21.47 (272)	21.52 (1,110)	28.78 (482)	29.49 (1,564)	42.64 (825)	46.98 (3,155)
Sexual abuse	7.02 (89)	11.61 (599)	8.30 (139)	11.05 (586)	9.04 (175)	10.54 (708)
Mental injury and emotional harm	0.24(3)	0.12 (6)	0.24 (4)	0.43 (23)	1.29 (25)	1.47 (99)

	2014 (N=6,082)		2015 (N=6,448)		2016 (N=7,565)	
	Yes % (n)	No % (n)	Yes % (n)	No % (n)	Yes % (n)	No % (n)
Allegation at re-report						
Neglect (not medical neglect)	67.05 (865)	-	55.54 (973)	-	50.08 (984)	-
Physical abuse	23.41 (302)	-	35.22 (617)	-	38.68 (760)	-
Sexual abuse	9.15 (118)	-	8.39 (147)	-	10.03 (197)	-
Mental injury and emotional harm	0.39 (5)	-	0.86 (15)	-	1.22 (24)	-
Allegation paired 1-1						
Concordant	70.73 (848)	-	67.52 (1,037)	-	66.29 (1,107)	-
Discordant	29.27 (351)	-	32.48 (494)	-	33.71 (563)	-
Allegation detail paired (1-1)						
Concordant	37.11 (445)	-	33.07 (503)	-	33.89 (566)	-
Discordant	62.86 (754)	-	66.93 (1,018)	-	66.11 (1,104)	-
Allegation detail paired (Group - Group)						
Concordant	43.70 (524)	-	43.46 (661)	-	48.50 (810)	-
Discordant	56.30 (675)	-	56.54 (860)	-	51.50 (860)	-
Special Education at Index						
Yes	38.02 (295)	31.08 (943)	34.28 (326)	29.5 (848)	29.57 (304)	26.22 (933)
No	61.98 (481)	68.92 (2,091)	65.72 (625)	70.5 (2,027)	70.43 (724)	73.78 (2,625)
Primary Language at Index						
English	91.62 (711)	84.11 (2,552)	89.06 (847)	80.83 (2,324)	90.18 (927)	79.9 (2,843)
Languages other than English	8.38 (65)	15.89 (482)	10.94 (104)	19.17 (551)	9.82 (101)	20.1 (715)
Free/Reduced Lunch at Index						
Yes	89.69 (696)	82.99 (2,518)	85.8 (816)	78.71 (2,263)	83.56 (859)	79.71 (2,836)
No	10.31 (80)	17.01 (516)	14.2 (135)	21.29 (612)	16.44 (169)	20.29 (722)
Homeless/McKinney Vento at Index						
Yes	28.22 (219)	19.45 (590)	23.76 (226)	14.75 (424)	19.84 (204)	12.84 (457)
No	71.78 (557)	80.55 (2,444)	76.24 (725)	85.25 (2,451)	80.16 (824)	87.16 (3,101)
Either Care Has a History of Domestic Violence						
Yes	51.21 (614)	44.82 (2,187)	51.13 (772)	42.23 (2,068)	48.25 (801)	38.89 (2,278)
No	48.79 (585)	55.18 (2,693)	48.87 (738)	57.77 (2,829)	51.75 (859)	61.11 (3,579)
Either Care Has/Had an Alcohol or Drug Problem During the Last 12 Months						
Yes	22.52 (270)	20.57 (1,004)	22.65 (342)	19.93 (976)	25.72 (427)	19.81 (1,160)
No	77.48 (929)	79.43 (3,876)	77.35 (1,168)	80.07 (3,921)	74.28 (1,233)	80.19 (4,697)
Primary Caregiver Has/Had Mental Health Problem						
Yes	41.28 (495)	26.56 (1,296)	30.46 (460)	22.56 (1,105)	30.24 (502)	21.26 (1,245)
No	58.72 (704)	73.44 (3,584)	69.54 (1,050)	77.44 (3,792)	69.76 (1,158)	78.74 (4,612)

	2014 (N=6,082)		2015 (N=6,448)		2016 (N=7,565)	
	Yes % (n)	No % (n)	Yes % (n)	No % (n)	Yes % (n)	No % (n)
Either Caregiver was Abused as a Child						
Yes	33.19 (398)	23.40 (1,142)	28.08 (424)	20.83 (1,020)	23.86 (396)	19.50 (1,142)
No	66.81 (801)	76.60 (3,738)	71.92 (1,086)	79.17 (3,877)	76.14 (1,264)	80.50 (4,715)
Primary Caregiver Lacks Parenting Skills						
Yes	33.44 (401)	27.79 (1,356)	30.66 (463)	23.14 (1,133)	24.04 (399)	18.76 (1,099)
No	66.56 (798)	72.21 (3,524)	69.34 (1,047)	76.86 (3,764)	75.96 (1,261)	81.24 (4,758)
Either Caregiver Employs Harmful and/or Developmentally Inappropriate Discipline						
Yes	9.67 (116)	8.16 (398)	8.08 (122)	7.45 (365)	6.14 (102)	7.14 (418)
No	90.33 (1,083)	91.84 (4,482)	91.92 (1,388)	92.55 (4,532)	93.86 (1,558)	92.86 (5,439)
Either Caregiver's Parenting Style is Over-Controlling						
Yes	4.00 (48)	4.34 (212)	3.84 (58)	3.55 (174)	3.61 (60)	4.11 (241)
No	96.00 (1,151)	95.66 (4,668)	96.16 (1,452)	96.45 (4,723)	96.39 (1,600)	95.89 (5,616)
Child in the Home Has a Developmental Disability or History of Delinquency						
Developmental Disability and Delinquency	2.17 (26)	1.60 (78)	2.45 (37)	1.59 (78)	2.71 (45)	1.31 (77)
History of Delinquency	1.25 (15)	1.80 (88)	1.13 (17)	1.72 (84)	2.35 (39)	1.67 (98)
Developmental Disability	26.61 (319)	20.57 (1,004)	21.46 (324)	18.46 (904)	20.42 (339)	17.45 (1,022)
No	69.97 (839)	76.02 (3,710)	74.97 (1,132)	78.23 (3,831)	74.52 (1,237)	79.56 (4,660)

TABLE D2. DESCRIPTIVE CHARACTERISTICS FOR MALTREATMENT RECURRENCE

	2014 (N=1,360)		2015 (N=1,490)		2016 (N=2,717)	
	Yes % (n)	No % (n)	Yes % (n)	No % (n)	Yes % (n)	No % (n)
Overall	8.90 (121)	91.10 (1,239)	14.23 (212)	85.77 (1,278)	13.29 (361)	86.71 (2,356)
Sex						
Female	52.89 (64)	51.90 (643)	51.42 (109)	51.88 (663)	51.80 (187)	52.29 (1,232)
Male	47.11(57)	48.10 (596)	48.58 (103)	48.12 (615)	48.20 (174)	47.71 (1,124)
Race						
White	22.50 (27)	25.14 (309)	22.75 (48)	26.61 (335)	20.56 (73)	30.59 (703)
Black	41.67 (50)	40.85 (502)	45.02 (95)	40.43 (509)	47.89 (170)	43.43 (998)
AI/AN	19.17 (23)	16.92 (208)	20.38 (43)	16.04 (202)	19.72 (70)	11.75 (270)
Asian	2.50 (3)	3.01 (37)	1.90 (4)	3.57 (45)	1.69 (6)	3.79 (87)
Multi-racial	0 (0)	0 (0)	0.00 (0)	0.24 (3)	9.86 (35)	10.44 (240)
Hispanic						
Yes	13.33 (16)	15.57 (192)	18.01 (38)	15.48 (195)	14.01 (50)	13.77 (320)
No	86.67 (104)	84.43 (1,041)	81.99 (173)	84.52 (1,065)	85.99 (307)	86.23 (2,004)
Age at Index Categories						
0-1 yrs	19.83 (24)	22.37 (277)	20.28 (43)	23.12 (295)	18.01 (65)	21.58 (508)
2-5 yrs	19.83 (24)	24.31 (301)	25.94 (55)	21.71 (277)	22.99 (83)	23.41 (551)
6-9 yrs	38.84 (47)	25.28 (313)	32.55 (69)	23.20 (296)	30.47 (110)	23.66 (557)
10-13 yrs	14.05 (17)	18.09 (224)	16.04 (34)	19.67 (251)	19.67 (71)	19.33 (455)
14 + yrs	7.44 (9)	9.94 (123)	5.19 (11)	12.30 (157)	8.86 (32)	12.02 (283)
Number of substantiated prior reports						
0	60.33 (73)	76.92 (953)	74.06 (157)	80.05 (1,023)	82.83 (299)	89.13 (2,100)
1	20.66 (25)	14.77 (183)	16.51 (35)	13.93 (178)	10.80 (39)	7.94 (187)
2	16.53 (20)	5.49 (68)	6.60 (14)	3.76 (48)	3.60 (13)	1.99 (47)
3	1.65 (2)	2.02 (25)	0.47 (1)	1.80 (23)	1.94 (7)	0.42 (10)
4	0.83 (1)	0.48 (6)	2.36 (5)	0.31 (4)	0.28 (1)	0.21 (5)
5+	0 (0)	0.32 (4)	0.00 (0)	0.16 (2)	0.55 (2)	0.32 (7)
Mandated Reporter type						
Mandated	88.43 (107)	86.92 (1,077)	89.15 (189)	87.32 (1,116)	86.15 (311)	86.46 (2,037)
Non-mandated	11.57 (14)	13.08 (162)	10.85 (23)	12.68 (162)	13.85 (50)	13.54 (319)
Imminent Danger at index report						
Yes	8.26 (10)	7.83 (97)	0.00 (0)	0.94 (12)	1.11 (4)	0.25 (6)
No	91.74 (111)	92.17 (1,142)	100.00 (212)	99.06 (1,266)	98.89 (357)	99.75 (2,350)
Allegation at index report						
Neglect (not medical neglect)	83.87 (104)	71.14 (944)	61.40 (140)	61.66 (854)	57.36 (191)	45.57 (1,214)
Physical abuse	6.45 (8)	14.24 (189)	29.39 (67)	23.68 (328)	35.14 (117)	40.09 (1,068)
Sexual abuse	9.68 (12)	14.17 (188)	9.21 (21)	14.37 (199)	6.91 (23)	13.29 (354)
Mental injury and emotional harm	0.00 (0)	0.45 (6)	0.00 (0)	0.29 (4)	0.60 (2)	1.05 (28)

	2014 (N=1,360)		2015 (N=1,490)		2016 (N=2,717)	
	Yes % (n)	No % (n)	Yes % (n)	No % (n)	Yes % (n)	No % (n)
Allegation at re-report						
Neglect (not medical neglect)	76.56 (98)	-	58.12 (136)	-	54.00 (223)	-
Physical abuse	13.28 (17)	-	31.20 (73)	-	38.50 (159)	-
Sexual abuse	10.16 (13)	-	10.26 (24)	-	5.57 (23)	-
Mental injury and emotional harm	0.00 (0)	-	0.43 (1)	-	1.94 (8)	-
Allegation paired 1-1						
Concordant	80.17 (97)	-	65.09 (138)	-	65.37 (236)	-
Discordant	19.83 (24)	-	34.91 (74)	-	34.63 (125)	-
Allegation detail paired (1-1)						
Concordant	41.32 (50)	-	34.43 (73)	-	66.48 (240)	-
Discordant	56.68 (71)	-	65.57 (139)	-	33.52 (121)	-
Allegation detail paired (Group - Group)						
Concordant	53.72 (65)	-	45.28 (96)	-	45.71 (165)	-
Discordant	46.28 (56)	-	54.72 (116)	-	54.29 (196)	-
Special Education at Index						
Yes	34.41(32)	34.01 (250)	42.06(53)	33.72(264)	35.89(89)	27.01 (370)
No	65.59(61)	65.99 (48)	57.94 (73)	66.28 (519)	64.11(159)	72.99 (1,000)
Primary Language at Index						
English	91.4 (85)	90.48 (665)	90.48 (114)	88.25 (691)	92.34 (229)	84.74 (1,161)
Languages other than English	8.6 (8)	9.52 (70)	9.52 (12)	11.75 (92)	7.66 (19)	15.26 (209)
Free/Reduced Lunch at Index						
Yes	91.4 (85)	86.53 (636)	90.48 (114)	84.93 (665)	88.71 (220)	85.04 (1,165)
No	8.6 (8)	13.47 (99)	9.52 (12)	15.07 (118)	11.29 (28)	14.96 (205)
Homeless/McKinney Vento at Index						
Yes	43.01 (40)	32.38 (238)	28.57 (36)	27.33 (214)	27.42 (68)	17.96 (246)
No	56.99 (53)	67.62 (497)	71.43 (90)	72.67 (569)	72.58 (180)	82.04 (1,124)
Either Care Has a History of Domestic Violence						
Yes	61.16 (74)	60.58 (750)	67.45 (143)	54.32 (691)	61.22 (221)	55.05 (1,291)
No	38.84 (47)	39.42 (488)	32.55 (69)	45.68 (581)	38.78 (140)	44.95 (1,054)
Either Care Has/Had an Alcohol or Drug Problem During the Last 12 Months						
Yes	29.75 (36)	45.40 (562)	30.19 (64)	38.44 (489)	43.21 (156)	36.67 (860)
No	70.25 (85)	54.60 (676)	69.81 (148)	61.56 (783)	56.79 (205)	63.33 (1,485)
Primary Caregiver Has/Had Mental Health Problem						
Yes	59.50 (72)	50.81 (629)	41.51 (88)	40.88 (520)	43.77 (158)	32.32 (758)
No	40.50 (49)	49.19 (609)	58.49 (124)	59.12 (752)	56.23 (203)	67.68 (1,587)

	2014 (N=1,360)		2015 (N=1,490)		2016 (N=2,717)	
	Yes % (n)	No % (n)	Yes % (n)	No % (n)	Yes % (n)	No % (n)
Either Caregiver was Abused as a Child						
Yes	47.11 (57)	38.61 (478)	41.04 (87)	33.02 (420)	35.18 (127)	25.03 (587)
No	52.89 (64)	61.39 (760)	58.96 (125)	66.98 (852)	64.82 (234)	74.97 (1,758)
Primary Caregiver Lacks Parenting Skills						
Yes	56.20 (68)	61.15 (757)	54.25 (115)	50.00 (636)	37.67 (136)	34.75 (815)
No	43.80 (53)	38.85 (481)	45.75 (97)	50.00 (636)	62.33 (225)	65.25 (1,530)
Either Caregiver Employs Harmful and/or Developmentally Inappropriate Discipline						
Yes	14.88 (18)	17.12 (212)	13.21 (28)	16.12 (205)	8.86 (32)	10.87 (255)
No	85.12 (103)	82.88 (1,026)	86.79 (184)	83.88 (1,067)	91.14 (329)	89.13 (2,090)
Either Caregiver's Parenting Style is Over-Controlling						
Yes	6.61 (8)	8.80 (109)	4.25 (9)	8.81 (112)	4.43 (16)	4.82 (113)
No	93.39 (113)	91.20 (1,129)	95.75 (203)	91.19 (1,160)	95.57 (345)	95.18 (2,232)
Child in the Home Has a Developmental Disability or History of Delinquency						
Developmental Disability and Delinquency	1.65 (2)	1.70 (21)	5.19 (11)	2.59 (33)	4.16 (15)	1.58 (37)
History of Delinquency	0.83 (1)	2.26 (28)	0.94 (2)	1.65 (21)	2.49 (9)	2.00 (47)
Developmental Disability	32.23 (39)	23.91 (296)	23.58 (50)	22.09 (281)	18.01 (65)	16.38 (384)
No	65.29 (79)	72.13 (893)	70.28 (149)	73.66 (937)	75.35 (272)	80.04 (1,877)

TABLE D3. DESCRIPTIVE CHARACTERISTICS FOR FOSTER CARE RE-ENTRY

	2014 (N=354)		2015 (N=313)		2016 (N=193)	
	Yes % (n)	No % (n)	Yes % (n)	No % (n)	Yes % (n)	No % (n)
Overall	15.82(56)	84.18 (298)	14.38(45)	85.62 (268)	11.4 (22)	88.6 (171)
Sex						
Female	48.21 (27)	54.36 (162)	51.11 (23)	47.39 (127)	31.82 (7)	53.22 (91)
Male	51.79 (29)	45.64 (136)	48.89 (22)	52.61 (141)	68.18 (15)	46.78 (80)
Race						
White	19.64 (11)	22.11 (65)	24.44 (11)	26.32 (70)	13.64 (3)	30.3 (50)
Black	39.29 (22)	29.93 (88)	33.33 (15)	40.98 (109)	36.36 (8)	36.36 (60)
AI/AN	25 (14)	25.17 (74)	35.56 (16)	14.29 (38)	13.64 (3)	18.18 (30)
Asian	0 (0)	3.4 (10)	2.22 (1)	3.38 (9)	0 (0)	4.85 (8)
Multi-racial	16.07 (9)	19.39 (57)	4.44 (2)	14.29 (38)	36.36 (8)	10.3 (17)
Hispanic						
Yes	9.09 (5)	17.63 (52)	13.33 (6)	13.21 (35)	18.18 (4)	13.25(22)
No	90.91 (50)	82.37 (243)	86.67 (39)	86.79 (230)	81.82(18)	86.75 (144)
Age at Index Categories						
0-1 yrs	21.43 (12)	27.85 (83)	35.56 (16)	25.75 (69)	27.27 (6)	30.41 (52)
2-5 yrs	26.79 (15)	30.2 (90)	17.78 (8)	26.87 (72)	27.27 (6)	21.05 (36)
6-9 yrs	19.64 (11)	20.47 (61)	20 (9)	24.63 (66)	13.64 (3)	15.79 (27)
10-13 yrs	23.21 (13)	14.43 (43)	22.22 (10)	14.18 (38)	18.18 (4)	18.71 (32)
14 + yrs	8.93 (5)	7.05 (21)	4.44 (2)	8.58 (23)	13.64 (3)	14.04 (24)
Mean Time in Days in Index Continuous Placement (sd)	261.43 (226.80)	344.37(226.03)	294.8(143.85)	323.69(160.11)	179.18(114.04)	174.57(105.40)
Number of Continuous Placements Prior to Index Placement						
0	71.43 (40)	89.6 (267)	82.22 (37)	89.18 (239)	86.36 (19)	92.98 (159)
1	21.43 (12)	6.71 (20)	17.78 (8)	9.7 (26)	13.64 (3)	6.43 (11)
2	5.36 (3)	3.02 (9)	0 (0)	1.12 (3)	0 (0)	0.58 (1)
3 +	1.79 (1)	0.68 (2)	0 (0)	0 (0)	0 (0)	0 (0)
Number of Location Settings in Index Placements						
1	53.57 (30)	45.3 (135)	44.44 (20)	44.4 (119)	63.64 (14)	60.23 (103)
2	23.21 (13)	37.58 (112)	31.11 (14)	30.6 (82)	22.73 (5)	23.98 (41)
3	8.93 (5)	11.74 (35)	15.56 (7)	10.45 (28)	9.09 (2)	11.11 (19)
4	3.57 (2)	3.02 (9)	2.22 (1)	8.21 (22)	4.55 (1)	2.34 (4)
5 +	10.71 (6)	2.35 (7)	6.67 (3)	6.34 (17)	0 (0)	2.34 (4)
Reason for Removal Categories at Index						
Alleged neglect	37.80 (31)	37.77 (159)	46.38(32)	38.43(166)	34.04(16)	37.54(110)
Alleged physical abuse	12.20 (10)	17.34 (73)	11.59(8)	13.89(60)	10.64(5)	16.04(47)
Alleged sexual abuse	1.22 (1)	2.85 (12)	4.35(3)	3.70(16)	2.13(1)	3.41(10)
Parental inability to care	21.96 (18)	12.12 (51)	8.7 (6)	15.28 (66)	6.38(3)	10.92(32)
Parental alcohol/drug abuse	18.30 (15)	26.60(112)	24.61 (17)	25 (101)	31.91(15)	26.62(78)
Child concerns	8.54 (7)	3.33 (14)	4.35 (3)	3.71 (16)	14.89(7)	5.46(16)

	2014 (N=354)		2015 (N=313)		2016 (N=193)	
	Yes % (n)	No % (n)	Yes % (n)	No % (n)	Yes % (n)	No % (n)
Reason for Removal Categories at Re-entry						
Alleged neglect	33.33(28)	-	39.51(32)	-	30.77(16)	-
Alleged physical abuse	16.67(14)	-	16.05(13)	-	17.31(9)	-
Alleged sexual abuse	0.00(0)	-	2.48(2)	-	1.92(1)	-
Parental inability to care	9.5(8)	-	4.76(4)	-	13.46(7)	-
Parental alcohol/drug abuse	20.24(17)	-	29.76(25)	-	26.92(14)	-
Child concerns	20.24(17)	-	5.95(5)	-	9.61(5)	-
Reason for Removal Paired (1-1)						
Concordant	50 (28)	-	75.56 (34)	-	77.27 (17)	-
Discordant	50 (28)	-	24.24 (11)	-	22.73 (5)	-
Reason for Removal Paired (Group-Group)						
Concordant	57.14 (32)	-	80.00 (36)	-	81.81 (18)	-
Discordant	42.86 (24)	-	20.00 (9)	-	18.18 (4)	-
Special Education at Index						
Yes	37.5 (15)	38.54 (74)	36.36 (12)	41.46 (68)	40 (4)	42.27 (41)
No	62.5(25)	61.46 (118)	63.64 (21)	58.54 (96)	60 (6)	57.73 (56)
Primary Language at Index						
English	97.5 (39)	90.1 (173)	93.94 (31)	92.68 (152)	100 (10)	89.69 (87)
Languages other than English	2.5 (1)	9.9 (19)	6.06 (2)	7.32 (12)	0(0)	10.31 (10)
Free/Reduced Lunch at Index						
Yes	85 (34)	85.42 (164)	84.85 (28)	93.29 (153)	100 (10)	88.66 (86)
No	15 (6)	14.58 (28)	15.15 (5)	6.71 (11)	0 (0)	11.34 (11)
Homeless/McKinney Vento ² at Index						
Yes	65 (26)	41.15 (79)	39.39 (13)	46.95 (77)	40 (4)	43.3 (42)
No	35 (14)	58.85 (113)	60.61 (20)	53.05 (87)	60 (6)	56.7 (55)
Either Care Has a History of Domestic Violence						
Yes	64.29 (36)	64.38 (188)	53.33 (24)	55.85 (148)	57.14 (12)	63.69 (107)
No	35.71 (20)	35.62 (104)	46.67 (21)	44.15 (117)	42.86 (9)	36.31 (61)
Either Care Has/Had an Alcohol or Drug Problem During the Last 12 Months						
Yes	53.57 (30)	51.37 (150)	53.33 (24)	46.79 (124)	61.90 (13)	51.79 (87)
No	46.43 (26)	48.63 (142)	46.67 (21)	53.21 (141)	38.10 (8)	48.21 (81)
Primary Caregiver Has/Had Mental Health Problem						
Yes	55.36 (31)	51.37 (150)	48.89 (22)	50.19 (133)	66.67 (14)	43.45 (73)
No	44.64 (25)	48.63 (142)	51.11 (23)	49.81 (132)	33.33 (7)	56.55 (95)
Either Caregiver was Abused as a Child						
Yes	37.50 (21)	40.07 (117)	26.67 (12)	46.04 (122)	61.90 (13)	30.36 (51)
No	62.50 (35)	59.93 (175)	73.33 (33)	53.96 (143)	38.10 (8)	69.64 (117)

	2014 (N=354)		2015 (N=313)		2016 (N=193)	
	Yes % (n)	No % (n)	Yes % (n)	No % (n)	Yes % (n)	No % (n)
Primary Caregiver Lacks Parenting Skills						
Yes	71.43 (40)	66.44 (194)	51.11 (23)	64.15 (170)	61.90 (13)	53.57 (90)
No	28.57 (16)	33.56 (98)	48.89 (22)	35.85 (95)	38.10 (8)	46.43 (78)
Either Caregiver's Parenting Style is Over-Controlling						
Yes	5.36 (3)	9.93 (29)	11.11 (5)	10.94 (29)	9.52 (2)	8.33 (14)
No	94.64 (53)	90.07 (263)	88.89 (40)	89.06 (236)	90.48 (19)	91.67 (154)
Child in the Home Has a Developmental Disability or History of Delinquency						
Developmental Disability and Delinquency	5.36 (3)	1.03 (3)	4.44 (2)	3.02 (8)	14.29 (3)	5.95 (10)
History of Delinquency	7.14 (4)	2.05 (6)	0.00 (0)	3.02 (8)	0.00 (0)	4.76 (8)
Developmental Disability	26.79 (15)	25.68 (75)	13.33 (6)	21.51 (57)	14.29 (3)	13.10 (22)
No	60.71 (34)	71.23 (208)	82.22 (37)	72.45 (192)	71.43 (15)	76.19 (128)

**TABLE D4.
RISK AND PROTECTIVE FACTORS FOR MALTREATMENT RE-REPORTING**

	2014				2015				2016			
Model 1- Child Characteristics, Index Case Characteristics, Multisystem Involvement, & Family Characteristics (SDM)												
	OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value
Sex												
Female	1	-	-	-	1	-	-	-	1	-	-	-
Male	1.05	(0.92,1.21)	0.07	0.44	0.91	(0.81,1.03)	0.06	0.15	0.98	(0.87,1.10)	0.06	0.71
Race												
White	1	-	-	-	1	-	-	-	1	-	-	-
Black	1.04	(0.87,1.24)	0.09	0.69	1.11	(0.94,1.30)	0.09	0.22	1.18	(1.01,1.38)	0.09	0.04
AI/AN	1.63	(1.28,2.06)	0.2	<.01	1.74	(1.40,2.17)	0.2	<.01	1.97	(1.58,2.47)	0.23	<.01
Asian	0.63	(0.39,1.02)	0.15	0.06	0.7	(0.49,1.01)	0.13	0.06	0.63	(0.42,0.93)	0.13	0.02
Multi-racial	1.32	(1.04,1.68)	0.16	0.02	1.46	(1.17,1.82)	0.16	0	1.27	(1.01,1.59)	0.15	0.04
Hispanic												
Yes	0.94	(0.77,1.16)	0.1	0.58	0.94	(0.78,1.15)	0.09	0.56	1.05	(0.86,1.27)	0.1	0.64
No	1	-	-	-	1	-	-	-	1	-	-	-
Age at index report	0.97	(0.95,0.99)	0.01	0.01	0.98	(0.96,1.00)	0.01	0.02	0.98	(0.97,1.00)	0.01	0.04
Mandated Reporter type												
Mandated	1.16	(0.80,1.67)	0.22	0.44	0.84	(0.63,1.12)	0.13	0.24	0.52	(0.38,0.70)	0.08	<.01
Non-mandated	1	-	-	-	1	-	-	-	1	-	-	-
Reporter type												
Human and social service staff	0.95	(0.75,1.20)	0.11	0.68	0.95	(0.77,1.18)	0.1	0.67	1.09	(0.90,1.33)	0.11	0.38
Family and friends	1.42	(0.95,2.12)	0.29	0.09	1.22	(0.87,1.70)	0.21	0.25	0.58	(0.41,0.81)	0.1	<.01
Other professional	1	-	-	-	1	-	-	-	1	-	-	-
Anonymous/other	1.1	(0.82,1.48)	0.17	0.54	1.08	(0.87,1.33)	0.12	0.51	0.92	(0.72,1.16)	0.11	0.47
Alleged victim	-	-	-	-	-	-	-	-	0.43	(0.04,4.22)	0.5	0.47
Alleged offender	-	-	-	-	-	-	-	-	-	-	-	-
Services needed and received												
Needed & received cm	0.8	(0.65,0.99)	0.09	0.04	1.21	(1.02,1.44)	0.11	0.03	0.94	(0.78,1.13)	0.09	0.5
Needed but no cm	1.09	(0.76,1.56)	0.2	0.66	1.15	(0.82,1.62)	0.2	0.41	0.96	(0.69,1.34)	0.16	0.82
Not needed & received cm	1.21	(0.99,1.47)	0.12	0.07	1.49	(1.13,1.87)	0.19	<.01	1.86	(1.30,2.64)	0.33	<.01
Not needed & no cm	1	-	-	-	1	-	-	-	1	-	-	-
Allegation at index report												
Neglect (not medical neglect)	0.98	(0.73,1.30)	0.14	0.87	1.11	(0.88,1.39)	0.13	0.38	1.04	(0.86,1.26)	0.1	0.68
Physical abuse	1.03	(0.79,1.36)	0.14	0.81	1.17	(0.94,1.45)	0.13	0.16	0.95	(0.79,1.14)	0.09	0.57
Sexual abuse	0.74	(0.53,1.02)	0.12	0.06	0.97	(0.75,1.27)	0.13	0.85	0.89	(0.71,1.13)	0.11	0.35
Relationship of offender to victim at index												
Parent	1.01	(0.77,1.33)	0.14	0.95	1.27	(0.99,1.63)	0.16	0.06	1.05	(0.83,1.31)	0.12	0.7
Other relative (non-foster parents)	0.63	(0.42,0.95)	0.13	0.03	0.94	(0.68,1.30)	0.16	0.71	0.83	(0.60,1.14)	0.13	0.25
Unmarried partner of parent	1.19	(0.88,1.61)	0.18	0.26	1.41	(1.07,1.86)	0.2	0.02	1.49	(1.16,1.92)	0.19	<.01
Number of prior CPS reports	1.24	(1.16,1.33)	0.04	<.01	1.21	(1.12,1.31)	0.05	<.01	1.08	(0.98,1.19)	0.05	0.1
History of CMH case												
Yes	1.17	(0.87,1.58)	0.18	0.29	1.34	(1.02,1.78)	0.19	0.04	1.19	(0.89,1.59)	0.17	0.24
No	1	-	-	-	1	-	-	-	1	-	-	-

	2014				2015				2016			
	OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value
Concurrent CMH case												
Yes	1.86	(1.19,2.92)	0.43	0.01	1.8	(1.14,2.85)	0.42	0.01	1.42	(0.80,2.49)	0.41	0.23
No	1	-	-	-	1	-	-	-	1	-	-	-
CMH case within 12 months after												
Yes	1.97	(1.45,2.67)	0.31	<.01	1.83	(1.32,2.53)	0.3	<.01	1.56	(1.13,2.17)	0.26	0.01
No	1	-	-	-	1	-	-	-	1	-	-	-
History of CPS OHP												
Yes	0.98	(0.76,1.27)	0.13	0.88	0.97	(0.73,1.28)	0.14	0.82	1.6	(1.18,2.16)	0.25	<.01
No	1	-	-	-	1	-	-	-	1	-	-	-
Number of Children in the Home												
Two or More	0.92	(0.77,1.09)	0.08	0.34	1.19	(1.01,1.40)	0.1	0.04	1.05	(0.89,1.23)	0.09	0.56
One	1	-	-	-	1	-	-	-	1	-	-	-
Age of Youngest child												
Two or Younger	0.93	(0.77,1.12)	0.09	0.42	0.89	(0.75,1.06)	0.08	0.2	0.91	(0.76,1.09)	0.08	0.29
Three or Older	1	-	-	-	1	-	-	-	1	-	-	-
Number of Adults in Home												
One or None	1.14	(0.98,1.33)	0.09	0.1	1.11	(0.96,1.27)	0.08	0.16	1.17	(1.02,1.34)	0.08	0.03
Two or More	1	-	-	-	1	-	-	-	1	-	-	-
Age of Primary Caregiver												
29 or younger	0.98	(0.83,1.15)	0.08	0.8	1.13	(0.97,1.32)	0.09	0.11	1.2	(1.03,1.39)	0.09	0.02
30 or older	1	-	-	-	1	-	-	-	1	-	-	-
Either Care Has a History of Domestic Violence												
Yes	1	(0.86,1.16)	0.07	0.97	1.11	(0.96,1.27)	0.08	0.15	1.12	(0.98,1.29)	0.08	0.11
No	1	-	-	-	1	-	-	-	1	-	-	-
Either Care Has/Had an Alcohol or Drug Problem During the Last 12 Months												
Yes	0.82	(0.69,0.99)	0.08	0.04	0.91	(0.77,1.07)	0.08	0.24	0.96	(0.81,1.13)	0.08	0.6
No	1	-	-	-	1	-	-	-	1	-	-	-
Primary Caregiver Has/Had Mental Health Problem												
Yes	1.44	(1.23,1.69)	0.12	<.01	1.09	(0.94,1.27)	0.09	0.26	1.28	(1.10,1.49)	0.1	<.01
No	1	-	-	-	1	-	-	-	1	-	-	-
Either Caregiver was Abused as a Child												
Yes	1.24	(1.06,1.44)	0.1	0.01	1.2	(1.04,1.39)	0.09	0.01	0.95	(0.81,1.11)	0.07	0.52
No	1	-	-	-	1	-	-	-	1	-	-	-
Primary Caregiver Lacks Parenting Skills												
Yes	0.95	(0.81,1.13)	0.08	0.58	1	(0.85,1.17)	0.08	0.99	0.98	(0.82,1.16)	0.08	0.78
No	1	-	-	-	1	-	-	-	1	-	-	-
Child in the Home Has a Developmental Disability/ Emotional Impairment												
Developmental Disability and Delinquency	0.98	(0.60,1.59)	0.24	0.92	0.86	(0.55,1.36)	0.2	0.53	1.44	(0.94,2.21)	0.32	0.1
History of Delinquency	0.51	(0.28,0.92)	0.15	0.02	0.54	(0.31,0.95)	0.16	0.03	1.38	(0.89,2.12)	0.3	0.15
Developmental Disability	1.06	(0.89,1.26)	0.09	0.5	1	(0.85,1.18)	0.09	0.99	1.13	(0.96,1.34)	0.1	0.15
No	1	-	-	-	1	-	-	-	1	-	-	-

	2014				2015				2016			
	OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value
Alleged Offender is an Unmarried Partner of Primary Caregiver												
Yes	0.78	(0.64,0.96)	0.08	0.02	0.82	(0.68,0.98)	0.08	0.03	0.88	(0.74,1.05)	0.08	0.15
No	1	-	-	-	1	-	-	-	1	-	-	-
Father, Stepfather, Boyfriend, or Male Roommates Provides Unsupervised Childcare to a Child < 3 years												
Yes	0.98	(0.73,1.31)	0.15	0.88	0.97	(0.73,1.29)	0.14	0.83	1.26	(0.94,1.68)	0.19	0.13
No	0.76	(0.60,0.95)	0.09	0.02	1.03	(0.82,1.29)	0.12	0.82	0.98	(0.78,1.25)	0.12	0.9
N/A	1	-	-	-	1	-	-	-	1	-	-	-
Father, Stepfather, Boyfriend, or Male Roommates is Employed												
Yes	1.03	(0.80,1.31)	0.13	0.83	0.99	(0.78,1.26)	0.12	0.92	0.79	(0.62,1.01)	0.1	0.07
No	1.12	(0.89,1.42)	0.13	0.34	1.18	(0.93,1.50)	0.14	0.18	1.13	(0.88,1.45)	0.14	0.34
N/A	1	-	-	-	1	-	-	-	1	-	-	-
Risk Level												
High	2.18	(1.48,3.21)	0.43	<.01	1.69	(1.22,2.33)	0.28	<.01	1.64	(1.22,2.19)	0.24	<.01
Moderate	1.81	(1.30,2.53)	0.31	<.01	1.49	(1.15,1.94)	0.2	<.01	1.27	(1.02,1.58)	0.14	0.04
Low	1	-	-	-	1	-	-	-	1	-	-	-

Model 1.1 -Child Characteristics, Index Case Characteristics, Multisystem Involvement, Family Characteristics (SDM) & Risk Reassessment (SDM)

	OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value
Sex												
Female	1	-	-	-	1	-	-	-	1	-	-	-
Male	1.06	(0.84,1.33)	0.12	0.63	0.99	(0.81,1.22)	0.1	0.94	1.14	(0.92,1.44)	0.12	0.24
Hispanic												
Yes	0.83	(0.59,1.19)	0.15	0.3	0.68	(0.49,0.96)	0.12	0.03	1.01	(0.73,1.38)	0.16	0.96
No	1	-	-	-								
Race												
White	1	-	-	-	1	-	-	-	1	-	-	-
Black	0.88	(0.65,1.18)	0.13	0.39	0.84	(0.64,1.15)	0.12	0.21	1.06	(0.80,1.39)	0.15	0.7
AI/AN	0.66	(0.44,0.99)	0.14	0.05	1.49	(1.05,2.12)	0.27	0.03	1.44	(1.02,2.03)	0.25	0.04
Asian	0.73	(0.32,1.67)	0.31	0.46	0.57	(0.33,0.96)	0.15	0.04	0.36	(0.17,0.79)	0.14	0.01
Multi-racial	0.92	(0.60,1.40)	0.2	0.7	1.54	(1.07,2.20)	0.28	0.02	1.11	(0.74,1.67)	0.23	0.61
Age at index report	1.02	(0.99,1.05)	0.01	0.14	1	(0.98,1.03)	0.01	0.73	1	(0.97,1.03)	0.01	0.73
Number of Children												
One	1	-	-	-	1	-	-	-	1	-	-	-
Two or three	1.03	(0.76,1.39)	0.16	0.87	1.26	(0.95,1.66)	0.18	0.11	1.35	(1.01,1.84)	0.2	0.04
Four or more	0.86	(0.59,1.25)	0.16	0.43	1.33	(0.95,1.85)	0.22	0.09	1.25	(0.89,1.76)	0.22	0.2
Age of primary caregiver												
30 or older	1	-	-	-	1	-	-	-	1	-	-	-
29 or younger	1.36	(1.04,1.79)	0.19	0.03	0.99	(0.77,1.26)	0.13	0.91	1.04	(0.81,1.35)	0.14	0.74
Alcohol and drug problem from either caregiver												
Yes	1.38	(1.01,1.89)	0.22	0.04	1	(0.73,1.35)	0.16	0.98	1.01	(0.74,1.36)	0.16	0.96
No	1	-	-	-	1	-	-	-	1	-	-	-

	2014				2015				2016			
	OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value
Domestic violence since last assessment/reassessment												
Yes	2.01	(1.41,2.88)	0.37	<.01	1.77	(1.24,2.51)	0.32	<.01	2.33	(1.55,3.50)	0.48	<.01
No	1	-	-	-	1	-	-	-	1	-	-	-
Child in the home has a developmental disability/emotional impairment												
Yes	1.01	(0.77,1.31)	0.14	0.96	1.25	(0.98,1.61)	0.16	0.08	0.99	(0.75,1.38)	0.14	0.95
No	1	-	-	-	1	-	-	-	1	-	-	-
Number of Workers												
1	1	-	-	-	1	-	-	-	1	-	-	-
2	1.73	(1.23,2.41)	0.3	<.01	0.87	(0.64,1.18)	0.14	0.36	1	(0.77,1.35)	0.14	1
3	1.29	(0.75,2.22)	0.36	0.35	0.74	(0.43,1.28)	0.21	0.29	1.6	(1.07,2.49)	0.33	0.02
4+	1.18	(0.61,2.30)	0.4	0.62	0.92	(0.50,1.70)	0.29	0.79	0.93	(0.47,1.84)	0.32	0.84
Risk Level												
High	2.38	(1.60,3.54)	0.48	<.01	2.21	(1.54,3.17)	0.41	<.01	1.84	(1.29,2.63)	0.33	<.01
Moderate	2.07	(1.50,2.86)	0.34	<.01	1.72	(1.34,2.29)	0.22	<.01	1.08	(0.84,1.39)	0.14	0.56
Low	1	-	-	-	1	-	-	-	1	-	-	-

Model 1.2 - Child Characteristics, Index Case Characteristics, Multisystem Involvement, Family Characteristics (SDM) & Strengths and Needs (SDM)

	OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value
Sex												
Female	1	-	-	-	1	-	-	-	1	-	-	-
Male	1.06	(0.70,1.60)	0.22	0.79	0.98	(0.65,1.49)	0.21	0.94	1.05	(0.69,1.59)	0.22	0.82
Hispanic												
Yes	0.52	(0.24,1.12)	0.2	0.1	0.47	(0.21,1.04)	0.19	0.06	1.42	(0.76,2.68)	0.46	0.27
No	1	-	-	-	1	-	-	-	1	-	-	-
Race												
White	1	-	-	-	1	-	-	-	1	-	-	-
Black	0.83	(0.49,1.41)	0.22	0.49	0.85	(0.52,1.40)	0.21	0.53	1.25	(0.75,2.08)	0.33	0.4
AI/AN	0.81	(0.34,1.90)	0.35	0.62	2.68	(1.01,7.10)	1.33	0.05	2.25	(0.99,5.16)	0.95	0.05
Asian	0.82	(0.18,3.71)	0.63	0.79	0.79	(0.29,2.14)	0.4	0.64	0.12	(0.01,0.91)	0.12	0.04
Multi-racial	0.44	(0.17,1.10)	0.2	0.08	1.78	(0.83,3.80)	0.69	0.14	1.72	(0.77,3.82)	0.7	0.18
Age at index report	0.98	(0.93,1.02)	0.02	0.29	1.03	(0.99,1.08)	0.02	0.14	1.01	(0.97,1.06)	0.02	0.62
Household Relationships/ Domestic Violence												
Supportive	1	-	-	-	1	-	-	-	1	-	-	-
Minor or occasional discord	0.48	(0.27,0.87)	0.14	0.02	1.23	(0.66,2.31)	0.4	0.51	0.67	(0.35,1.25)	0.22	0.21
Frequent discord or some domestic violence	0.5	(0.26,0.96)	0.17	0.04	1.45	(0.73,2.87)	0.51	0.29	0.47	(0.24,0.94)	0.17	0.03
Chronic discord or severe domestic violence	0.86	(0.35,2.13)	0.4	0.75	1.21	(0.48,3.04)	0.57	0.69	1.73	(0.69,4.37)	0.82	0.24
Resource Management/Basic Needs												
Resources are sufficient to meet basic needs and are adequately managed	1	-	-	-	1	-	-	-	1	-	-	-

	2014				2015				2016			
	OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value
Resources may be limited but are adequately managed	0.42	(0.21,0.85)	0.15	0.02	1.57	(0.76,3.27)	0.59	0.23	1.92	(0.86,4.31)	0.79	0.11
Resources are insufficient or not well managed	0.4	(0.18,0.89)	0.16	0.03	1.73	(0.78,3.85)	0.71	0.18	1.79	(0.72,4.46)	0.83	0.21
No resources, or resources are severely limited and/or mismanaged	0.19	(0.03,1.05)	0.16	0.06	2.5	(0.83,7.59)	1.42	0.11	1.5	(0.39,5.73)	1.03	0.55
Social Support System												
Strong support system	1	-	-	-	1	-	-	-	1	-	-	-
Adequate support system	1.39	(0.50,3.84)	0.72	0.52	1.32	(0.65,2.68)	0.48	0.45	2.22	(1.12,4.39)	0.77	0.02
Limited support system	1.53	(0.54,4.34)	0.81	0.42	1.63	(0.77,3.46)	0.63	0.2	1.86	(0.88,3.92)	0.71	0.11
No support system	0.47	(0.07,2.97)	0.44	0.42	-	-	-	-	2.5	(0.43,14.39)	2.23	0.31

Model 2 - Child Characteristics, Index Case Characteristics, Multisystem Involvement, & Family Characteristics (SDM) & Education

	OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value
Sex												
Female	1	-	-	-	1	-	-	-	1	-	-	-
Male	1.01	(0.85,1.20)	0.09	0.91	0.82	(0.70,0.97)	0.07	0.02	0.94	(0.81,1.10)	0.08	0.46
Race												
White	1	-	-	-	1	-	-	-	1	-	-	-
Black	1.02	(0.82,1.29)	0.12	0.83	0.98	(0.80,1.22)	0.11	0.88	1.1	(0.89,1.35)	0.12	0.39
AI/AN	1.63	(1.20,2.20)	0.25	<.01	1.34	(1.00,1.79)	0.2	0.05	1.66	(1.23,2.23)	0.25	<.01
Asian	0.65	(0.35,1.20)	0.2	0.17	0.75	(0.43,1.29)	0.21	0.3	0.83	(0.51,1.36)	0.21	0.47
Pacific Islander	-	-	-	-	-	-	-	-	-	-	-	-
Multi-racial	1.04	(0.75,1.44)	0.17	0.83	1.22	(0.91,1.64)	0.18	0.18	1.22	(0.90,1.64)	0.18	0.2
Hispanic												
Yes	0.97	(0.73,1.30)	0.14	0.85	1.15	(0.87,1.52)	0.16	0.32	1.35	(1.04,1.75)	0.18	0.03
No	1	-	-	-	1	-	-	-	1	-	-	-
Age at index report	0.95	(0.92,0.97)	0.01	<.01	0.95	(0.92,0.97)	0.01	<.01	0.97	(0.94,0.99)	0.01	0.01
Mandated Reporter type												
Mandated	1.13	(0.67,1.89)	0.3	0.64	0.73	(0.50,1.08)	0.14	0.12	0.58	(0.39,0.84)	0.11	0.01
Non-mandated	1	-	-	-	1	-	-	-	1	-	-	-
Reporter type												
Human and social service staff	0.84	(0.62,1.15)	0.13	0.29	0.96	(0.72,1.27)	0.14	0.77	1.13	(0.87,1.45)	0.15	0.36
Family and friends	1.29	(0.74,2.24)	0.36	0.37	1.01	(0.66,1.57)	0.22	0.95	0.5	(0.33,0.78)	0.11	<.01
Other professional	1	-	-	-	1	-	-	-	1	-	-	-
Anonymous/other	0.83	(0.55,1.24)	0.17	0.36	0.86	(0.64,1.15)	0.13	0.3	0.9	(0.67,1.21)	0.14	0.49
Alleged victim	-	-	-	-	-	-	-	-	-	-	-	-
Alleged offender	-	-	-	-	-	-	-	-	-	-	-	-
Services needed and received												
Needed & received cm	0.8	(0.60,1.05)	0.11	0.11	1.17	(0.94,1.47)	0.13	0.16	0.89	(0.70,1.12)	0.11	0.31
Needed but no cm	0.95	(0.59,1.53)	0.23	0.83	1.28	(0.83,1.99)	0.29	0.27	1.08	(0.68,1.70)	0.25	0.75
Not needed & received cm	1.03	(0.80,1.33)	0.13	0.83	1.33	(0.96,1.83)	0.22	0.09	1.17	(0.71,1.91)	0.29	0.54
Not needed & no cm	1	-	-	-	1	-	-	-	1	-	-	-
Allegation at index report												
Neglect (not medical neglect)	0.85	(0.59,1.23)	0.16	0.39	1.19	(0.90,1.59)	0.17	0.23	1.01	(0.80,1.29)	0.12	0.92

	2014				2015				2016			
	OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value
Physical abuse	0.99	(0.70,1.40)	0.18	0.95	1.21	(0.91,1.59)	0.17	0.19	0.91	(0.72,1.15)	0.11	0.42
Sexual abuse	0.51	(0.34,0.78)	0.11	<.01	1	(0.72,1.37)	0.16	0.98	0.86	(0.65,1.15)	0.13	0.31
Relationship of offender to victim at index												
Parent	0.93	(0.67,1.30)	0.16	0.69	1.33	(0.97,1.82)	0.21	0.07	1.19	(0.89,1.60)	0.18	0.23
Other relative (non-foster parents)	0.66	(0.40,1.06)	0.16	0.09	1	(0.67,1.50)	0.21	1	0.97	(0.65,1.44)	0.2	0.88
Unmarried partner of parent	0.9	(0.61,1.31)	0.17	0.57	1.17	(0.83,1.65)	0.21	0.38	1.6	(1.16,2.22)	0.27	0.01
Number of prior CPS reports	1.22	(1.13,1.32)	0.05	<.01	1.19	(1.09,1.30)	0.05	<.01	1.04	(0.94,1.15)	0.06	0.47
History of CMH case												
Yes	1.29	(0.94,1.78)	0.21	0.11	1.38	(1.02,1.87)	0.21	0.04	1.27	(0.94,1.74)	0.2	0.12
No	1	-	-	-	1	-	-	-	1	-	-	-
Concurrent CMH case												
Yes	1.71	(1.07,2.74)	0.41	0.03	2.02	(1.23,3.30)	0.51	0.01	1.49	(0.84,2.65)	0.44	0.18
No	1	-	-	-	1	-	-	-	1	-	-	-
CMH case within 12 months after												
Yes	1.85	(1.34,2.56)	0.31	<.01	1.59	(1.11,2.27)	0.29	0.01	1.49	(1.05,2.10)	0.26	0.02
No	1	-	-	-	1	-	-	-				
History of CPS OHP												
Yes	0.89	(0.66,1.19)	0.13	0.42	0.87	(0.63,1.18)	0.14	0.37	1.75	(1.26,2.43)	0.29	<.01
No	1	-	-	-	1	-	-	-	1	-	-	-
Number of Children in the Home												
Two or More	0.89	(0.71,1.13)	0.11	0.36	1.16	(0.93,1.45)	0.13	0.2	0.92	(0.74,1.15)	0.1	0.47
One	1	-	-	-	1	-	-	-	1	-	-	-
Age of Youngest child												
Two or Younger	0.92	(0.72,1.18)	0.12	0.53	0.97	(0.76,1.23)	0.12	0.79	0.91	(0.72,1.17)	0.11	0.47
Three or Older	1	-	-	-	1	-	-	-	1	-	-	-
Number of Adults in Home												
One or None	1.07	(0.88,1.31)	0.11	0.47	1.1	(0.92,1.32)	0.1	0.29	1.16	(0.97,1.38)	0.1	0.11
Two or More	1	-	-	-	1	-	-	-	1	-	-	-
Age of Primary Caregiver												
29 or younger	1.17	(0.94,1.44)	0.13	0.16	1.15	(0.94,1.41)	0.12	0.18	1.1	(0.89,1.35)	0.12	0.4
30 or older	1	-	-	-	1	-	-	-	1	-	-	-
Either Care Has a History of Domestic Violence												
Yes	1.01	(0.84,1.22)	0.1	0.89	1.12	(0.94,1.34)	0.1	0.2	1.04	(0.87,1.25)	0.1	0.65
No	1	-	-	-	1	-	-	-	1	-	-	-
Either Care Has/Had an Alcohol or Drug Problem During the Last 12 Months												
Yes	0.81	(0.64,1.04)	0.1	0.09	0.91	(0.72,1.14)	0.1	0.39	0.93	(0.75,1.16)	0.1	0.53
No	1	-	-	-	1	-	-	-	1	-	-	-
Primary Caregiver Has/Had Mental Health Problem												
Yes	1.44	(1.18,1.76)	0.15	0	0.99	(0.81,1.21)	0.1	0.91	1.16	(0.96,1.41)	0.12	0.13
No	1	-	-	-	1	-	-	-	1	-	-	-

	2014				2015				2016			
	OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value
Either Caregiver was Abused as a Child												
Yes	1.26	(1.03,1.53)	0.13	0.02	1.22	(1.01,1.48)	0.12	0.04	0.92	(0.76,1.13)	0.1	0.45
No	1	-	-	-	1	-	-	-	1	-	-	-
Primary Caregiver Lacks Parenting Skills												
Yes	0.95	(0.77,1.17)	0.1	0.6	1.03	(0.84,1.27)	0.11	0.79	1	(0.80,1.24)	0.11	0.98
No	1	-	-	-	1	-	-	-	1	-	-	-
Child in the Home Has a Developmental Disability/Emotional Impairment												
Developmental Disability and Delinquency	1.06	(0.63,1.79)	0.28	0.82	1.29	(0.76,2.17)	0.34	0.35	1.47	(0.93,2.33)	0.35	0.1
History of Delinquency	0.43	(0.22,0.85)	0.15	0.02	0.68	(0.37,1.26)	0.21	0.22	1.28	(0.79,2.08)	0.32	0.32
Developmental Disability	1.06	(0.85,1.31)	0.12	0.62	0.97	(0.79,1.20)	0.1	0.8	0.99	(0.80,1.22)	0.1	0.92
No	1	-	-	-	1	-	-	-	1	-	-	-
Alleged Offender is an Unmarried Partner of Primary Caregiver												
Yes	1.02	(0.78,1.35)	0.14	0.87	0.96	(0.75,1.23)	0.12	0.77	0.8	(0.63,1.02)	0.1	0.08
No	1	-	-	-	1	-	-	-	1	-	-	-
Father, Stepfather, Boyfriend, or Male Roommates Provides Unsupervised Childcare to a Child < 3 years												
Yes	1.31	(0.89,1.93)	0.26	0.18	0.81	(0.54,1.20)	0.16	0.28	1.39	(0.93,2.06)	0.28	0.11
No	0.85	(0.64,1.12)	0.12	0.24	0.95	(0.71,1.27)	0.14	0.72	0.98	(0.72,1.33)	0.15	0.89
N/A	1	-	-	-	1	-	-	-	1	-	-	-
Father, Stepfather, Boyfriend, or Male Roommates is Employed												
Yes	0.91	(0.67,1.23)	0.14	0.53	0.99	(0.73,1.35)	0.16	0.96	0.86	(0.63,1.18)	0.14	0.35
No	0.96	(0.72,1.29)	0.14	0.8	1.25	(0.91,1.70)	0.2	0.16	1.15	(0.83,1.58)	0.19	0.4
N/A	1	-	-	-	1	-	-	-	1	-	-	-
Risk Level												
High	1.64	(1.03,2.61)	0.39	0.04	1.41	(0.95,2.08)	0.28	0.09	2.19	(1.52,3.14)	0.4	<.01
Moderate	1.53	(1.03,2.27)	0.31	0.03	1.3	(0.95,1.78)	0.21	0.1	1.52	(1.16,1.99)	0.21	<.01
Low	1	-	-	-	1	-	-	-	1	-	-	-
Special Education												
Yes	0.98	(0.80,1.21)	0.1	0.88	1.07	(0.88,1.29)	0.1	0.5	0.97	(0.80,1.18)	0.09	0.78
No	1	-	-	-	1	-	-	-	1	-	-	-
Primary Home Language												
Other	0.72	(0.52,1.00)	0.12	0.05	0.67	(0.50,0.91)	0.1	0.01	0.58	(0.44,0.78)	0.08	<.01
English	1	-	-	-	1	-	-	-	1	-	-	-
Homeless (McKinney-Vento)												
Yes	1.24	(1.02,1.52)	0.13	0.03	1.29	(1.05,1.58)	0.13	0.02	1.27	(1.03,1.56)	0.14	0.03
No	1	-	-	-	1	-	-	-	1	-	-	-
Free/Reduced Price Lunch												
Yes	1.52	(1.14,2.01)	0.22	<.01	1.32	(1.04,1.67)	0.16	0.02	0.97	(0.78,1.22)	0.11	0.82
No	1	-	-	-	1	-	-	-	1	-	-	-
Number of prior disciplinary events	1.03	(1.00,1.07)	0.02	0.05	0.99	(0.96,1.03)	0.02	0.62	1	(0.97,1.03)	0.02	0.75

**TABLE D5.
RISK AND PROTECTIVE FACTORS FOR MALTREATMENT RECURRENCE**

	2014				2015				2016			
Model 1- Child Characteristics, Index Case Characteristics, Multisystem Involvement, & Family Characteristics (SDM)												
	OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value
Sex												
Female	1	-	-	-	1	-	-	-	1	-	-	-
Male	0.82	(0.54,1.22)	0.17	0.32	0.88	(0.64,1.21)	0.14	0.44	0.9	(0.71,1.14)	0.11	0.39
Race												
White	1	-	-	-	1	-	-	-	1	-	-	-
Black	0.84	(0.48,1.47)	0.24	0.54	1.23	(0.78,1.93)	0.28	0.37	1.72	(1.23,2.38)	0.29	<.01
AI/AN	1.03	(0.54,1.96)	0.34	0.94	1.43	(0.87,2.37)	0.37	0.16	2.1	(1.42,3.10)	0.42	<.01
Asian	1.17	(0.31,4.44)	0.8	0.81	0.72	(0.23,2.26)	0.42	0.58	0.86	(0.35,2.07)	0.39	0.73
Multi-racial	1.01	(0.50,2.01)	0.35	0.99	0.83	(0.46,1.51)	0.25	0.54	1.34	(0.85,2.11)	0.31	0.21
Hispanic												
Yes	1.01	(0.54,1.86)	0.32	0.98	1.31	(0.83,2.06)	0.3	0.24	1.35	(0.94,1.93)	0.25	0.11
No	1	-	-	-	1	-	-	-	1	-	-	-
Age at index report	0.95	(0.90,1.01)	0.03	0.11	0.92	(0.88,0.96)	0.02	<.01	1.01	(0.98,1.04)	0.01	0.64
Services needed and received												
Needed & received cm	1.4	(0.52,3.80)	0.71	0.51	1.87	(1.05,3.34)	0.55	0.03	1.23	(0.87,1.75)	0.22	0.24
Needed but no cm	2.48	(0.89,6.88)	1.29	0.08	1.68	(0.91,3.10)	0.52	0.1	1.56	(1.08,2.26)	0.3	0.02
Not needed & received cm	3.84	(0.40,36.78)	4.43	0.24	2.31	(0.63,8.47)	1.53	0.21	2.4	(1.28,4.49)	0.77	0.01
Not needed & no cm	1	-	-	-	1	-	-	-	1	-	-	-
Imminent danger												
Yes	1.13	(0.55,2.34)	0.42	0.74	-	-	-	-	6.91	(1.72,27.83)	4.91	0.01
No	1	-	-	-	1	-	-	-	1	-	-	-
Allegation at index report												
Neglect (not medical neglect)	0.89	(0.37,2.10)	0.39	0.78	0.56	(0.32,0.96)	0.15	0.04	0.69	(0.46,1.02)	0.14	0.06
Physical abuse	0.3	(0.11,0.80)	0.15	0.02	1.02	(0.61,1.71)	0.27	0.94	0.81	(0.55,1.20)	0.16	0.29
Sexual abuse	0.76	(0.31,1.86)	0.35	0.55	0.57	(0.29,1.14)	0.2	0.11	0.38	(0.22,0.65)	0.1	<.01
Relationship of offender to victim at index												
Parent	1.55	(0.63,3.79)	0.71	0.34	3.27	(1.70,6.29)	1.09	<.01	1.24	(0.79,1.96)	0.29	0.35
Unmarried partner of parent	1.74	(0.81,3.75)	0.68	0.15	3.83	(2.26,6.48)	1.03	<.01	2.07	(1.34,3.19)	0.46	<.01
Friends and Neighbors	0.62	(0.07,5.46)	0.69	0.67	3.01	(0.90,10.06)	1.85	0.07	0.59	(0.20,1.72)	0.32	0.33
Number of prior CPS reports	1.1	(0.85,1.43)	0.15	0.45	1.29	(1.00,1.67)	0.17	0.05	0.99	(0.80,1.23)	0.11	0.94
Number of prior substantiated reports	1.15	(0.78,1.70)	0.23	0.47	0.92	(0.62,1.36)	0.18	0.67	1.14	(0.84,1.54)	0.18	0.41
Concurrent CMH case												
Yes	2.87	(1.20,6.83)	1.27	0.02	2.54	(1.11,5.78)	1.07	0.03	0.53	(0.18,1.57)	0.29	0.25
No	1	-	-	-	1	-	-	-	1	-	-	-
History of CPS OHP												
Yes	1.1	(0.59,2.03)	0.34	0.77	1.47	(0.85,2.55)	0.41	0.17	1.56	(0.96,2.52)	0.38	0.07
No	1	-	-	-	1	-	-	-	1	-	-	-

	2014				2015				2016			
	OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value
Number of Children in the Home												
Two or More	1.06	(0.63,1.80)	0.29	0.82	2.17	(1.38,3.39)	0.5	0	0.93	(0.68,1.27)	0.15	0.64
One	1	-	-	-	1	-	-	-	1	-	-	-
Either Care Has a History of Domestic Violence												
Yes	0.21	(1.45,1.43)	-0.28	0.61	1.47	(1.02,2.10)	0.27	0.04	0.13	(1.24,1.23)	-0.35	0.73
No	1	-	-	-	1	-	-	-	1	-	-	-
Either Care Has/Had an Alcohol or Drug Problem During the Last 12 Months												
Yes	0.08	(0.51,1.70)	-4.67	0.2	0.65	(0.45,0.95)	0.12	0.03	0.15	(1.45,1.54)	0.72	0.84
No	1	-	-	-	1	-	-	-	1	-	-	-
Primary Caregiver Has/Had Mental Health Problem												
Yes	0.26	(1.81,6.83)	0.66	0.74	0.93	(0.65,1.32)	0.17	0.68	0.17	(1.62,1.57)	1.66	0.96
No	1	-	-	-	1	-	-	-	1	-	-	-
Either Caregiver was Abused as a Child												
Yes	0.32	(2.25,2.03)	1.86	0.98	1.33	(0.95,1.88)	0.23	0.1	0.17	(1.66,2.52)	1.83	0.98
No	1	-	-	-	1	-	-	-	1	-	-	-
Either Caregiver's Parenting Style is Over-Controlling												
Yes	0.37	(2.03,1.80)	-0.27	0.39	0.41	(0.19,0.88)	0.16	0.02	0.27	(1.65,1.27)	-0.26	0.52
No	1	-	-	-	1	-	-	-	1	-	-	-
Child in the Home Has a Developmental Disability/ Emotional Impairment												
Developmental Disability and Delinquency	0.77	(0.15,3.87)	0.63	0.75	2.68	(1.20,5.96)	1.09	0.02	2.18	(1.11,4.28)	0.75	0.02
History of Delinquency	0.42	(0.05,3.37)	0.45	0.42	1.14	(0.25,5.28)	0.89	0.87	1.07	(0.49,2.33)	0.43	0.87
Developmental Disability	1.15	(0.71,1.84)	0.28	0.57	1.05	(0.71,1.57)	0.22	0.8	1.04	(0.76,1.44)	0.17	0.8
No	1	-	-	-	1	-	-	-	1	-	-	-
Alleged Offender is an Un-married Partner of Primary Caregiver												
Yes	0.41	(0.21,0.80)	0.14	0.01	0.69	(0.45,1.06)	0.15	0.09	1.06	(0.80,1.41)	0.15	0.68
No	1	-	-	-	1	-	-	-	1	-	-	-
Father, Stepfather, Boy-friend, or Male Roommates Provides Unsupervised Childcare to a Child < 3 years												
Yes	0.58	(0.26,1.30)	0.24	0.19	1.21	(0.56,2.60)	0.47	0.63	1.03	(0.60,1.76)	0.28	0.93
No	0.89	(0.47,1.71)	0.3	0.73	1.4	(0.71,2.75)	0.48	0.33	1.03	(0.64,1.65)	0.25	0.91
N/A	1	-	-	-	1	-	-	-	1	-	-	-
Father, Stepfather, Boy-friend, or Male Roommates is Employed												
Yes	1.67	(0.86,3.22)	0.56	0.13	1.26	(0.64,2.48)	0.44	0.5	1.02	(0.63,1.66)	0.25	0.93
No	0	(0.00,0.00)	0	0	1.25	(0.65,2.39)	0.41	0.51	1.11	(0.69,1.78)	0.27	0.68
N/A	1	-	-	-	1	-	-	-	1	-	-	-

	2014				2015				2016			
	OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value
Risk Level												
High	1.39	(0.26,7.49)	1.19	0.7	0.79	(0.21,2.97)	0.53	0.73	2.66	(0.91,7.81)	1.46	0.07
Moderate	0.77	(0.15,4.00)	0.65	0.76	1	(0.28,3.60)	0.65	0.99	2.29	(0.80,6.53)	1.22	0.12
Low	1	-	-	-	1	-	-	-	1	-	-	-
Model 1.1 -Child Characteristics, Index Case Characteristics, Multisystem Involvement, Family Characteristics (SDM) & Risk Reassessment (SDM)												
	OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value
Sex												
Female	1	-	-	-	1	-	-	-	1	-	-	-
Male	0.91	(0.54,1.53)	0.24	0.72	0.83	(0.56,1.24)	0.17	0.37	0.99	(0.72,1.37)	0.16	0.97
Hispanic												
Yes	0.92	(0.40,2.11)	0.39	0.84	1.28	(0.70,2.32)	0.39	0.42	1.13	(0.68,1.87)	0.29	0.64
No	1	-	-	-	1	-	-	-	1	-	-	-
Race												
White	1	-	-	-	1	-	-	-	1	-	-	-
Black	1.16	(0.59,2.29)	0.4	0.67	1.21	(0.67,2.17)	0.36	0.52	1.67	(1.08,2.57)	0.37	0.02
AI/AN	0.93	(0.42,2.03)	0.37	0.85	1.96	(1.04,3.67)	0.63	0.04	1.76	(1.05,2.96)	0.47	0.03
Asian					0.83	(0.25,2.76)	0.51	0.76	0.48	(0.11,2.13)	0.37	0.34
Multi-racial	1.03	(0.41,2.56)	0.48	0.95	0.94	(0.45,1.96)	0.35	0.88	1.54	(0.83,2.86)	0.49	0.17
Age at index report	1.02	(0.95,1.08)	0.03	0.63	0.96	(0.92,1.01)	0.02	0.16	0.97	(0.93,1.01)	0.02	0.15
Number of Children												
One	1	-	-	-	1	-	-	-	1	-	-	-
Two or three	1.12	(0.62,2.03)	0.34	0.7	1.09	(0.63,1.88)	0.3	0.76	1.32	(0.86,2.03)	0.29	0.2
Four or more	0.35	(0.13,0.93)	0.18	0.04	2.13	(1.14,3.95)	0.67	0.02	0.93	(0.55,1.56)	0.25	0.77
Age of primary caregiver												
30 or older	1	-	-	-	1	-	-	-	1	-	-	-
29 or younger	0.61	(0.32,1.18)	0.21	0.15	0.74	(0.45,1.22)	0.19	0.24	0.59	(0.39,0.89)	0.12	0.01
Alcohol and drug problem from either caregiver												
Yes	1.53	(0.75,3.12)	0.55	0.24	0.54	(0.32,0.93)	0.15	0.02	0.83	(0.54,1.29)	0.18	0.4
No	1	-	-	-	1	-	-	-	1	-	-	-
Domestic violence since last assessment/reassessment												
Yes	0.88	(0.37,2.06)	0.38	0.76	1.16	(0.60,2.24)	0.39	0.66	1.51	(0.89,2.58)	0.41	0.13
No	1	-	-	-	1	-	-	-	1	-	-	-
Number of Workers												
1	1	-	-	-	1	-	-	-	1	-	-	-
2	2.22	(1.22,4.06)	0.68	0.01	0.77	(0.47,1.27)	0.2	0.31	0.94	(0.63,1.42)	0.19	0.75
3	1.89	(0.82,4.35)	0.8	0.14	0.64	(0.27,1.50)	0.28	0.3	1.52	(0.90,2.56)	0.4	0.11
4+	2.45	(0.91,6.64)	1.24	0.08	1.56	(0.70,3.46)	0.63	0.28	0.81	(0.34,1.91)	0.36	0.63
Risk Level												
High	1.22	(0.48,3.14)	0.59	0.68	3.4	(1.79,6.47)	1.12	0	2.03	(1.21,3.48)	0.54	0.01
Moderate	1.31	(0.66,2.60)	0.46	0.44	1.78	(1.03,3.09)	0.5	0.04	1.66	(1.10,2.49)	0.34	0.02
Low	1	-	-	-	1	-	-	-	1	-	-	-

	2014				2015				2016			
Model 1.2 - Child Characteristics, Index Case Characteristics, Multisystem Involvement, Family Characteristics (SDM) & Strengths and Needs (SDM)												
	OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value
Sex												
Female	1	-	-	-	1	-	-	-	1	-	-	-
Male	0.55	(0.17,1.82)	0.34	0.33	0.49	(0.15,1.61)	0.3	0.24	1.23	(0.58,2.60)	0.47	0.59
Hispanic												
Yes	0.35	(0.03,3.84)	0.42	0.39	-	-	-	-				
No	1	-	-	-	1	-	-	-	1	-	-	-
Race												
White	1	-	-	-	1	-	-	-	1	-	-	-
Black	0.35	(0.09,1.38)	0.24	0.13	0.24	(0.07,0.86)	0.16	0.03	4.98	(1.72,14.39)	2.7	0
AI/AN	0.24	(0.02,2.40)	0.28	0.23	0.49	(0.04,5.63)	0.61	0.57	2.28	(0.38,13.81)	2.1	0.37
Asian	0.78	(0.06,10.87)	1.04	0.85	0.52	(0.07,4.00)	0.54	0.53	-	-	-	-
Multi-racial	3.7	(0.46,29.86)	3.94	0.22	-	-	-	-	8.89	(2.07,38.21)	6.61	<.01
Age at index report	0.93	(0.81,1.07)	0.07	0.33	1.16	(1.04,1.30)	0.07	0.01	0.1	(0.01,0.94)	0.11	0.04
Household Relationships/ Domestic Violence												
Supportive	1	-	-	-	1	-	-	-	1	-	-	-
Minor or occasional discord	0.61	(0.10,3.66)	0.56	0.59	0.76	(0.12,4.73)	0.71	0.77	2.68	(0.72,10.01)	1.8	0.14
Frequent discord or some domestic violence	1.55	(0.26,9.18)	1.41	0.63	0.56	(0.08,3.73)	0.54	0.55	4.36	(1.05,18.06)	3.16	0.04
Chronic discord or se- vere domestic violence	0.49	(0.04,6.85)	0.66	0.6	-	-	-	-	10.73	(2.34,49.22)	8.34	<.01
Model 2 - Child Characteristics, Index Case Characteristics, Multisystem Involvement, & Family Characteristics (SDM) & Education												
	OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value
Sex												
Female	1	-	-	-	1	-	-	-	1	-	-	-
Male	0.65	(0.39,1.10)	0.17	0.11	0.74	(0.47,1.16)	0.17	0.19	0.74	(0.54,1.01)	0.12	0.06
Race												
White	1	-	-	-	1	-	-	-	1	-	-	-
Black	0.84	(0.42,1.67)	0.3	0.62	0.83	(0.45,1.53)	0.26	0.55	1.45	(0.96,2.21)	0.31	0.08
AI/AN	0.92	(0.42,2.01)	0.37	0.83	1.05	(0.53,2.10)	0.37	0.88	1.53	(0.91,2.57)	0.4	0.11
Asian	2.75	(0.54,14.15)	2.3	0.23	1.83	(0.45,7.51)	1.32	0.4	1.04	(0.33,3.25)	0.6	0.95
Pacific Islander	-	-	-	-	-	-	-	-	-	-	-	-
Multi-racial	0.47	(0.16,1.36)	0.25	0.16	0.51	(0.22,1.20)	0.22	0.13	1.16	(0.64,2.10)	0.35	0.62
Hispanic												
Yes	1.13	(0.47,2.70)	0.5	0.79	1.72	(0.91,3.28)	0.57	0.1	1.51	(0.91,2.51)	0.39	0.11
No	1	-	-	-	1	-	-	-	1	-	-	-
Age at index report	0.89	(0.82,0.97)	0.04	0.01	0.85	(0.79,0.92)	0.03	<.01	0.95	(0.91,1.00)	0.02	0.04
Services needed and received												
Needed & received cm	1.11	(0.34,3.67)	0.68	0.86	1.9	(0.83,4.32)	0.8	0.13	1.31	(0.84,2.04)	0.3	0.23
Needed but no cm	2.1	(0.63,7.05)	1.3	0.23	1.35	(0.57,3.19)	0.59	0.49	1.63	(1.02,2.59)	0.39	0.04
Not needed & received cm	4.27	(0.32,57.78)	5.68	0.28	1.68	(0.28,10.18)	1.54	0.57	2.65	(1.28,5.49)	0.98	0.01
Not needed & no cm	1	-	-	-	1	-	-	-	1	-	-	-

	2014				2015				2016			
	OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value
Imminent danger												
Yes	1.63	(0.61,4.33)	0.81	0.33	--	-	-	-	32.21	(4.97,208.54)	30.69	<.01
No	1	-	-	-	1	-	-	-	1	-	-	-
Allegation at index report												
Neglect (not medical neglect)	1.26	(0.46,3.49)	0.66	0.65	0.51	(0.23,1.11)	0.2	0.09	0.98	(0.58,1.67)	0.26	0.94
Physical abuse	0.22	(0.06,0.78)	0.14	0.02	0.77	(0.37,1.61)	0.29	0.49	0.67	(0.40,1.14)	0.18	0.14
Sexual abuse	0.48	(0.16,1.46)	0.27	0.2	0.31	(0.12,0.82)	0.15	0.02	0.34	(0.17,0.67)	0.12	<.01
Relationship of offender to victim at index												
Parent	1.17	(0.40,3.46)	0.65	0.78	3.35	(1.43,7.84)	1.45	0.01	1.04	(0.60,1.81)	0.29	0.9
Unmarried partner of parent	1.05	(0.41,2.73)	0.51	0.91	4.98	(2.44,10.16)	1.81	<.01	2.47	(1.45,4.21)	0.67	<.01
Friends and Neighbors	-	-	-	-	1.66	(0.23,11.94)	1.67	0.61	0.62	(0.18,2.19)	0.4	0.46
Number of prior CPS reports	1.2	(0.91,1.60)	0.17	0.2	1.21	(0.88,1.66)	0.19	0.24	0.94	(0.73,1.20)	0.12	0.6
Number of prior substantiated reports	1	(0.66,1.54)	0.22	0.98	1.09	(0.69,1.72)	0.26	0.72	1.2	(0.85,1.69)	0.21	0.29
Concurrent CMH case												
Yes	3.38	(1.30,8.84)	1.66	0.01	3.08	(1.22,7.77)	1.45	0.02	0.51	(0.17,1.55)	0.29	0.24
No	1	-	-	-	1	-	-	-	1	-	-	-
History of CPS OHP												
Yes	0.99	(0.49,2.01)	0.36	0.97	1.17	(0.58,2.36)	0.42	0.66	1.69	(0.98,2.90)	0.47	0.06
No	1	-	-	-	1	-	-	-	1	-	-	-
Number of Children in the Home												
Two or More	0.7	(0.35,1.42)	0.25	0.33	2.33	(1.18,4.61)	0.81	0.02	0.92	(0.59,1.45)	0.21	0.73
One	1	-	-	-	1	-	-	-	1	-	-	-
Either Care Has a History of Domestic Violence												
Yes	0.85	(0.49,1.47)	0.24	0.55	0.91	(0.55,1.50)	0.23	0.7	0.86	(0.61,1.21)	0.15	0.38
No	1	-	-	-	1	-	-	-	1	-	-	-
Either Care Has/Had an Alcohol or Drug Problem During the Last 12 Months												
Yes	0.25	(0.14,0.47)	0.08	<.01	0.67	(0.39,1.15)	0.18	0.15	1.05	(0.74,1.49)	0.19	0.8
No	1	-	-	-	1	-	-	-	1	-	-	-
Primary Caregiver Has/Had Mental Health Problem												
Yes	0.98	(0.57,1.70)	0.28	0.95	0.86	(0.53,1.40)	0.21	0.55	1.32	(0.94,1.85)	0.23	0.11
No	1	-	-	-	1	-	-	-	1	-	-	-
Either Caregiver was Abused as a Child												
Yes	1.54	(0.91,2.62)	0.42	0.11	1.19	(0.73,1.94)	0.3	0.48	1.4	(0.99,1.97)	0.25	0.06
No	1	-	-	-	1	-	-	-	1	-	-	-
Either Caregiver's Parenting Style is Over-Controlling												
Yes	0.4	(0.12,1.32)	0.24	0.13	0.56	(0.23,1.37)	0.26	0.21	1.52	(0.80,2.90)	0.5	0.21
No	1	-	-	-	1	-	-	-	1	-	-	-

	2014				2015				2016			
	OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value
Child in the Home Has a Developmental Disability/ Emotional Impairment												
Developmental Disability and Delinquency	0.65	(0.11,3.91)	0.59	0.64	3.01	(1.09,8.32)	1.56	0.03	1.9	(0.89,4.04)	0.73	0.1
History of Delinquency	0.44	(0.05,3.89)	0.49	0.46	0.87	(0.10,7.43)	0.95	0.9	1.22	(0.51,2.96)	0.55	0.65
Developmental Disability	1.11	(0.61,2.02)	0.34	0.74	0.77	(0.44,1.33)	0.22	0.35	1.14	(0.77,1.69)	0.23	0.52
No	1	-	-	-	1	-	-	-	1	-	-	-
Alleged Offender is an Unmarried Partner of Primary Caregiver												
Yes	0.55	(0.24,1.22)	0.22	0.14	0.6	(0.31,1.16)	0.2	0.13	0.87	(0.59,1.28)	0.17	0.47
No	1	-	-	-	1	-	-	-	1	-	-	-
Father, Stepfather, Boy-friend, or Male Roommates Provides Unsupervised Childcare to a Child < 3 years												
Yes	0.38	(0.13,1.08)	0.2	0.07	0.99	(0.32,3.04)	0.57	0.98	1.25	(0.63,2.48)	0.44	0.52
No	0.71	(0.31,1.60)	0.3	0.41	1.45	(0.55,3.79)	0.71	0.45	1.44	(0.80,2.58)	0.43	0.22
N/A	1	-	-	-	1	-	-	-	1	-	-	-
Father, Stepfather, Boy-friend, or Male Roommates is Employed												
Yes	1.27	(0.49,3.29)	0.62	0.63	0.99	(0.37,2.63)	0.49	0.98	0.88	(0.49,1.59)	0.26	0.68
No	3.25	(1.41,7.47)	1.38	0.01	1.46	(0.58,3.71)	0.69	0.43	0.79	(0.43,1.43)	0.24	0.43
N/A	1	-	-	-	1	-	-	-	1	-	-	-
Risk Level												
High	1.69	(0.16,18.37)	2.06	0.67	0.74	(0.17,3.16)	0.55	0.68	1.91	(0.61,6.03)	1.12	0.27
Moderate	0.73	(0.07,7.66)	0.88	0.79	0.52	(0.13,2.10)	0.37	0.36	1.72	(0.57,5.17)	0.97	0.33
Low	1	-	-	-	1	-	-	-	1	-	-	-
Special Education												
Yes	0.86	(0.47,1.58)	0.27	0.63	1.29	(0.77,2.15)	0.34	0.34	1.19	(0.84,1.68)	0.21	0.33
No	1	-	-	-	1	-	-	-	1	-	-	-
Primary Home Language												
Other	0.84	(0.29,2.38)	0.45	0.74	0.86	(0.36,2.06)	0.38	0.74	0.67	(0.33,1.33)	0.24	0.25
English	1	-	-	-	1	-	-	-	1	-	-	-
Homeless (McKinney-Vento)												
Yes	1.04	(0.61,1.79)	0.29	0.88	0.95	(0.57,1.59)	0.25	0.85	1.24	(0.86,1.77)	0.23	0.24
No	1	-	-	-	1	-	-	-	1	-	-	-
Free/Reduced Price Lunch												
Yes	1.67	(0.61,4.61)	0.86	0.32	1.95	(0.90,4.24)	0.77	0.09	1.32	(0.78,2.24)	0.36	0.3
No	1	-	-	-	1	-	-	-	1	-	-	-

TABLE D6. RISK AND PROTECTIVE FACTORS FOR FOSTER CARE RE-ENTRY

		All Years (2014-2016)			
Model 1 - Child Characteristics					
	OR	95% CI	se	p-value	
Sex					
Female	1	-	-	-	
Male	1.23	(0.83,1.82)	0.24	0.3	
Race					
White	1	-	-	-	
Black	1.17	(0.68,2.02)	0.33	0.57	
AI/AN	1.74	(0.99,3.07)	0.5	0.06	
Asian	0.25	(0.03,1.95)	0.26	0.19	
Multi-racial	1.23	(0.65,2.35)	0.41	0.53	
Hispanic					
Yes	0.77	(0.42,1.41)	0.24	0.39	
No	1	-	-	-	
Age at index report	1.02	(0.98,1.06)	0.02	0.45	
Model 2 - Child Characteristics & Index Case Characteristics					
	OR	95% CI	se	p-value	
Sex					
Female	1	-	-	-	
Male	1.2	(0.80,1.81)	0.25	0.38	
Race					
White	1	-	-	-	
Black	1.31	(0.74,2.30)	0.38	0.36	
AI/AN	1.57	(0.86,2.86)	0.48	0.15	
Asian	0.19	(0.02,1.49)	0.2	0.11	
Multi-racial	1	(0.51,1.95)	0.34	1	
Hispanic					
Yes	0.78	(0.42,1.47)	0.25	0.45	
No	1	-	-	-	
Age at index report	1.02	(0.97,1.06)	0.02	0.46	
Time in index continuous placement					
1-30 days	7.19	(3.02,7.07)	3.17	<.01	
31-180 days	1.69	(0.97,2.95)	0.48	0.06	
181 days to 365 days	1.18	(0.70,1.98)	0.31	0.53	
366 days or more	1	-	-	-	
Home Trial Vist					
Yes	0.32	(0.19,0.55)	0.09	<.01	
No	1	-	-	-	
Reason for Removal					
Child's behavior problem - delinquency	3.12	(0.85,1.42)	2.07	0.09	
Allegation of Neglect (not medical neglect)	1.3	(0.66,2.52)	0.44	0.45	
Allegation of Physical abuse	0.64	(0.36,1.14)	0.19	0.13	
Allegation of Sexual abuse	0.33	(0.13,0.87)	0.16	0.02	

	All Years (2014-2016)			
	OR	95% CI	se	p-value
Reporter type				
Human and social service staff	1.19	(0.63,2.23)	0.38	0.6
Family and friends	2.11	(1.16,3.84)	0.64	0.02
Other professional	1	-	-	-
Anonymous/other	2.33	(1.26,4.31)	0.73	0.01
Model 3 - Child Characteristics & Multi-system involvement				
	OR	95% CI	se	p-value
Sex				
Female	1	-	-	-
Male	1.21	(0.82,1.80)	0.24	0.33
Race				
White	1	-	-	-
Black	1.11	(0.64,1.92)	0.31	0.71
AI/AN	1.6	(0.90,2.83)	0.47	0.11
Asian	0.23	(0.03,1.79)	0.24	0.16
Multi-racial	1.07	(0.55,2.07)	0.36	0.85
Hispanic				
Yes	0.78	(0.43,1.44)	0.24	0.43
No	1	-	-	-
Age at index report	1	(0.96,1.04)	0.02	0.97
Number of prior continuous placements	1.64	(1.13,2.40)	0.32	0.01
Model 4 - Child Characteristics & Family Characteristics (SDM)				
	OR	95% CI	se	p-value
Sex				
Female	1	-	-	-
Male	1.17	(0.79,1.74)	0.24	0.43
Race				
White	1	-	-	-
Black	1.16	(0.67,2.01)	0.32	0.59
AI/AN	1.71	(0.96,3.03)	0.5	0.07
Asian	0.3	(0.04,2.37)	0.32	0.26
Multi-racial	1.27	(0.66,2.43)	0.42	0.47
Hispanic				
Yes	0.81	(0.44,1.49)	0.25	0.51
No	1	-	-	-
Age at index report	1	(0.96,1.05)	0.02	0.9
Father, Stepfather, Boyfriend, or Male Roommates Provides Unsupervised Childcare to a Child < 3 years				
Yes	0.59	(0.34,1.02)	0.16	0.06
No	1.04	(0.64,1.67)	0.25	0.88
N/A	1	-	-	-

Model 4.1 - Child Characteristics & Risk Reassessment (SDM)

	OR	95% CI	se	p-value
Sex				
Female	1	-	-	-
Male	1.16	(0.69,1.96)	0.31	0.58
Hispanic				
Yes	0.48	(0.19,1.21)	0.23	0.12
No	1	-	-	-
Race				
White	1	-	-	-
Black	1.02	(0.51,2.05)	0.36	0.95
AI/AN	1.12	(0.51,2.45)	0.45	0.78
Asian	0.51	(0.06,4.29)	0.55	0.54
Multi-racial	1	(0.37,2.68)	0.5	1
Age at index report	1.02	(0.96,1.07)	0.03	0.59
Final Risk Score				
Low	1	-	-	-
Moderate	3.57	(1.70,7.52)	1.36	<.01
High	2.63	(1.13,6.12)	1.13	0.03
Number of Workers				
1	1	-	-	-
2	1.22	(0.66,2.26)	0.38	0.52
3	0.78	(0.33,1.85)	0.34	0.58
4+	3.29	(1.33,8.12)	1.52	0.01

Model 4.2 - Child Characteristics & Strength and Needs (SDM)

	OR	95% CI	se	p-value
Sex				
Female	1	-	-	-
Male	0.47	(0.10,2.27)	0.38	0.35
Hispanic				
Yes	1	-	-	-
No	53.2	(1.57,1797.16)	95.54	0.03
Race				
White	1	-	-	-
Black	1.43	(0.26,7.98)	1.25	0.69
AI/AN	0.2	(0.02,2.58)	0.26	0.22
Asian	0.51	(0.01,25.15)	1.02	0.74
Multi-racial	0.16	(0.01,2.29)	0.22	0.18
Age at index report	1.17	(1.01,1.37)	0.09	0.04

	All Years (2014-2016)			
Resource Management/Basic Needs				
Resources are sufficient to meet basic needs and are adequately managed	1	-	-	-
Resources may be limited but are adequately managed	0.44	(0.05,3.67)	0.48	0.45
Resources are insufficient or not well managed	0.05	(0.00,1.09)	0.07	0.06
No resources, or resources are severely limited and/or mismanaged..	-	-	-	-
	OR	95% CI	se	p-value
Parenting Skills				
Strong skills	1	-	-	-
Adequately parents and protects child	-	-	-	-
Some difficulty parenting and protecting the child	0.2	(0.04,1.01)	0.16	0.05
Significant difficulty parenting and protecting the child	--	--	--	--
Model 5 - Child Characteristics & Education				
	OR	95% CI	se	p-value
Sex				
Female	1	-	-	-
Male	0.42	(0.23,0.78)	0.13	0.01
Race				
White	1	-	-	-
Black	1.45	(0.56,3.72)	0.7	0.44
AI/AN	4.24	(1.67,10.77)	2.02	<.01
Asian	1.67	(0.16,17.23)	1.99	0.67
Multi-racial	3.02	(1.08,8.44)	1.58	0.04
Hispanic				
Yes	2.13	(0.88,5.19)	0.97	0.1
No	1	-	-	-
Age at index report	0.94	(0.86,1.03)	0.04	0.2
Primary Home Language				
Other	0.19	(0.04,0.91)	0.15	0.04
English	1	-	-	-
Number of prior disciplinary events	1.17	(1.08,1.02)	0.05	<.01

**TABLE D7.
RISK AND PROTECTIVE FACTORS FOR MALTREATMENT RE-REPORTING
BY RACE AND ETHNICITY**

	White				Black				Alaskan Native/American Indian			
Model 1- Child Characteristics, Index Case Characteristics, Multisystem Involvement, & Family Characteristics Risk Assessment (SDM)												
	OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value
Sex												
Female	1	-	-	-	1	-	-	-	1	-	-	-
Male	0.93	(0.81,1.07)	0.06	0.31	1.03	(0.93,0.15)	0.06	0.53	0.98	(0.79,1.21)	0.11	0.87
Race												
White	-	-	-	-	-	-	-	-	-	-	-	-
Black	-	-	-	-	-	-	-	-	-	-	-	-
AI/AN	-	-	-	-	-	-	-	-	-	-	-	-
Asian	-	-	-	-	-	-	-	-	-	-	-	-
Multi-racial	-	-	-	-	-	-	-	-	-	-	-	-
Hispanic												
Yes	0.89	(0.77,1.04)	0.07	0.15	1.08	(0.76,1.53)	0.19	0.66	1.09	(0.83,1.43)	0.15	0.55
No	1	-	-	-	1	-	-	-	1	-	-	-
Age at index report	0.98	(0.96,1.00)	0.01	0.03	0.99	(0.97,1.00)	0.01	0.1	0.96	(0.93,1.99)	0.02	0.02
Mandated Reporter type												
Mandated	1.09	(0.77,1.55)	0.19	0.61	0.76	(0.59,0.98)	0.1	0.04	0.81	(0.48,1.37)	0.22	0.43
Non-mandated	1	-	-	-	1	-	-	-	1	-	-	-
Reporter type												
Human and social service staff	0.99	(0.78,1.25)	0.12	0.91	0.93	(0.78,1.12)	0.09	0.47	0.98	(0.71,1.37)	0.16	0.92
Family and friends	1.23	(0.84,1.81)	0.24	0.28	1.01	(0.75,1.35)	0.15	0.95	1.08	(0.61,1.92)	0.32	0.79
Other professional	1	-	-	-	1	-	-	-	1	-	-	-
Anonymous/other	1.13	(0.88,1.46)	0.14	0.32	1.14	(0.93,1.39)	0.12	0.2	1.06	(0.67,1.66)	0.24	0.81
Alleged victim	-	-	-	-	0.23	(0.03,1.82)	0.24	0.16	-	-	-	-
Alleged offender	-	-	-	-	-	-	-	-	-	-	-	-
Services needed and received												
Needed & received cm	1.16	(0.94,1.43)	0.12	0.17	1.09	(0.93,1.27)	0.09	0.29	0.8	(0.59,1.09)	0.13	0.15
Needed but no cm	2.04	(1.38,3.02)	0.41	0	1.19	(0.88,1.62)	0.19	0.26	0.66	(0.42,1.04)	0.15	0.08
Not needed & received cm	1.42	(1.09,1.84)	0.19	0.01	1.07	(0.87,1.32)	0.12	0.53	1.66	(1.14,0.42)	0.32	0.01
Not needed & no cm	1	-	-	-	1	-	-	-	1	-	-	-
Allegation at index report												
Neglect (not medical neglect)	1.02	(0.81,1.29)	0.12	0.85	0.95	(0.79,1.15)	0.09	0.61	1.09	(0.72,1.65)	0.23	0.68
Physical abuse	1.16	(0.93,1.45)	0.13	0.19	0.97	(0.81,1.16)	0.09	0.73	1.21	(0.83,1.76)	0.23	0.32
Sexual abuse	0.91	(0.70,1.19)	0.12	0.49	0.74	(0.58,0.93)	0.09	0.01	1.09	(0.68,1.77)	0.27	0.71
Relationship of offender to victim at index												
Parent	1.08	(0.82,1.42)	0.15	0.59	1.03	(0.84,1.26)	0.11	0.76	1.29	(0.82,2.02)	0.3	0.27
Other relative (non-foster parents)	1.19	(0.83,1.71)	0.22	0.35	0.77	(0.58,1.03)	0.11	0.07	0.71	(0.42,1.20)	0.19	0.2
Unmarried partner of parent	1.27	(0.94,1.71)	0.19	0.12	1.4	(1.12,1.74)	0.16	0	0.86	(0.50,1.46)	0.23	0.57
Number of prior CPS reports	1.22	(1.11,1.34)	0.06	0	1.2	(1.12,1.28)	0.04	0	1.08	(0.97,1.20)	0.06	0.17
History of CMH case												
Yes	1.16	(0.87,1.55)	0.17	0.32	1.31	(1.03,1.66)	0.16	0.03	0.89	(0.51,1.58)	0.26	0.7
No	1	-	-	-	1	-	-	-	1	-	-	-

Asian				Multiracial				Hispanic				Non-Hispanic			
OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value
0.91	(0.56,1.50)	0.23	0.72	0.9	(0.71,1.13)	0.1	0.35	0.91	(0.75,1.12)	0.09	0.39	0.99	(0.92,1.07)	0.04	0.77
-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-
-	-	-	-	-	-	-	-	1.35	(0.92,1.98)	0.26	0.12	1.08	(0.98,1.19)	0.06	0.14
-	-	-	-	-	-	-	-	2.29	(1.68,3.11)	0.36	<.01	1.68	(1.46,1.94)	0.12	<.01
-	-	-	-	-	-	-	-	-	-	-	-	0.67	(0.53,0.85)	0.08	<.01
-	-	-	-	-	-	-	-	1.64	(1.18,2.26)	0.27	<.01	1.31	(1.13,1.51)	0.1	<.01
-	-	-	-	1.09	(0.80,1.48)	0.17	0.6	-	-	-	-	-	-	-	-
-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
0.92	(0.86,0.99)	0.03	0.02	0.96	(0.93,0.99)	0.02	0.02	0.99	(0.97,1.02)	0.01	0.72	0.98	(0.97,0.99)	0.01	<.01
0.15	(0.03,0.65)	0.11	0.01	0.47	(0.25,0.85)	0.14	0.01	0.77	(0.44,1.35)	0.22	0.37	0.78	(0.65,0.94)	0.07	0.01
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
2.07	(0.96,4.49)	0.82	0.07	1.4	(0.99,1.98)	0.25	0.06	1.29	(0.93,1.79)	0.22	0.13	0.99	(0.87,1.12)	0.07	0.83
0.18	(0.03,1.01)	0.16	0.05	0.76	(0.39,1.49)	0.26	0.43	1.34	(0.72,2.49)	0.42	0.36	0.96	(0.77,1.18)	0.1	0.68
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
0.9	(0.31,2.62)	0.49	0.85	0.76	(0.46,1.24)	0.19	0.27	0.86	(0.58,1.27)	0.17	0.44	1.12	(0.96,1.29)	0.08	0.15
-	-	-	-	-	-	-	-	-	-	-	-	0.2	(0.03,1.52)	0.21	0.12
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.16	(0.58,2.31)	0.41	0.68	0.92	(0.66,1.28)	0.16	0.61	0.92	(0.67,1.26)	0.15	0.6	1.07	(0.95,1.19)	0.06	0.28
0.28	(0.03,2.56)	0.31	0.26	0.8	(0.44,1.46)	0.25	0.48	0.99	(0.57,1.71)	0.28	0.97	1.15	(0.93,1.42)	0.12	0.19
5.32	(2.15,13.20)	2.47	<.01	1.3	(0.84,2.02)	0.29	0.25	0.98	(0.67,1.41)	0.18	0.9	1.36	(1.17,1.58)	0.1	<.01
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
0.99	(0.38,2.58)	0.48	0.98	1.4	(0.95,2.08)	0.28	0.09	1.09	(0.77,1.55)	0.19	0.62	1.04	(0.90,1.19)	0.07	0.61
1.05	(0.41,2.66)	0.5	0.92	1.56	(1.09,2.23)	0.29	0.02	1.35	(0.97,1.89)	0.23	0.08	1.08	(0.95,1.23)	0.07	0.22
0.53	(0.15,1.85)	0.34	0.32	1.59	(1.00,2.54)	0.38	0.05	0.87	(0.58,1.32)	0.18	0.52	0.9	(0.76,1.06)	0.07	0.19
0.52	(0.20,1.35)	0.25	0.18	1.63	(1.01,2.65)	0.4	0.05	1.52	(1.02,2.27)	0.31	0.04	1.04	(0.90,1.21)	0.08	0.59
0.32	(0.08,1.29)	0.23	0.11	0.53	(0.27,1.06)	0.19	0.07	1.01	(0.61,1.68)	0.26	0.98	0.77	(0.63,0.96)	0.08	0.02
2.35	(0.69,8.06)	1.48	0.17	1.44	(0.88,2.34)	0.36	0.15	1.91	(1.22,2.97)	0.43	<.01	1.24	(1.05,1.46)	0.11	0.01
1.47	(1.03,2.10)	0.27	0.03	1.07	(0.93,1.23)	0.08	0.35	1.22	(1.07,1.39)	0.08	<.01	1.17	(1.11,1.22)	0.03	<.01
-	-	-	-	1.88	(1.11,3.19)	0.51	0.02	1.21	(0.78,1.87)	0.27	0.41	1.26	(1.06,1.50)	0.11	0.01
-	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-

	White				Black				Alaskan Native/American Indian			
Concurrent CMH case												
Yes	2.12	(1.37,3.26)	0.47	<.01	1.15	(0.74,1.79)	0.26	0.53	2.23	(0.83,5.98)	1.12	0.11
No	1	-	-	-	1	-	-	-	1	-	-	-
CMH case within 12 months after												
Yes	1.47	(1.08,2.00)	0.23	0.01	2.08	(1.59,0.72)	0.29	<.01	1.73	(0.96,3.13)	0.52	0.07
No	1	-	-	-	1	-	-	-	1	-	-	-
History of CPS OHP												
Yes	0.93	(0.65,1.33)	0.17	0.7	1.14	(0.89,1.45)	0.14	0.29	1.73	(0.96,3.13)	0.52	0.07
No	1	-	-	-	1	-	-	-	1	-	-	-
Number of Children in the Home												
Two or More	1.03	(0.87,1.23)	0.09	0.73	1.07	(0.93,1.24)	0.08	0.32	1.2	(0.91,1.59)	0.17	0.19
One	1	-	-	-	1	-	-	-	1	-	-	-
Age of Youngest child												
Two or Younger	0.82	(0.66,1.03)	0.09	0.09	0.97	(0.84,1.12)	0.07	0.66	0.83	(0.62,1.12)	0.12	0.23
Three or Older	1	-	-	-	1	-	-	-	1	-	-	-
Number of Adults in Home												
One or None	1.12	(0.95,1.32)	0.09	0.16	1.12	(1.00,1.26)	0.07	0.06	1.23	(0.97,1.55)	0.15	0.09
Two or More	1	-	-	-	1	-	-	-	1	-	-	-
Age of Primary Caregiver												
29 or younger	0.98	(0.82,1.17)	0.09	0.83	1.23	(1.08,1.40)	0.08	<.01	1.09	(0.84,1.41)	0.14	0.53
30 or older	1	-	-	-	1	-	-	-	1	-	-	-
Either Care Has a History of Domestic Violence												
Yes	1.07	(0.92,1.25)	0.08	0.36	1.07	(0.95,1.21)	0.07	0.24	0.97	(0.77,1.22)	0.11	0.79
No	1	-	-	-	1	-	-	-	1	-	-	-
Either Caregiver Has/Had an Alcohol or Drug Problem During the Last 12 Months												
Yes	0.77	(0.64,0.91)	0.07	<.01	1.07	(0.91,1.24)	0.08	0.42	0.82	(0.63,1.05)	0.11	0.12
No	1	-	-	-	1	-	-	-	1	-	-	-
Primary Caregiver Has/Had Mental Health Problem												
Yes	1.23	(1.04,1.45)	0.1	0.01	1.13	(0.99,1.29)	0.08	0.07	1.45	(1.13,1.84)	0.18	<.01
No	1	-	-	-	1	-	-	-	1	-	-	-
Either Caregiver was Abused as a Child												
Yes	1.29	(1.10,1.51)	0.1	0	1.1	(0.96,1.25)	0.07	0.16	0.85	(0.67,1.09)	0.11	0.2
No	1	-	-	-	1	-	-	-	1	-	-	-
Primary Caregiver Lacks Parenting Skills												
Yes	1.04	(0.88,1.24)	0.09	0.64	1	(0.87,1.15)	0.07	0.98	0.82	(0.62,1.07)	0.11	0.14
No	1	-	-	-	1	-	-	-	1	-	-	-
Child in the Home Has a Developmental Disability/Emotional Impairment												
Developmental Disability and Delinquency	1.19	(0.71,2.00)	0.32	0.51	1.02	(0.70,1.50)	0.2	0.9	1.47	(0.72,2.99)	0.53	0.29
History of Delinquency	1.2	(0.67,2.15)	0.36	0.54	0.75	(0.49,1.17)	0.17	0.21	0.93	(0.49,1.75)	0.3	0.82
Developmental Disability	0.96	(0.80,1.14)	0.09	0.63	1.12	(0.97,1.29)	0.08	0.12	1.02	(0.74,1.41)	0.17	0.9
No	1	-	-	-	1	-	-	-	1	-	-	-

Asian				Multiracial				Hispanic				Non-Hispanic			
-	-	-	-	2.13	(0.82,5.53)	1.04	0.12	1.97	(0.93,4.18)	0.76	0.08	1.63	(1.21,2.19)	0.25	<.01
-	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
0.45	(0.04,4.89)	0.55	0.51	1.55	(0.77,3.10)	0.55	0.22	1.4	(0.86,2.27)	0.35	0.17	1.84	(1.51,2.24)	0.18	<.01
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
4.15	(1.07,16.08)	2.87	0.04	1.66	(1.07,2.58)	0.37	0.02	1.07	(0.68,1.69)	0.25	0.76	1.1	(0.93,1.30)	0.09	0.29
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
0.92	(0.43,1.96)	0.35	0.82	1.09	(0.82,1.45)	0.16	0.56	0.89	(0.68,1.18)	0.13	0.43	1.09	(0.98,1.20)	0.06	0.11
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
0.55	(0.24,1.24)	0.23	0.15	0.93	(0.67,1.29)	0.16	0.66	0.94	(0.70,1.27)	0.14	0.7	0.89	(0.80,1.00)	0.05	0.05
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
3.19	(1.70,5.99)	1.03	<.01	1.06	(0.82,1.38)	0.14	0.64	1.03	(0.81,1.31)	0.13	0.81	1.15	(1.05,1.25)	0.05	0
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
0.53	(0.27,1.03)	0.18	0.61	0.98	(0.74,1.28)	0.14	0.86	1.01	(0.79,1.29)	0.13	0.94	1.12	(1.02,1.23)	0.05	0.02
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
0.67	(0.37,1.21)	-0.2	0.18	1.17	(0.91,1.51)	0.15	0.22	0.94	(0.76,1.18)	0.11	0.61	1.07	(0.98,1.17)	0.05	0.13
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
1.32	(0.64,2.73)	0.49	0.46	0.98	(0.74,1.31)	0.14	0.89	0.79	(0.59,1.06)	0.12	0.11	0.92	(0.83,1.02)	0.05	0.12
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
1.2	(0.59,2.44)	0.43	0.61	1.58	(1.21,2.08)	0.22	<.01	1.11	(0.86,1.44)	0.15	0.42	1.25	(1.13,1.37)	0.06	<.01
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
0.79	(0.28,2.20)	0.41	0.65	0.96	(0.73,1.25)	0.13	0.75	1.29	(1.03,1.62)	0.15	0.03	1.08	(0.98,1.18)	0.05	0.11
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
1.22	(0.64,2.34)	0.4	0.54	0.64	(0.47,0.86)	0.1	0	0.75	(0.57,0.99)	0.11	0.04	0.97	(0.88,1.08)	0.05	0.62
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
4.46	(0.61,32.57)	4.52	0.14	1.13	(0.51,2.48)	0.45	0.76	2.38	(1.04,5.43)	1	0.04	1.03	(0.78,1.35)	0.14	0.84
0	(0.00,0.00)	0	<.01	0.15	(0.03,0.69)	0.12	0.02	0.81	(0.34,1.97)	0.37	0.65	0.74	(0.55,1.01)	0.12	0.06
2.32	(1.18,4.60)	0.81	0.02	0.86	(0.62,1.19)	0.14	0.36	1.59	(1.21,2.07)	0.22	<.01	0.99	(0.89,1.10)	0.05	0.8
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-

	White				Black				Alaskan Native/American Indian			
Alleged Offender is an Un-married Partner of Primary Caregiver												
Yes	1.01	(0.83,1.22)	0.1	0.96	0.81	(0.69,0.94)	0.07	0.01	0.94	(0.68,1.31)	0.16	0.72
No	1	-	-	-	1	-	-	-	1	-	-	-
Father, Stepfather, Boyfriend, or Male Roommates Provides Unsupervised Childcare to a Child < 3 years												
Yes	1.3	(0.92,1.83)	0.23	0.14	0.83	(0.66,1.05)	0.1	0.12	0.93	(0.58,1.49)	0.23	0.76
No	0.99	(0.76,1.29)	0.13	0.93	0.8	(0.66,0.96)	0.07	0.02	0.92	(0.63,1.34)	0.18	0.66
N/A	1	-	-	-	1	-	-	-	1	-	-	-
Father, Stepfather, Boyfriend, or Male Roommate is Employed												
Yes	0.76	(0.58,0.99)	0.1	0.04	1.08	(0.88,1.32)	0.11	0.47	1.18	(0.78,1.78)	0.25	0.44
No	0.98	(0.74,1.31)	0.14	0.91	1.23	(1.02,1.50)	0.12	0.03	1.34	(0.90,1.99)	0.27	0.15
N/A	1	-	-	-	1	-	-	-	1	-	-	-
Risk Level												
High	1.96	(1.39,2.77)	0.35	<.01	1.27	(0.97,1.66)	0.17	0.08	3.27	(1.56,6.88)	1.24	<.01
Moderate	1.76	(1.36,2.28)	0.23	<.01	1.03	(0.83,1.28)	0.11	0.8	3.34	(1.69,6.63)	1.17	<.01
Low	1	-	-	-	1	-	-	-	1	-	-	-

Model 1.1 -Child Characteristics, Index Case Characteristics, Multisystem Involvement, Family Characteristics Risk Assessment (SDM) & Risk Reassessment (SDM)

	OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value
Sex												
Female	1	-	-	-	1	-	-	-	1	-	-	-
Male	1.26	(0.99,1.63)	0.15	0.06	0.96	(0.80,1.16)	0.09	0.68	1.09	(0.79,1.52)	0.18	0.62
Hispanic												
Yes	0.83	(0.64,1.09)	0.11	0.18	0.7	(0.38,1.29)	0.22	0.25	0.7	(0.45,1.09)	0.16	0.11
No	1	-	-	-	1	-	-	-	1	-	-	-
Race												
White	-	-	-	-	-	-	-	-	-	-	-	-
Black	-	-	-	-	-	-	-	-	-	-	-	-
AI/AN	-	-	-	-	-	-	-	-	-	-	-	-
Asian	-	-	-	-	-	-	-	-	-	-	-	-
Multi-racial	-	-	-	-	-	-	-	-	-	-	-	-
Age at index report	1.03	(1.00,1.07)	0.01	0.02	0.98	(0.96,1.01)	0.01	0.11	1.02	(0.98,1.06)	0.02	0.3
Number of Children												
One	1	-	-	-	1	-	-	-	1	-	-	-
Two or three	1.13	(0.83,1.54)	0.18	0.45	1.37	(1.05,1.79)	0.18	0.02	1.06	(0.70,1.60)	0.22	0.79
Four or more	1.33	(0.90,1.96)	0.27	0.16	1.08	(0.79,1.46)	0.17	0.63	1.37	(0.83,2.27)	0.35	0.22
Age of primary caregiver												
30 or older	1	-	-	-	1	-	-	-	1	-	-	-
29 or younger	0.74	(0.53,1.02)	0.12	0.07	1.03	(0.83,1.28)	0.12	0.8	1.59	(1.11,2.29)	0.3	0.01
Alcohol and drug problem from either caregiver												
Yes	0.87	(0.62,1.24)	0.16	0.45	1.11	(0.84,1.49)	0.16	0.46	1.39	(0.93,2.06)	0.28	0.11
No	1	-	-	-	1	-	-	-	1	-	-	-
Domestic violence since last assessment/reassessment												
Yes	3	(1.96,4.60)	0.65	<.01	2.14	(1.56,2.93)	0.34	<.01	0.9	(0.53,1.51)	0.24	0.69
No	1	-	-	-	1	-	-	-	1	-	-	-

Asian				Multiracial				Hispanic				Non-Hispanic			
OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value
0.84	(0.39,1.77)	0.32	0.64	0.72	(0.52,0.98)	0.12	0.04	0.97	(0.72,1.29)	0.14	0.81	0.84	(0.75,0.94)	0.05	<.01
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
3.27	(0.79,13.48)	2.36	0.1	0.92	(0.55,1.55)	0.24	0.76	1.1	(0.67,1.79)	0.28	0.72	0.97	(0.82,1.16)	0.09	0.77
1.77	(0.52,6.02)	1.11	0.36	0.78	(0.51,1.20)	0.17	0.26	0.78	(0.52,1.16)	0.16	0.21	0.88	(0.77,1.01)	0.06	0.08
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
0.75	(0.24,2.30)	0.43	0.61	1.12	(0.72,1.76)	0.26	0.61	1.02	(0.68,1.53)	0.21	0.94	0.96	(0.83,1.12)	0.07	0.62
0.77	(0.23,2.54)	0.47	0.66	1.39	(0.90,2.13)	0.3	0.13	1.26	(0.82,1.93)	0.28	0.29	1.16	(1.01,1.34)	0.09	0.04
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
2.09	(0.60,7.24)	1.32	0.25	2.23	(1.24,4.00)	0.66	0.01	2.73	(1.58,4.71)	0.76	<.01	1.64	(1.34,1.99)	0.16	<.01
2.29	(0.87,6.03)	1.13	0.09	1.79	(1.11,2.90)	0.44	0.02	2.42	(1.56,3.75)	0.54	<.01	1.37	(1.17,1.60)	0.11	<.01
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
0.61	(0.28,1.33)	0.24	0.22	1.17	(0.80,1.75)	0.23	0.42	1.01	(0.72,1.44)	0.18	0.93	1.06	(0.93,1.20)	0.07	0.41
-	-	-	-	0.73	(0.43,1.23)	0.2	0.24	-	-	-	-	-	-	-	-
-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-
-	-	-	-	-	-	-	-	0.7	(0.36,1.37)	0.24	0.3	0.95	(0.80,1.13)	0.08	0.59
-	-	-	-	-	-	-	-	0.86	(0.51,1.43)	0.22	0.55	1.25	(0.99,1.00)	0.15	0.06
-	-	-	-	-	-	-	-	-	-	-	-	0.59	(0.41,0.87)	0.12	0.01
-	-	-	-	-	-	-	-	0.98	(0.56,1.76)	0.28	0.94	1.25	(0.98,1.59)	0.16	0.08
1.02	(0.93,1.20)	0.05	0.72	1	(0.96,1.05)	0.02	0.85	1.03	(0.99,1.08)	0.02	0.1	1	(0.99,1.00)	0.01	0.98
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
0.55	(0.17,1.73)	0.32	0.3	1.42	(0.88,2.32)	0.35	0.15	1.1	(0.66,1.82)	0.28	0.72	1.23	(1.03,1.46)	0.11	0.02
0.77	(0.24,2.44)	0.45	0.65	1.35	(0.70,2.58)	0.45	0.37	1.09	(0.62,1.93)	0.32	0.77	1.15	(0.93,1.42)	0.12	0.19
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
1.3	(0.46,3.69)	0.69	0.62	1.91	(1.22,2.99)	0.44	0.01	0.98	(0.64,1.51)	0.21	0.92	1.12	(0.96,1.31)	0.09	0.15
1.77	(0.57,5.55)	1.02	0.32	1.36	(0.82,2.26)	0.35	0.24	1.57	(0.93,2.65)	0.42	0.09	1.07	(0.88,1.28)	0.1	0.5
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
4.21	(0.98,18.53)	3.13	0.05	1.75	(0.88,3.49)	0.62	0.11	3.05	(1.57,5.94)	1.04	<.01	1.9	(1.52,2.38)	0.22	<.01
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-

	White				Black				Alaskan Native/American Indian			
Child in the home has a developmental disability/emotional impairment												
Yes	0.98	(0.75,1.28)	0.13	0.89	1.12	(0.90,1.42)	0.13	0.31	0.92	(0.59,1.45)	0.21	0.73
No	1	-	-	-	1	-	-	-	1	-	-	-
Number of Workers												
1	1	-	-	-	1	-	-	-	1	-	-	-
2	1.35	(0.97,1.87)	0.22	0.07	1.23	(0.94,1.59)	0.16	0.13	0.74	(0.49,1.12)	0.15	0.14
3	0.79	(0.40,1.56)	0.27	0.51	1.93	(1.26,2.95)	0.42	<.01	0.71	(0.40,1.26)	0.21	0.24
4+	1.3	(0.56,3.03)	0.56	0.54	0.88	(0.49,1.60)	0.27	0.68	0.58	(0.28,1.22)	0.22	0.14
Risk Level												
High	3.13	(2.07,4.74)	0.66	<.01	1.59	(1.16,2.18)	0.26	<.01	1.75	(1.00,3.06)	0.5	0.05
Moderate	1.64	(1.24,2.16)	0.23	<.01	1.44	(1.14,1.82)	0.17	<.01	1.57	(0.96,2.58)	0.4	0.07
Low	1	-	-	-	1	-	-	-	1	-	-	-

Model 1.2 - Child Characteristics, Index Case Characteristics, Multisystem Involvement, Family Characteristics (SDM) & Strengths and Needs (SDM)

	OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value
Sex												
Female	1	-	-	-	1	-	-	-	1	-	-	-
Male	0.97	(0.63,1.48)	0.21	0.88	0.92	(0.67,1.28)	0.15	0.61	3.87	(1.31,11.39)	2.13	0.01
Hispanic												
Yes	0.84	(0.51,1.37)	0.21	0.48	0.59	(0.20,1.83)	0.34	0.36	0.51	(0.11,2.33)	0.4	0.39
No	1	-	-	-	1	-	-	-	1	-	-	-
Race												
White	-	-	-	-	-	-	-	-	-	-	-	-
Black	-	-	-	-	-	-	-	-	-	-	-	-
AI/AN	-	-	-	-	-	-	-	-	-	-	-	-
Asian	-	-	-	-	-	-	-	-	-	-	-	-
Multi-racial	-	-	-	-	-	-	-	-	-	-	-	-
Age at index report	1.03	(0.98,1.08)	0.02	0.2	0.98	(0.95,1.02)	0.02	0.28	1	(0.90,1.12)	0.06	0.95
Household Relationships/ Domestic Violence												
Supportive	1	-	-	-	1	-	-	-	1	-	-	-
Minor or occasional discord	1.14	(0.56,2.30)	0.41	0.73	0.61	(0.39,0.95)	0.14	0.03	1.32	(0.26,6.75)	1.1	0.74
Frequent discord or some domestic violence	1	(0.47,2.14)	0.39	1	0.52	(0.31,0.87)	0.14	0.01	2.14	(0.32,14.38)	2.08	0.43
Chronic discord or severe domestic violence	1.7	(0.63,4.57)	0.86	0.29	1.05	(0.52,2.14)	0.38	0.89	0.98	(0.05,18.33)	1.47	0.99
Resource Management/Basic Needs												
Resources are sufficient to meet basic needs and are adequately managed	1	-	-	-	1	-	-	-	-	-	-	-
Resources may be limited but are adequately managed	1.33	(0.65,2.77)	0.5	0.44	1.03	(0.55,1.92)	0.33	0.92	-	-	-	-
Resources are insufficient or not well managed	1.16	(0.52,2.60)	0.48	0.72	1.07	(0.54,2.13)	0.37	0.85	-	-	-	-
No resources, or resources are severely limited and/or mismanaged..	1.85	(0.34,9.94)	1.59	0.48	1	(0.37,2.71)	0.51	1	-	-	-	-

Asian				Multiracial				Hispanic				Non-Hispanic			
OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value
2.82	(1.01,7.87)	1.48	0.05	1.15	(0.72,1.83)	0.28	0.57	0.88	(0.58,1.33)	0.19	0.56	1.09	(0.93,1.27)	0.09	0.3
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
1.42	(0.45,4.42)	0.82	0.55	0.98	(0.57,1.67)	0.27	0.93	1.55	(0.98,2.45)	0.36	0.06	1.04	(0.87,1.24)	0.1	0.68
5.57	(0.66,46.74)	6.05	0.11	1.03	(0.49,2.15)	0.39	0.95	1.34	(0.57,3.17)	0.59	0.5	1.22	(0.91,1.62)	0.18	0.18
0.47	(0.04,5.61)	0.6	0.55	2.97	(0.82,10.74)	1.95	0.1	1.55	(0.58,4.13)	0.77	0.38	0.87	(0.58,1.30)	0.18	0.5
2.18	(0.49,9.69)	1.66	0.31	1.06	(0.58,1.94)	0.33	0.85	2.36	(1.33,4.19)	0.69	<.01	1.81	(1.45,2.26)	0.2	<.01
2.34	(0.93,5.86)	1.1	0.07	0.81	(0.51,1.28)	0.19	0.37	1.37	(0.90,2.09)	0.3	0.15	1.47	(1.25,1.73)	0.12	<.01
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
-	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
-	-	-	-	0.92	(0.40,2.08)	0.38	0.83	0.97	(0.46,2.07)	0.37	0.94	1.01	(0.79,1.30)	0.13	0.92
-	-	-	-	0.96	(0.32,2.87)	0.54	0.94	-	-	-	-	-	-	-	-
-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-
-	-	-	-	-	-	-	-	0.48	(0.13,1.83)	0.33	0.28	0.97	(0.72,1.31)	0.15	0.87
-	-	-	-	-	-	-	-	2.75	(0.00,10.11)	1.83	0.13	1.47	(0.87,2.48)	0.39	0.16
-	-	-	-	-	-	-	-	-	-	-	-	0.48	(0.24,0.96)	0.17	0.04
-	-	-	-	-	-	-	-	2.74	(0.00,8.61)	1.6	0.08	1.05	(0.64,1.72)	0.27	0.85
-	-	-	-	0.99	(0.92,1.08)	0.04	0.9	1.06	(0.97,1.15)	0.05	0.19	1	(0.97,1.03)	0.01	1
-	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
-	-	-	-	1.12	(0.25,4.98)	0.85	0.88	0.39	(0.12,1.30)	0.24	0.13	0.76	(0.53,1.09)	0.14	0.14
-	-	-	-	1.36	(0.29,6.44)	1.08	0.69	0.32	(0.09,1.18)	0.21	0.09	0.75	(0.53,1.11)	0.15	0.15
-	-	-	-	3.7	(0.62,21.98)	3.36	0.15	0.98	(0.25,3.80)	0.68	0.98	1.2	(0.70,2.08)	0.34	0.51
-	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
-	-	-	-	0.69	(0.19,2.50)	0.45	0.57	2.76	(0.54,14.11)	2.3	0.22	1.05	(0.69,1.61)	0.23	0.82
-	-	-	-	0.58	(0.12,2.76)	0.46	0.5	3.74	(0.66,21.47)	3.33	0.14	0.97	(0.60,1.57)	0.24	0.91
-	-	-	-	0.31	(0.04,2.72)	0.35	0.29	-	-	-	-	1.22	(0.59,2.51)	0.45	0.59

	White				Black				Alaskan Native/American Indian			
Social Support System												
Strong support system	1	-	-	-	1	-	-	-	-	-	-	-
Adequate support system	0.98	(0.49,1.98)	0.35	0.95	4.74	(2.18,10.30)	1.88	<.01	-	-	-	-
Limited support system	1.29	(0.62,2.67)	0.48	0.5	3.39	(1.50,7.66)	1.41	<.01	-	-	-	-
No support system	1.24	(0.27,5.78)	0.97	0.78	1.11	(0.21,6.03)	0.96	0.9	-	-	-	-

MODEL 2 - Child Characteristics, Index Case Characteristics, Multisystem Involvement, Family Characteristics (SDM) & Education

	OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value
Sex												
Female	1	-	-	-	1	-	-	-	1	-	-	-
Male	0.85	(0.72,1.01)	0.07	0.07	1	(0.87,1.14)	0.07	0.96	1	(0.75,1.34)	0.15	0.99
Race												
White	-	-	-	-	-	-	-	-	-	-	-	-
Black	-	-	-	-	-	-	-	-	-	-	-	-
AI/AN	-	-	-	-	-	-	-	-	-	-	-	-
Asian	-	-	-	-	-	-	-	-	-	-	-	-
Multi-racial	-	-	-	-	-	-	-	-	-	-	-	-
Hispanic												
Yes	1.13	(0.87,1.45)	0.15	0.36	1.16	(0.74,1.81)	0.26	0.51	1.3	(0.89,1.90)	0.25	0.17
No	1	-	-	-	1	-	-	-	1	-	-	-
Age at index report	0.96	(0.94,0.99)	0.01	<.01	0.95	(0.93,0.98)	0.01	<.01	0.94	(0.90,0.99)	0.02	0.03
Mandated Reporter type												
Mandated	1.67	(1.05,2.66)	0.39	0.03	0.66	(0.47,0.93)	0.11	0.02	0.54	(0.25,1.14)	0.21	0.11
Non-mandated	1	-	-	-	1	-	-	-	1	-	-	-
Reporter type												
Human and social service staff	0.92	(0.68,1.24)	0.14	0.58	0.97	(0.76,1.23)	0.12	0.78	0.7	(0.43,1.13)	0.17	0.15
Family and friends	1.48	(0.91,2.43)	0.37	0.12	0.91	(0.62,1.33)	0.18	0.62	0.56	(0.25,1.25)	0.23	0.16
Other professional	1	-	-	-	1	-	-	-	1	-	-	-
Anonymous/other	1.01	(0.74,1.38)	0.16	0.96	0.95	(0.73,1.24)	0.13	0.73	0.72	(0.38,1.36)	0.23	0.31
Alleged victim	-	-	-	-	-	-	-	-	-	-	-	-
Alleged offender	-	-	-	-	-	-	-	-	-	-	-	-
Services needed and received												
Needed & received cm	1.32	(1.02,1.72)	0.18	0.04	0.99	(0.81,1.21)	0.1	0.94	0.64	(0.42,0.96)	0.13	0.03
Needed but no cm	2.2	(1.35,3.57)	0.55	<.01	0.93	(0.61,1.41)	0.2	0.73	0.71	(0.39,1.33)	0.23	0.29
Not needed & received cm	1.29	(0.93,1.80)	0.22	0.13	0.86	(0.66,1.13)	0.12	0.28	1.27	(0.77,2.10)	0.32	0.34
Not needed & no cm	1	-	-	-	1	-	-	-	1	-	-	-
Allegation at index report												
Neglect (not medical neglect)	0.97	(0.73,1.29)	0.14	0.84	0.86	(0.67,1.10)	0.11	0.23	1.27	(0.73,2.19)	0.35	0.4
Physical abuse	1.11	(0.85,1.46)	0.15	0.45	0.87	(0.68,1.11)	0.11	0.26	1.27	(0.76,2.12)	0.33	0.36
Sexual abuse	0.93	(0.68,1.27)	0.15	0.65	0.63	(0.47,0.84)	0.09	0	1.07	(0.58,1.98)	0.34	0.83
Relationship of offender to victim at index												
Parent	1.23	(0.88,1.72)	0.21	0.22	1.15	(0.89,1.48)	0.15	0.29	1.03	(0.60,1.79)	0.29	0.91
Other relative (non-foster parents)	1.33	(0.86,2.06)	0.3	0.21	0.87	(0.61,1.24)	0.16	0.44	0.68	(0.35,1.32)	0.23	0.26
Unmarried partner of parent	1.16	(0.80,1.68)	0.22	0.45	1.28	(0.97,1.70)	0.19	0.09	1.11	(0.57,2.15)	0.37	0.76
Number of prior CPS reports	1.17	(1.05,1.30)	0.06	<.01	1.2	(1.12,1.29)	0.04	<.01	1.08	(0.96,1.23)	0.07	0.2

Asian				Multiracial				Hispanic				Non-Hispanic			
OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value
-	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
-	-	-	-	0.7	(0.20,2.59)	0.47	0.6	0.78	(0.22,2.72)	0.5	0.7	1.97	(1.24,3.13)	0.47	<.01
-	-	-	-	2.01	(0.47,8.68)	1.5	0.35	1.23	(0.36,4.18)	0.77	0.74	1.96	(1.20,3.22)	0.5	0.01
-	-	-	-	-	-	-	-	6.66	(0.27,165.23)	10.91	0.25	0.77	(0.24,2.47)	0.46	0.66
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
1.09	(0.55,2.15)	0.38	0.8	0.75	(0.54,1.04)	0.13	0.09	0.96	(0.75,1.25)	0.13	0.78	0.92	(0.83,1.02)	0.05	0.11
-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-
-	-	-	-	-	-	-	-	1.02	(0.61,1.70)	0.27	0.94	1.01	(0.88,1.15)	0.07	0.91
-	-	-	-	-	-	-	-	1.76	(1.16,2.68)	0.38	0.01	1.44	(1.20,1.74)	0.14	<.01
-	-	-	-	-	-	-	-	-	-	-	-	0.73	(0.52,1.01)	0.12	0.06
-	-	-	-	-	-	-	-	1.16	(0.74,1.82)	0.27	0.51	1.14	(0.94,1.38)	0.11	0.17
-	-	-	-	1.14	(0.73,1.78)	0.26	0.57	-	-	-	-	-	-	-	-
-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
0.89	(0.79,1.00)	0.06	0.06	0.96	(0.91,1.01)	0.03	0.11	0.96	(0.92,1.00)	0.02	0.06	0.95	(0.94,0.97)	0.01	<.01
0.05	(0.01,0.55)	0.06	0.01	0.38	(0.15,0.95)	0.18	0.04	1.03	(0.49,2.15)	0.39	0.93	0.74	(0.57,0.94)	0.09	0.02
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
1.51	(0.54,4.25)	0.8	0.44	1.78	(1.09,2.93)	0.45	0.02	1.24	(0.80,1.91)	0.27	0.34	0.96	(0.80,1.13)	0.08	0.6
0.02	(0.00,0.37)	0.03	0.01	0.54	(0.20,1.45)	0.27	0.22	1.09	(0.48,2.47)	0.46	0.84	0.83	(0.63,1.09)	0.12	0.18
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
0.44	(0.09,2.29)	0.37	0.33	0.52	(0.24,1.13)	0.21	0.1	0.82	(0.50,1.33)	0.2	0.42	0.93	(0.77,1.14)	0.09	0.49
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.36	(0.11,1.21)	0.22	0.1	0.89	(0.55,1.44)	0.22	0.65	1.05	(0.71,1.55)	0.21	0.81	0.99	(0.86,1.15)	0.07	0.93
0.68	(0.05,8.65)	0.88	0.77	0.95	(0.41,2.25)	0.42	0.91	1.37	(0.69,2.72)	0.48	0.37	1.11	(0.84,1.47)	0.16	0.48
2.24	(0.61,8.28)	1.49	0.23	1.22	(0.67,2.21)	0.37	0.52	1.06	(0.67,1.67)	0.25	0.8	1.1	(0.91,1.34)	0.11	0.31
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
0.6	(0.15,2.38)	0.42	0.47	2.02	(1.17,3.49)	0.56	0.01	1.33	(0.88,2.01)	0.28	0.18	0.99	(0.83,1.18)	0.09	0.87
0.75	(0.19,2.90)	0.52	0.67	2.26	(1.35,3.78)	0.59	<.01	1.61	(1.08,2.42)	0.33	0.02	1.04	(0.88,1.23)	0.09	0.68
0.43	(0.08,2.23)	0.36	0.32	1.35	(0.72,2.52)	0.43	0.35	1.18	(0.73,1.92)	0.29	0.51	0.79	(0.65,0.97)	0.08	0.02
0.83	(0.24,2.88)	0.53	0.77	1.13	(0.58,2.19)	0.38	0.72	1.48	(0.91,2.39)	0.36	0.12	1.1	(0.91,1.33)	0.11	0.32
0.28	(0.04,1.77)	0.26	0.18	0.29	(0.10,0.88)	0.16	0.03	0.95	(0.51,1.76)	0.3	0.86	0.84	(0.65,1.09)	0.11	0.2
1.42	(0.24,8.51)	1.3	0.7	0.83	(0.43,1.61)	0.28	0.58	1.25	(0.71,2.20)	0.36	0.44	1.15	(0.93,1.42)	0.12	0.19
1.45	(0.89,2.37)	0.36	0.14	1.05	(0.89,1.24)	0.09	0.55	1.16	(1.00,1.34)	0.09	0.04	1.15	(1.09,1.21)	0.03	<.01

	White				Black				Alaskan Native/American Indian			
History of CMH case												
Yes	1.15	(0.84,1.56)	0.18	0.39	1.37	(1.06,1.77)	0.18	0.02	1.11	(0.60,2.04)	0.34	0.74
No	1	-	-	-	1	-	-	-	1	-	-	-
Concurrent CMH case												
Yes	2.05	(1.31,3.21)	0.47	<.01	1.29	(0.82,2.03)	0.3	0.28	2.47	(0.79,7.75)	1.44	0.12
No	1	-	-	-	1	-	-	-	1	-	-	-
CMH case within 12 months after												
Yes	1.42	(1.03,1.97)	0.24	0.03	1.69	(1.26,2.27)	0.25	<.01	2.31	(1.20,4.43)	0.77	0.01
No	1	-	-	-	1	-	-	-	1	-	-	-
History of CPS OHP												
Yes	0.89	(0.60,1.33)	0.18	0.58	1.14	(0.87,1.48)	0.15	0.35	0.76	(0.50,1.14)	0.16	0.18
No	1	-	-	-	1	-	-	-	1	-	-	-
Number of Children in the Home												
Two or More	1.03	(0.82,1.29)	0.12	0.83	0.97	(0.79,1.17)	0.1	0.73	1.24	(0.82,1.87)	0.26	0.31
One	1	-	-	-	1	-	-	-	1	-	-	-
Age of Youngest child												
Two or Younger	0.75	(0.55,1.01)	0.12	0.06	1.03	(0.85,1.25)	0.1	0.73	1	(0.67,1.50)	0.21	0.98
Three or Older	1	-	-	-	1	-	-	-	1	-	-	-
Number of Adults in Home												
One or None	0.97	(0.79,1.19)	0.1	0.79	1.15	(0.98,1.33)	0.09	0.08	1.22	(0.90,1.66)	0.19	0.21
Two or More	1	-	-	-	1	-	-	-	1	-	-	-
Age of Primary Caregiver												
29 or younger	1.07	(0.84,1.36)	0.13	0.61	1.14	(0.96,1.35)	0.1	0.13	1.5	(1.05,2.15)	0.28	0.03
30 or older	1	-	-	-	1	-	-	-	1	-	-	-
Either Care Has a History of Domestic Violence												
Yes	1.08	(0.89,1.30)	0.1	0.44	1.06	(0.91,1.24)	0.08	0.44	1.04	(0.76,1.42)	0.16	0.81
No	1	-	-	-	1	-	-	-	1	-	-	-
Either Care Has/Had an Alcohol or Drug Problem During the Last 12 Months												
Yes	0.61	(0.48,0.78)	0.07	0	1.01	(0.82,1.25)	0.11	0.93	1.06	(0.75,1.50)	0.19	0.74
No	1	-	-	-	1	-	-	-	1	-	-	-
Primary Caregiver Has/Had Mental Health Problem												
Yes	1.13	(0.92,1.39)	0.12	0.25	1.04	(0.87,1.23)	0.09	0.68	1.73	(1.24,2.41)	0.29	<.01
No	1	-	-	-	1	-	-	-	1	-	-	-
Either Caregiver was Abused as a Child												
Yes	1.28	(1.06,1.56)	0.13	0.01	1.09	(0.92,1.29)	0.09	0.32	0.84	(0.61,1.17)	0.14	0.3
No	1	-	-	-	1	-	-	-	1	-	-	-
Primary Caregiver Lacks Parenting Skills												
Yes	1.06	(0.85,1.31)	0.12	0.62	1	(0.83,1.20)	0.09	0.99	0.95	(0.66,1.36)	0.17	0.78
No	1	-	-	-	1	-	-	-	1	-	-	-
Child in the Home Has a Developmental Disability/Emotional Impairment												
Developmental Disability and Delinquency	1.28	(0.73,2.23)	0.36	0.38	1.14	(0.76,1.72)	0.24	0.53	1.83	(0.81,4.13)	0.76	0.15
History of Delinquency	1.14	(0.60,2.16)	0.37	0.69	0.71	(0.43,1.15)	0.18	0.17	1.03	(0.49,2.17)	0.39	0.93
Developmental Disability	0.91	(0.73,1.14)	0.1	0.41	1.03	(0.86,1.22)	0.09	0.76	0.93	(0.63,1.37)	0.18	0.71
No	1	-	-	-	1	-	-	-	1	-	-	-

Asian				Multiracial				Hispanic				Non-Hispanic			
-	-	-	-	2.28	(1.26,4.12)	0.69	0.01	1.39	(0.86,2.23)	0.34	0.18	1.32	(1.10,1.60)	0.13	<.01
-	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
-	-	-	-	1.7	(0.59,4.95)	0.93	0.33	1.65	(0.74,3.71)	0.68	0.22	1.69	(1.24,2.31)	0.27	<.01
-	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
0.22	(0.01,3.24)	0.3	0.27	1.55	(0.75,3.23)	0.58	0.24	1.39	(0.83,2.33)	0.37	0.22	1.66	(1.34,2.04)	0.18	<.01
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
3.06	(0.63,4.89)	2.47	0.17	1.88	(1.14,3.11)	0.48	0.01	1.06	(0.65,1.75)	0.27	0.81	1.04	(0.86,1.26)	0.1	0.67
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
0.77	(0.25,2.40)	0.45	0.65	1	(0.64,1.56)	0.23	0.99	0.86	(0.59,1.25)	0.16	0.42	1.03	(0.90,1.18)	0.07	0.66
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
0.2	(0.05,0.91)	0.16	0.04	0.96	(0.61,1.53)	0.23	0.87	1.07	(0.73,1.56)	0.21	0.73	0.91	(0.79,1.06)	0.07	0.22
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
3.57	(1.46,8.74)	1.63	0.01	1.04	(0.72,1.50)	0.19	0.83	0.76	(0.56,1.04)	0.12	0.09	1.17	(1.04,1.30)	0.07	0.01
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
0.57	(0.22,1.49)	0.28	0.25	1.03	(0.68,1.56)	0.22	0.89	0.95	(0.72,1.26)	0.14	0.73	1.16	(1.02,1.32)	0.08	0.03
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
0.68	(0.30,1.52)	0.28	0.34	0.96	(0.68,1.36)	0.17	0.82	0.78	(0.53,1.14)	0.15	0.19	1.04	(0.94,1.17)	0.06	0.44
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
1.32	(0.40,4.36)	0.8	0.65	1.26	(0.83,1.90)	0.27	0.28	1.08	(0.77,1.51)	0.19	0.65	0.9	(0.78,1.03)	0.06	0.13
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
1.15	(0.40,4.36)	0.8	0.65	1.36	(0.92,1.99)	0.26	0.12	1.08	(0.77,1.51)	0.19	0.65	1.18	(1.05,1.33)	0.07	0.01
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
0.68	(0.14,3.25)	0.54	0.62	0.93	(0.63,1.37)	0.18	0.71	1.12	(0.84,1.49)	0.16	0.46	1.12	(0.99,1.26)	0.07	0.07
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
1.17	(0.47,2.96)	0.55	0.74	0.7	(0.46,1.05)	0.15	0.09	0.77	(0.55,1.09)	0.14	0.14	1	(0.88,1.14)	0.07	0.99
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
2.51	(0.95,6.66)	1.25	0.06	1.85	(0.78,4.39)	0.82	0.16	3.07	(1.24,7.59)	1.42	0.02	1.16	(0.86,1.56)	0.18	0.32
-	-	-	-	0.22	(0.05,1.06)	0.18	0.06	1.06	(0.40,2.80)	0.53	0.91	0.72	(0.51,1.02)	0.13	0.07
2.94	(0.22,38.84)	3.87	0.41	0.94	(0.61,1.43)	0.2	0.76	1.51	(1.09,2.08)	0.25	0.01	0.92	(0.81,1.05)	0.06	0.23
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-

	White				Black				Alaskan Native/American Indian			
Alleged Offender is an Un-married Partner of Primary Caregiver												
Yes	1.03	(0.80,1.33)	0.13	0.82	0.89	(0.71,1.10)	0.1	0.28	0.84	(0.52,1.35)	0.2	0.46
No	1	-	-	-	1	-	-	-	1	-	-	-
Father, Stepfather, Boyfriend, or Male Roommates Provides Unsupervised Childcare to a Child < 3 years												
Yes	1.49	(0.95,2.33)	0.34	0.09	0.98	(0.71,1.34)	0.16	0.89	0.78	(0.40,1.55)	0.27	0.48
No	1.04	(0.76,1.43)	0.17	0.81	0.8	(0.63,1.00)	0.09	0.05	0.93	(0.57,1.53)	0.24	0.78
N/A	1	-	-	-	1	-	-	-	1	-	-	-
Father, Stepfather, Boyfriend, or Male Roommates is Employed												
Yes	0.7	(0.51,0.97)	0.12	0.03	1.08	(0.84,1.39)	0.14	0.55	1.08	(0.63,1.87)	0.3	0.78
No	0.96	(0.68,1.34)	0.17	0.8	1.13	(0.88,1.44)	0.14	0.34	1.24	(0.73,2.11)	0.33	0.42
N/A	1	-	-	-	1	-	-	-	1	-	-	-
Risk Level												
High	1.91	(1.27,2.90)	0.4	<.01	1.29	(0.93,1.78)	0.21	0.12	4	(1.50,10.64)	2	0.01
Moderate	1.71	(1.25,2.32)	0.27	<.01	1.02	(0.79,1.32)	0.13	0.89	4.96	(2.01,12.23)	2.28	<.01
Low	1	-	-	-	1	-	-	-	1	-	-	-
Special Education												
Yes	1.01	(0.83,1.24)	0.11	0.89	1.04	(0.88,1.22)	0.09	0.68	0.89	(0.64,1.25)	0.15	0.52
No	1	-	-	-	1	-	-	-	1	-	-	-
Primary Home Language												
Other	0.59	(0.44,0.79)	0.09	<.01	0.66	(0.49,0.88)	0.1	<.01	0.86	(0.32,2.32)	0.43	0.76
English	1	-	-	-	1	-	-	-	1	-	-	-
Homeless (McKinney-Vento)												
Yes	1.12	(0.85,1.49)	0.16	0.43	1.4	(1.20,1.63)	0.11	<.01	0.95	(0.69,1.33)	0.16	0.78
No	1	-	-	-	1	-	-	-	1	-	-	-
Free/Reduced Price Lunch												
Yes	1.23	(1.00,1.52)	0.13	0.05	1.17	(0.91,1.50)	0.15	0.22	1.01	(0.62,1.65)	0.25	0.97
No	1	-	-	-	1	-	-	-	1	-	-	-
Number of prior disciplinary events	1.03	(0.98,1.08)	0.02	0.24	1.01	(0.99,1.03)	0.01	0.35	0.96	(0.89,1.03)	0.04	0.25

Asian				Multiracial				Hispanic				Non-Hispanic			
2.45	(0.79,7.63)	1.42	0.12	0.87	(0.54,1.40)	0.21	0.55	1.1	(0.76,1.60)	0.21	0.61	0.91	(0.77,1.06)	0.07	0.22
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
2.13	(0.22,0.42)	2.45	0.51	0.71	(0.32,1.54)	0.28	0.38	0.91	(0.49,1.70)	0.29	0.77	1.05	(0.83,1.33)	0.13	0.69
0.6	(0.11,3.14)	0.51	0.55	0.6	(0.33,1.12)	0.19	0.11	0.76	(0.48,1.22)	0.18	0.26	0.87	(0.73,1.03)	0.08	0.11
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
1.47	(0.30,7.23)	1.19	0.64	1.42	(0.74,2.70)	0.47	0.29	0.84	(0.52,1.36)	0.21	0.48	0.99	(0.82,1.20)	0.09	0.95
1.52	(0.29,8.06)	1.29	0.63	1.92	(1.03,3.58)	0.61	0.04	1.05	(0.63,1.75)	0.27	0.85	1.16	(0.96,1.39)	0.11	0.12
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
2.92	(0.49,7.20)	2.64	0.24	1.93	(0.91,4.06)	0.73	0.09	3.34	(1.72,6.47)	1.13	<.01	1.55	(1.22,1.97)	0.19	<.01
4.98	(1.30,8.99)	3.4	0.02	1.81	(0.99,3.30)	0.55	0.05	2.68	(1.58,4.54)	0.72	<.01	1.33	(1.10,1.61)	0.13	<.01
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
0.76	(0.30,1.96)	0.37	0.57	0.86	(0.58,1.29)	0.18	0.47	0.97	(0.71,1.32)	0.15	0.85	1	(0.89,1.13)	0.06	0.99
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
1.06	(0.49,2.28)	0.42	0.89	0.78	(0.35,1.75)	0.32	0.55	0.57	(0.42,0.77)	0.09	<.01	0.72	(0.57,0.90)	0.08	0.01
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
6.98	(2.08,3.39)	4.31	<.01	1.09	(0.72,1.65)	0.23	0.68	1.05	(0.74,1.48)	0.19	0.79	1.26	(1.11,1.42)	0.08	<.01
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
1.03	(0.44,2.40)	0.44	0.95	1.18	(0.73,1.89)	0.29	0.5	1.03	(0.69,1.54)	0.21	0.89	1.24	(1.07,1.44)	0.09	<.01
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
1.39	(0.76,2.57)	0.43	0.29	0.97	(0.90,1.05)	0.04	0.46	0.96	(0.89,1.04)	0.04	0.38	1.01	(0.99,1.03)	0.01	0.29

**TABLE D8.
RISK AND PROTECTIVE FACTORS FOR MALTREATMENT RECURRENCE
BY RACE AND ETHNICITY**

	White				Black			
MODEL 1 - Child Characteristics, Index Case Characteristics, Multisystem Involvement & Family Characteristics Risk Assessment (SDM)								
	OR	95% CI	se	p-value	OR	95% CI	se	p-value
Sex								
Female	1	-	-	-	1	-	-	-
Male	0.86	(0.60,1.25)	0.16	0.43	0.87	(0.68,1.11)	0.11	0.26
Race								
White	-	-	-	-	-	-	-	-
Black	-	-	-	-	-	-	-	-
AI/AN	-	-	-	-	-	-	-	-
Asian	-	-	-	-	-	-	-	-
Multi-racial	-	-	-	-	-	-	-	-
Hispanic								
Yes	1.37	(0.90,2.07)	0.29	0.14	1.18	(0.61,2.25)	0.39	0.63
No	1	-	-	-	1	-	-	-
Age at index report	1.02	(0.98,1.07)	0.02	0.33	0.96	(0.93,0.99)	0.02	0.01
Services needed and received								
Needed & received cm	1.51	(0.83,2.77)	0.47	0.18	1.15	(0.78,1.69)	0.23	0.47
Needed but no cm	2.88	(1.56,5.32)	0.9	<.01	1.56	(1.03,2.36)	0.33	0.03
Not needed & received cm	4.8	(1.61,14.32)	2.68	0.01	1.59	(0.71,3.54)	0.65	0.26
Not needed & no cm	1	-	-	-	1	-	-	-
Imminent Danger								
Yes	2.14	(0.58,7.88)	1.42	0.25	1.35	(0.64,2.83)	0.51	0.43
No	1	-	-	-	1	-	-	-
Allegation at index report								
Neglect (not medical neglect)	0.79	(0.41,1.52)	0.26	0.48	0.55	(0.36,0.82)	0.11	<.01
Physical abuse	0.96	(0.52,1.78)	0.3	0.9	0.78	(0.52,1.17)	0.16	0.24
Sexual abuse	0.32	(0.15,0.70)	0.13	0.01	0.44	(0.26,0.75)	0.12	<.01
Relationship of offender to victim at index								
Parent	1.2	(0.61,2.34)	0.41	0.6	1.92	(1.22,3.03)	0.45	0.01
Unmarried partner of parent	1.97	(1.10,3.54)	0.59	0.02	2.65	(1.76,3.99)	0.55	<.01
Other/Sex trafficker	1.56	(0.40,6.02)	1.07	0.52	1.25	(0.46,3.38)	0.63	0.66
Number of prior CPS reports	1.19	(0.91,1.56)	0.16	0.2	1.24	(1.02,1.52)	0.13	0.03
Number of prior substationed CPS reports	1.05	(0.69,1.60)	0.23	0.8	0.77	(0.56,1.06)	0.13	0.11
Concurrent CMH case								
Yes	1.73	(0.74,4.04)	0.75	0.21	0.91	(0.39,2.14)	0.4	0.83
No	1	-	-	-	1	-	-	-
History of CPS OHP								
Yes	0.94	(0.41,2.12)	0.39	0.88	0.9	(0.53,1.54)	0.25	0.71
No	1	-	-	-	1	-	-	-
Number of Children in the Home								
Two or More	1.11	(0.68,1.83)	0.28	0.67	1.2	(0.85,1.69)	0.21	0.31
One	1	-	-	-	1	-	-	-
Either Care Has a History of Domestic Violence								
Yes	1.24	(0.83,1.87)	0.26	0.29	1.24	(0.94,1.64)	0.18	0.13
No	1	-	-	-	1	-	-	-

Alaskan Native/American Indian				Multiracial				Hispanic				Non-Hispanic			
OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
0.85	(0.57,1.27)	0.17	0.44	0.96	(0.56,1.65)	0.26	0.89	1.03	(0.64,1.64)	0.24	0.91	0.87	(0.72,1.04)	0.08	0.13
-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-
-	-	-	-	-	-	-	-	1.35	(0.61,2.96)	0.54	0.46	1.35	(1.05,1.74)	0.18	0.02
-	-	-	-	-	-	-	-	1.16	(0.61,2.22)	0.38	0.65	1.79	(1.32,2.43)	0.28	<.01
-	-	-	-	-	-	-	-	-	-	-	-	0.83	(0.45,1.54)	0.26	0.57
-	-	-	-	-	-	-	-	0.93	(0.46,1.90)	0.34	0.85	1	(0.70,1.44)	0.19	0.99
0.99	(0.59,1.65)	0.26	0.96	1.74	(0.91,3.31)	0.57	0.09	-	-	-	-	-	-	-	-
1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
0.97	(0.92,1.02)	0.03	0.27	0.97	(0.90,1.04)	0.04	0.37	0.98	(0.92,1.04)	0.03	0.55	0.98	(0.95,1.00)	0.01	0.04
1.06	(0.48,2.33)	0.43	0.88	1.91	(0.68,5.38)	1.01	0.22	2.45	(1.03,5.80)	1.08	0.04	1.27	(0.95,1.70)	0.19	0.11
1.03	(0.45,2.35)	0.43	0.95	2.02	(0.69,5.89)	1.1	0.2	3.41	(1.43,8.18)	1.52	0.01	1.55	(1.13,2.11)	0.25	0.01
4.49	(1.07,18.92)	3.3	0.04	2.34	(0.20,26.77)	2.91	0.49	6.95	(1.67,28.86)	5.05	0.01	2.36	(1.32,4.22)	0.7	<.01
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
0.39	(0.05,3.36)	0.43	0.39	0.36	(0.03,4.33)	0.46	0.42	0.37	(0.04,3.35)	0.42	0.38	1.07	(0.58,1.95)	0.33	0.83
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
0.4	(0.17,0.93)	0.17	0.03	0.92	(0.36,2.36)	0.44	0.87	1.22	(0.50,2.94)	0.55	0.66	0.58	(0.43,0.79)	0.09	<.01
0.64	(0.28,1.44)	0.26	0.28	1.74	(0.78,3.85)	0.7	0.17	1.17	(0.52,2.60)	0.48	0.71	0.85	(0.63,1.15)	0.13	0.29
0.53	(0.19,1.48)	0.28	0.22	1.03	(0.30,3.52)	0.65	0.96	0.41	(0.15,1.12)	0.21	0.08	0.5	(0.34,0.74)	0.1	<.01
2.35	(0.89,6.22)	1.17	0.09	2.13	(0.61,7.47)	1.36	0.24	0.81	(0.34,1.94)	0.36	0.64	1.87	(1.31,2.66)	0.34	<.01
2.33	(0.95,5.74)	1.07	0.07	4.16	(1.42,12.19)	2.28	0.01	2.44	(1.05,5.66)	1.05	0.04	2.38	(1.74,3.25)	0.38	<.01
0.5	(0.06,4.57)	0.57	0.54	1.1	(0.11,10.73)	1.28	0.94	0.86	(0.14,5.27)	0.8	0.88	1.08	(0.50,2.34)	0.43	0.84
0.8	(0.56,1.14)	0.15	0.21	1.15	(0.74,1.79)	0.26	0.54	1.27	(0.87,1.86)	0.25	0.22	1.06	(0.91,1.22)	0.08	0.47
1.69	(1.06,2.69)	0.4	0.03	1.09	(0.59,2.03)	0.34	0.78	1.72	(1.00,2.94)	0.47	0.05	1.01	(0.82,1.26)	0.11	0.91
7.37	(2.15,25.27)	4.63	<.01	1.28	(0.21,7.86)	1.18	0.79	5.16	(1.60,16.59)	3.07	0.01	1.12	(0.64,1.96)	0.32	0.7
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
1.97	(1.12,3.48)	0.57	0.02	2.57	(1.16,5.68)	1.04	0.02	0.92	(0.42,2.02)	0.37	0.84	1.26	(0.91,1.76)	0.21	0.17
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
1.31	(0.78,2.21)	0.35	0.31	0.83	(0.42,1.63)	0.29	0.59	1.49	(0.74,3.03)	0.54	0.27	1.17	(0.92,1.49)	0.14	0.2
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
0.88	(0.57,1.37)	0.2	0.57	0.68	(0.37,1.24)	0.21	0.21	0.75	(0.45,1.24)	0.19	0.26	1.08	(0.88,1.32)	0.11	0.45
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-

	White				Black			
	OR	95% CI	se	p-value	OR	95% CI	se	p-value
Either Care Has/Had an Alcohol or Drug Problem During the Last 12 Months								
Yes	0.9	(0.60,1.37)	0.19	0.64	0.82	(0.61,1.11)	0.13	0.21
No	1	-	-	-	1	-	-	-
Primary Caregiver Has/Had Mental Health Problem								
Yes	1.23	(0.81,1.88)	0.26	0.33	0.87	(0.66,1.15)	0.12	0.33
No	1	-	-	-	1	-	-	-
Either Caregiver was Abused as a Child								
Yes	1.38	(0.94,2.04)	0.28	0.1	1.36	(1.04,1.79)	0.19	0.03
No	1	-	-	-	1	-	-	-
Either Caregiver's Parenting Style is Over-controlling								
Yes	0.75	(0.35,1.61)	0.29	0.45	0.44	(0.23,0.84)	0.15	0.01
No	1	-	-	-	1	-	-	-
Child in the Home Has a Developmental Disability/Emotional Impairment								
Developmental Disability and Delinquency	3.85	(1.39,10.67)	2	0.01	2.87	(1.47,5.58)	0.97	<.01
History of Delinquency	1.35	(0.36,5.08)	0.91	0.66	0.7	(0.21,2.37)	0.44	0.57
Developmental Disability	1.59	(1.02,2.45)	0.35	0.04	1.24	(0.91,1.69)	0.19	0.17
No	1	-	-	-	1	-	-	-
Alleged Offender is an Unmarried Partner of Primary Caregiver								
Yes	1.36	(0.87,2.13)	0.31	0.18	0.83	(0.60,1.14)	0.13	0.24
No	1	-	-	-	1	-	-	-
Father, Stepfather, Boyfriend, or Male Roommates Provides Unsupervised Childcare to a Child < 3 years								
Yes	1.24	(0.51,2.99)	0.56	0.63	0.68	(0.40,1.16)	0.19	0.16
No	0.67	(0.31,1.47)	0.27	0.32	1	(0.63,1.58)	0.23	0.99
N/A	1	-	-	-	1	-	-	-
Father, Stepfather, Boyfriend, or Male Roommates is Employed								
Yes	1.02	(0.47,2.23)	0.41	0.96	1.5	(0.93,2.41)	0.36	0.1
No	1.16	(0.52,2.60)	0.48	0.71	1.4	(0.89,2.21)	0.33	0.15
N/A	1	-	-	-	1	-	-	-
Risk Level								
High	1.43	(0.30,6.79)	1.14	0.65	1.7	(0.62,4.63)	0.87	0.3
Moderate	1.9	(0.42,8.52)	1.45	0.4	1.42	(0.54,3.74)	0.7	0.48
Low	1	-	-	-	1	-	-	-

Model 1.1 -Child Characteristics, Index Case Characteristics, Multisystem Involvement, Family Characteristics Risk Assessment (SDM) & Risk Reassessment (SDM)

	OR	95% CI	se	p-value	OR	95% CI	se	p-value
Sex								
Female	1	-	-	-	1	-	-	-
Male	1.01	(0.62,1.64)	0.25	0.97	0.89	(0.64,1.24)	0.15	0.5
Hispanic								
Yes	1.45	(0.82,2.58)	0.43	0.21	0.49	(0.15,1.62)	0.3	0.24
No	1	-	-	-	1	-	-	-
Race								
White	-	-	-	-	-	-	-	-
Black	-	-	-	-	-	-	-	-
AI/AN	-	-	-	-	-	-	-	-
Asian	-	-	-	-	-	-	-	-
Multi-racial	-	-	-	-	-	-	-	-
Age at index report	1.08	(1.02,1.14)	0.03	0.01	0.93	(0.89,0.97)	0.02	0

Alaskan Native/American Indian				Multiracial				Hispanic				Non-Hispanic			
OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value
0.88	(0.57,1.37)	0.2	0.57	0.42	(0.23,0.76)	0.13	<.01	0.74	(0.42,1.29)	0.21	0.29	0.79	(0.64,0.97)	0.08	0.03
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
1.03	(0.67,1.56)	0.22	0.91	2.92	(1.51,5.67)	0.99	<.01	1.83	(1.06,3.17)	0.51	0.03	1.01	(0.83,1.23)	0.1	0.91
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
1.54	(1.02,2.33)	0.33	0.04	0.79	(0.44,1.42)	0.24	0.43	1.37	(0.83,2.26)	0.35	0.22	1.28	(1.06,1.56)	0.13	0.01
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
1	(0.35,2.86)	0.54	1	0.94	(0.29,2.99)	0.55	0.91	0.89	(0.30,2.65)	0.49	0.83	0.62	(0.41,0.95)	0.13	0.03
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
0.59	(0.14,2.48)	0.43	0.47	4.64	(1.00,21.62)	3.64	0.05	0.4	(0.04,3.82)	0.46	0.43	2.77	(1.70,4.50)	0.69	<.01
0.64	(0.20,2.03)	0.38	0.45	1.59	(0.12,20.31)	2.06	0.72	0.26	(0.02,3.38)	0.34	0.31	1.01	(0.52,1.95)	0.34	0.99
0.46	(0.24,0.91)	0.16	0.03	0.74	(0.35,1.59)	0.29	0.44	1.02	(0.55,1.88)	0.32	0.95	1.06	(0.84,1.34)	0.12	0.6
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
0.69	(0.39,1.23)	0.2	0.21	0.61	(0.27,1.37)	0.25	0.23	1.24	(0.63,2.44)	0.43	0.53	0.9	(0.72,1.13)	0.11	0.37
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
1.15	(0.47,2.84)	0.53	0.76	1.66	(0.49,5.69)	1.04	0.42	3.23	(1.04,10.02)	1.87	0.04	0.81	(0.54,1.21)	0.17	0.3
1.62	(0.77,3.39)	0.61	0.2	1.12	(0.37,3.41)	0.64	0.84	1.77	(0.70,4.50)	0.84	0.23	0.96	(0.67,1.36)	0.17	0.8
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
0.68	(0.30,1.52)	0.28	0.34	1.21	(0.40,3.69)	0.69	0.73	0.51	(0.20,1.31)	0.25	0.16	1.21	(0.84,1.73)	0.22	0.31
1.1	(0.53,2.28)	0.41	0.79	0.61	(0.21,1.78)	0.33	0.36	0.39	(0.15,1.04)	0.2	0.06	1.38	(0.98,1.95)	0.24	0.07
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
1.31	(0.14,12.40)	1.5	0.81	1.71	(0.18,16.54)	1.98	0.64	0.55	(0.28,1.09)	0.19	0.09	1.56	(0.74,3.29)	0.59	0.24
1.28	(0.14,11.55)	1.43	0.83	1.18	(0.13,10.97)	1.34	0.88	-	-	-	-	1.35	(0.66,2.78)	0.5	0.41
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
0.91	(0.55,1.50)	0.23	0.71	1.18	(0.59,2.37)	0.42	0.63	1.12	(0.57,2.22)	0.39	0.74	0.87	(0.69,1.11)	0.11	0.26
0.93	(0.47,1.86)	0.33	0.85	1.58	(0.69,3.61)	0.67	0.28	-	-	-	-	-	-	-	-
1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-
-	-	-	-	-	-	-	-	0.29	(0.07,1.20)	0.21	0.09	1.44	(1.04,2.00)	0.24	0.03
-	-	-	-	-	-	-	-	1.11	(0.46,0.00)	0.5	0.82	1.64	(1.11,2.42)	0.33	0.01
-	-	-	-	-	-	-	-	-	-	-	-	0.61	(0.25,1.47)	0.27	0.27
-	-	-	-	-	-	-	-	1.13	(0.46,0.00)	0.52	0.79	1.16	(0.72,1.87)	0.28	0.55
0.99	(0.93,1.61)	0.03	0.81	0.95	(0.87,1.54)	0.05	0.36	1.08	(1.00,1.17)	0.04	0.06	0.97	(0.94,1.00)	0.02	0.04

	White				Black			
	OR	95% CI	se	p-value	OR	95% CI	se	p-value
Number of Children								
One	1	-	-	-	1	-	-	-
Two or three	1.34	(0.73,2.45)	0.41	0.34	1.26	(0.80,1.10)	0.29	0.31
Four or more	0.83	(0.36,1.89)	0.35	0.65	1.12	(0.66,1.89)	0.3	0.68
Age of youngest child								
3 or older	1	-	-	-	1	-	-	-
2 or younger	0.66	(0.34,1.26)	0.22	0.21	0.52	(0.34,0.79)	0.11	<.01
Alcohol and drug problem from either caregiver								
Yes	2	(1.06,3.08)	0.64	0.03	0.82	(0.52,1.30)	0.19	0.4
No	1	-	-	-	1	-	-	-
Domestic violence since last assessment/reassessment								
Yes	2.18	(1.01,4.68)	0.85	0.05	1.03	(0.59,1.81)	0.3	0.91
No	1	-	-	-	1	-	-	-
Number of Workers								
1	1	-	-	-	1	-	-	-
2	1.26	(0.70,2.03)	0.37	0.44	0.97	(0.63,1.47)	0.21	0.87
3	1.27	(0.49,3.28)	0.61	0.62	1.4	(0.79,2.47)	0.41	0.25
4+	3.4	(1.30,8.88)	1.66	0.01	1.4	(0.79,2.47)	0.41	0.25
Risk Level								
High	1.86	(0.81,4.30)	0.79	0.15	1.86	(1.09,3.16)	0.5	0.02
Moderate	2.04	(1.13,3.69)	0.62	0.02	1.59	(1.04,2.45)	0.35	0.03
Low	1	-	-	-	1	-	-	-

MODEL 4.2 - Child Characteristics, Index Case Characteristics, Multisystem Involvement, Family Characteristics (SDM), & Strengths and Needs (SDM)

	OR	95% CI	se	p-value	OR	95% CI	se	p-value
Sex								
Female	1	-	-	-	1	-	-	-
Male	0.42	(0.13,1.39)	0.26	0.16	1.16	(0.59,2.28)	0.4	0.66
Hispanic								
Yes	-	-	-	-	-	-	-	-
No	-	-	-	-	-	-	-	-
Race								
White	-	-	-	-	-	-	-	-
Black	-	-	-	-	-	-	-	-
AI/AN	-	-	-	-	-	-	-	-
Asian	-	-	-	-	-	-	-	-
Multi-racial	-	-	-	-	-	-	-	-
Age at index report	1.04	(0.94,1.14)	0.05	0.48	0.96	(0.90,1.03)	0.03	0.24
Household Relationships/ Domestic Violence								
Supportive	1	-	-	-	1	-	-	-
Minor or occasional discord	1.04	(0.94,1.14)	0.05	0.48	3.24	(0.92,11.47)	2.09	0.07
Frequent discord or some domestic violence	0.57	(0.12,2.69)	0.45	0.47	4.69	(1.23,17.96)	3.21	0.02
Chronic discord or severe domestic violence	0.69	(0.13,3.67)	0.59	0.67	3.33	(0.72,15.45)	2.61	0.13

MODEL 2 - Child Characteristics, Index Case Characteristics, Multisystem Involvement, Family Characteristics (SDM) & Education

	OR	95% CI	se	p-value	OR	95% CI	se	p-value
Sex								
Female	1	-	-	-	1	-	-	-
Male	0.63	(0.40,1.00)	0.15	0.05	0.73	(0.53,1.02)	0.12	0.07

Alaskan Native/American Indian				Multiracial				Hispanic				Non-Hispanic			
OR	95% CI	se	p-value		95% CI	se	p-value		95% CI	se	p-value		95% CI	se	p-value
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
0.91	(0.46,1.77)	0.31	0.77	1.55	(0.66,3.62)	0.67	0.32	3.87	(1.29,11.63)	2.17	0.02	1.12	(0.83,1.52)	0.17	0.47
1.67	(0.78,3.58)	0.65	0.19	0.3	(0.06,1.59)	0.25	0.16	1.77	(0.55,5.66)	1.05	0.34	1.04	(0.71,1.52)	0.2	0.84
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
0.95	(0.52,1.74)	0.29	0.88	1.12	(0.46,2.72)	0.51	0.81	1.44	(0.64,3.21)	0.59	0.38	0.63	(0.47,0.85)	0.1	<.01
0.45	(0.24,0.85)	0.15	0.01	0.4	(0.14,1.16)	0.22	0.09	0.87	(0.34,2.24)	0.42	0.77	0.75	(0.55,1.31)	0.12	0.08
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
1.64	(0.78,3.48)	0.63	0.19	0.58	(0.11,2.95)	0.48	0.51	8.16	(2.73,24.36)	4.55	<.01	1.08	(0.72,1.60)	0.22	0.72
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
0.89	(0.47,1.69)	0.29	0.73	1.81	(0.76,4.32)	0.8	0.18	1.92	(0.85,4.31)	0.79	0.12	1.02	(0.76,1.38)	0.15	0.87
0.77	(0.34,1.74)	0.32	0.54	1.63	(0.57,4.64)	0.87	0.36	1.52	(0.44,5.26)	0.96	0.51	1.22	(0.82,1.83)	0.25	0.33
0.45	(0.13,1.59)	0.29	0.22	4.03	(0.86,18.08)	3.17	0.08	2.9	(0.81,10.39)	1.89	0.1	0.93	(0.53,1.64)	0.27	0.8
3.23	(1.26,8.27)	1.55	0.02	1.89	(0.64,5.59)	1.05	0.25	4.81	(1.44,16.02)	2.95	0.01	1.9	(1.30,2.79)	0.37	<.01
1.77	(0.75,4.21)	0.78	0.19	0.71	(0.31,1.04)	0.3	0.42	3.46	(1.26,9.47)	1.78	0.02	1.37	(1.01,1.86)	0.21	0.04
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value
1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
0.55	(0.04,8.07)	0.75	0.66	0.27	(0.03,2.21)	0.29	0.22	-	-	-	-	-	-	-	-
0.95	(0.03,32.08)	1.7	0.98	0.23	(0.02,3.57)	0.32	0.3	-	-	-	-	-	-	-	-
1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.76	(0.47,1.21)	0.18	0.25	1.33	(0.96,1.85)	0.22	0.08	-	-	-	-	-	-	-	-
1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
0.54	(0.04,6.04)	0.66	0.62	0.02	(0.00,1.45)	0.04	0.07	-	-	-	-	-	-	-	-
-	-	-	-	0.2	(0.01,6.44)	0.35	0.36	-	-	-	-	-	-	-	-
-	-	-	-	0.4	(0.01,11.71)	0.68	0.59	-	-	-	-	-	-	-	-
OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
0.85	(0.48,1.52)	0.25	0.58	0.37	(0.16,0.88)	0.16	0.03	1.01	(0.55,1.87)	0.32	0.97	0.72	(0.57,0.92)	0.09	0.01

	White				Black			
	OR	95% CI	se	p-value	OR	95% CI	se	p-value
Race								
White	-	-	-	-	-	-	-	-
Black	-	-	-	-	-	-	-	-
AI/AN	-	-	-	-	-	-	-	-
Asian	-	-	-	-	-	-	-	-
Multi-racial	-	-	-	-	-	-	-	-
Hispanic								
Yes	1.64	(0.86,3.13)	0.54	0.13	0.8	(0.29,2.19)	0.41	0.66
No	1	-	-	-	1	-	-	-
Age at index report	0.97	(0.91,1.04)	0.03	0.45	0.89	(0.85,0.94)	0.02	<.01
Services needed and received								
Needed & received cm	2.28	(1.05,4.96)	0.9	0.04	1.03	(0.63,1.67)	0.26	0.91
Needed but no cm	3.03	(1.37,6.69)	1.22	0.01	1.52	(0.92,2.51)	0.39	0.11
Not needed & received cm	6.65	(1.81,24.42)	4.41	<.01	1.69	(0.66,4.32)	0.81	0.27
Not needed & no cm	1	-	-	-	1	-	-	-
Imminent Danger								
Yes	7.2	(1.53,33.88)	5.69	0.01	1.99	(0.80,4.94)	0.92	0.14
No	1	-	-	-	1	-	-	-
Allegation at index report								
Neglect (not medical neglect)	1.11	(0.52,2.37)	0.43	0.78	0.84	(0.49,1.42)	0.23	0.51
Physical abuse	1.1	(0.54,2.25)	0.4	0.8	0.88	(0.52,1.49)	0.24	0.64
Sexual abuse	0.27	(0.11,0.67)	0.12	0.01	0.44	(0.23,0.85)	0.15	0.02
Relationship of offender to victim at index								
Parent	0.94	(0.45,1.98)	0.36	0.88	2.14	(1.20,3.83)	0.64	0.01
Unmarried partner of parent	2.19	(1.09,4.39)	0.78	0.03	2.83	(1.67,4.79)	0.76	<.01
Other/Sex trafficker	2.04	(0.49,8.41)	1.47	0.33	-	-	-	-
Number of prior CPS reports	1.23	(0.91,1.66)	0.19	0.19	1.17	(0.93,1.46)	0.13	0.18
Number of prior substationed CPS reports	1.05	(0.67,1.65)	0.24	0.82	0.82	(0.58,1.17)	0.15	0.27
Concurrent CMH case								
Yes	1.54	(0.64,3.69)	0.69	0.33	0.96	(0.40,2.32)	0.43	0.93
No	1	-	-	-	1	-	-	-
History of CPS OHP								
Yes	0.58	(0.23,1.47)	0.28	0.25	0.94	(0.52,1.71)	0.29	0.84
No	1	-	-	-	1	-	-	-
Number of Children in the Home								
Two or More	0.84	(0.45,1.59)	0.27	0.6	0.94	(0.59,1.50)	0.22	0.78
One	1	-	-	-	1	-	-	-
Either Care Has a History of Domestic Violence								
Yes	0.93	(0.57,1.50)	0.23	0.76	1.07	(0.74,1.53)	0.2	0.73
No	1	-	-	-	1	-	-	-
Either Care Has/Had an Alcohol or Drug Problem During the Last 12 Months								
Yes	0.87	(0.53,1.44)	0.22	0.59	0.63	(0.41,0.97)	0.14	0.04
No	1	-	-	-	1	-	-	-
Primary Caregiver Has/Had Mental Health Problem								
Yes	1.27	(0.77,2.09)	0.32	0.35	0.99	(0.69,1.43)	0.18	0.96
No	1	-	-	-	1	-	-	-

Alaskan Native/American Indian				Multiracial				Hispanic				Non-Hispanic			
OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value
-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-
-	-	-	-	-	-	-	-	0.96	(0.29,3.19)	0.59	0.95	1.17	(0.85,1.61)	0.19	0.34
-	-	-	-	-	-	-	-	1.02	(0.43,2.43)	0.45	0.97	1.35	(0.90,2.01)	0.27	0.15
-	-	-	-	-	-	-	-	-	-	-	-	1.42	(0.62,3.23)	0.59	0.4
-	-	-	-	-	-	-	-	0.69	(0.26,1.86)	0.35	0.46	0.72	(0.44,1.18)	0.18	0.19
1.52	(0.73,3.15)	0.57	0.26	3.98	(1.33,11.90)	2.22	0.01	-	-	-	-	-	-	-	-
1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
0.91	(0.82,1.00)	0.04	0.05	0.95	(0.83,1.08)	0.06	0.45	0.91	(0.83,1.01)	0.05	0.07	0.93	(0.89,0.96)	0.02	<.01
2.64	(0.72,9.75)	1.76	0.14	1.84	(0.41,8.29)	1.41	0.43	5.82	(1.55,21.86)	3.93	0.01	1.19	(0.82,1.72)	0.22	0.36
2.06	(0.55,7.80)	1.4	0.29	1.13	(0.24,5.36)	0.9	0.88	6.13	(1.62,23.17)	4.16	0.01	1.44	(0.97,2.12)	0.29	0.07
12.55	(1.67,94.45)	12.92	0.01	-	-	-	-	8.63	(1.31,56.97)	8.31	0.03	2.62	(1.32,5.18)	0.91	0.01
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
0.67	(0.05,8.74)	0.88	0.76	-	-	-	-	-	-	-	-	1.89	(0.93,3.87)	0.69	0.08
1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
0.32	(0.08,1.28)	0.23	0.11	0.24	(0.05,1.29)	0.21	0.1	1.15	(0.39,3.45)	0.64	0.8	0.72	(0.48,1.08)	0.15	0.12
0.28	(0.07,1.12)	0.2	0.07	0.57	(0.14,2.40)	0.42	0.45	0.95	(0.33,2.74)	0.51	0.93	0.69	(0.47,1.03)	0.14	0.07
0.18	(0.03,1.07)	0.16	0.06	0.09	(0.01,0.81)	0.1	0.03	0.29	(0.08,1.10)	0.2	0.07	0.36	(0.22,0.60)	0.09	<.01
0.96	(0.23,4.01)	0.7	0.96	6.01	(0.88,40.91)	5.88	0.07	0.6	(0.20,1.80)	0.34	0.37	1.66	(1.08,2.57)	0.37	0.02
1.92	(0.56,6.65)	1.22	0.3	21.33	(3.01,151.09)	21.31	<.01	3.18	(1.09,9.29)	1.74	0.03	2.47	(1.68,3.64)	0.49	<.01
0.57	(0.05,7.06)	0.73	0.66	2.99	(0.17,54.06)	4.42	0.46	0.57	(0.04,8.15)	0.77	0.68	0.77	(0.26,2.26)	0.42	0.63
0.7	(0.44,1.12)	0.17	0.14	0.8	(0.46,1.41)	0.23	0.44	1.43	(0.93,2.20)	0.31	0.11	0.99	(0.84,1.17)	0.08	0.89
1.9	(1.04,3.47)	0.58	0.04	1.73	(0.80,3.76)	0.69	0.17	1.54	(0.86,2.76)	0.46	0.15	1.06	(0.83,1.35)	0.13	0.65
14.03	(3.07,64.14)	10.88	<.01	6.25	(0.79,49.22)	6.58	0.08	5.82	(1.54,21.90)	3.93	0.01	1.19	(0.66,2.14)	0.36	0.56
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
2.58	(1.22,5.42)	0.98	0.01	2.12	(0.72,6.24)	1.17	0.17	0.79	(0.32,1.93)	0.36	0.61	1.22	(0.83,1.79)	0.24	0.32
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
1.57	(0.67,3.71)	0.69	0.3	1.42	(0.33,6.14)	1.06	0.64	1.56	(0.56,4.38)	0.82	0.4	1.07	(0.76,1.50)	0.18	0.71
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
0.54	(0.28,1.05)	0.18	0.07	0.79	(0.29,2.16)	0.41	0.65	0.61	(0.31,1.22)	0.21	0.16	0.9	(0.70,1.17)	0.12	0.43
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
1.31	(0.68,2.54)	0.44	0.42	0.25	(0.09,0.68)	0.13	0.01	0.78	(0.38,1.60)	0.29	0.49	0.71	(0.54,0.94)	0.1	0.02
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
1.14	(0.61,2.12)	0.36	0.69	2.68	(0.94,7.65)	1.43	0.07	1.42	(0.69,2.91)	0.52	0.34	1.11	(0.86,1.43)	0.15	0.43
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-

	White				Black			
	OR	95% CI	se	p-value	OR	95% CI	se	p-value
Either Caregiver was Abused as a Child								
Yes	1.67	(1.05,2.65)	0.39	0.03	1.22	(0.84,1.76)	0.23	0.3
No	1	-	-	-	1	-	-	-
Either Caregiver's Parenting Style is Over-controlling								
Yes	1.18	(0.52,2.69)	0.5	0.69	0.51	(0.23,1.12)	0.2	0.09
No	1	-	-	-	1	-	-	-
Child in the Home Has a Developmental Disability/Emotional Impairment								
Developmental Disability and Delinquency	4.63	(1.48,14.51)	2.7	0.01	2.41	(1.13,5.13)	0.93	0.02
History of Delinquency	1	(0.20,5.01)	0.82	1	0.53	(0.12,2.39)	0.41	0.41
Developmental Disability	1.57	(0.92,2.68)	0.43	0.1	1.08	(0.73,1.60)	0.22	0.7
No	1	-	-	-	1	-	-	-
Alleged Offender is an Unmarried Partner of Primary Caregiver								
Yes	1.2	(0.69,2.09)	0.34	0.53	0.85	(0.55,1.31)	0.19	0.46
No	1	-	-	-	1	-	-	-
Father, Stepfather, Boyfriend, or Male Roommates Provides Unsupervised Childcare to a Child < 3 years								
Yes	0.75	(0.27,2.11)	0.4	0.59	0.55	(0.27,1.12)	0.2	0.1
No	0.59	(0.24,1.42)	0.27	0.24	1.06	(0.60,1.87)	0.31	0.85
N/A	1	-	-	-	1	-	-	-
Father, Stepfather, Boyfriend, or Male Roommates is Employed								
Yes	1.46	(0.60,3.56)	0.66	0.4	1.25	(0.68,2.29)	0.39	0.47
No	1.3	(0.52,3.26)	0.61	0.58	1.49	(0.84,2.66)	0.44	0.18
N/A	1	-	-	-	1	-	-	-
Risk Level								
High	1.09	(0.21,5.65)	0.92	0.92	1.83	(0.55,6.11)	1.13	0.32
Moderate	1.29	(0.27,6.25)	1.04	0.75	1.58	(0.50,4.96)	0.92	0.43
Low	1	-	-	-	1	-	-	-
Special Education								
Yes	0.95	(0.56,1.61)	0.26	0.85	1.42	(0.99,2.05)	0.26	0.06
No	1	-	-	-	1	-	-	-
Primary Home Language								
Other	0.87	(0.41,1.83)	0.33	0.71	0.96	(0.39,2.37)	0.44	0.93
English	1	-	-	-	1	-	-	-
Homeless (McKinney-Vento)								
Yes	1.32	(0.75,2.32)	0.38	0.33	1.2	(0.85,1.71)	0.22	0.3
No	1	-	-	-	1	-	-	-
Free/Reduced Price Lunch								
Yes	1.34	(0.68,2.64)	0.46	0.39	1.27	(0.69,2.34)	0.4	0.45
No	1	-	-	-	1	-	-	-

NOTE: Children identified as Asian were not included in this analysis due to insufficient sample size.

Alaskan Native/American Indian				Multiracial				Hispanic				Non-Hispanic			
OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value
1.56	(0.86,2.81)	0.47	0.14	1.01	(0.39,2.61)	0.49	0.98	1.42	(0.75,2.70)	0.46	0.28	1.31	(1.01,1.69)	0.17	0.04
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
0.96	(0.28,3.33)	0.61	0.95	1.34	(0.25,7.13)	1.14	0.73	1.03	(0.31,3.39)	0.63	0.96	0.75	(0.46,1.22)	0.19	0.24
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
0.78	(0.13,4.75)	0.72	0.79	14.31	(2.06,99.69)	14.17	0.01	0.42	(0.04,4.36)	0.5	0.47	2.64	(1.53,4.55)	0.73	<.01
0.66	(0.18,2.34)	0.43	0.52	6.28	(0.10,385.69)	13.2	0.38	0.29	(0.02,3.96)	0.38	0.35	0.99	(0.46,2.10)	0.38	0.97
0.49	(0.20,1.23)	0.23	0.13	0.71	(0.25,2.05)	0.38	0.53	1.46	(0.68,3.13)	0.57	0.33	0.92	(0.69,1.23)	0.14	0.56
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
0.51	(0.21,1.25)	0.23	0.14	0.16	(0.02,1.09)	0.16	0.06	0.76	(0.30,1.91)	0.36	0.56	2.64	(1.53,4.55)	0.73	0
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
1.39	(0.39,4.91)	0.89	0.61	0.47	(0.07,3.14)	0.45	0.43	2.43	(0.56,10.53)	1.82	0.24	0.69	(0.41,1.16)	0.18	0.17
2.39	(0.89,6.42)	1.21	0.09	0.41	(0.07,2.49)	0.38	0.34	1.81	(0.54,6.05)	1.11	0.34	1.03	(0.67,1.58)	0.23	0.9
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
0.64	(0.22,1.86)	0.35	0.42	3.68	(0.54,25.18)	3.61	0.19	0.64	(0.18,2.29)	0.42	0.49	1.11	(0.71,1.73)	0.25	0.66
0.86	(0.33,2.26)	0.42	0.77	2.38	(0.42,13.38)	2.1	0.33	0.49	(0.14,1.69)	0.31	0.26	1.33	(0.87,2.04)	0.29	0.19
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
0.62	(0.05,7.71)	0.8	0.71	0.83	(0.06,10.61)	1.08	0.88	0.81	(0.33,1.99)	0.37	0.64	1.36	(0.59,3.15)	0.58	0.47
0.52	(0.04,6.02)	0.65	0.6	0.13	(0.01,2.16)	0.19	0.16	-	-	-	-	1.09	(0.49,2.43)	0.45	0.83
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
0.71	(0.35,1.43)	0.25	0.34	0.98	(0.38,2.56)	0.48	0.97	0.93	(0.45,1.89)	0.34	0.83	1.17	(0.89,1.53)	0.16	0.25
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
0.87	(0.20,3.83)	0.66	0.85	-	-	-	-	0.96	(0.45,2.05)	0.37	0.93	0.6	(0.28,1.30)	0.24	0.2
1	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-
0.63	(0.33,1.20)	0.21	0.16	0.82	(0.30,2.24)	0.42	0.7	0.78	(0.39,1.58)	0.28	0.5	1.06	(0.81,1.38)	0.14	0.67
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
3.31	(0.97,11.22)	2.06	0.06	1.35	(0.25,7.28)	1.16	0.73	3.33	(0.78,14.25)	2.47	0.11	1.48	(0.98,2.22)	0.31	0.06
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-

**TABLE D9.
RISK AND PROTECTIVE FACTORS FOR MALTREATMENT FOSTER CARE
RE-ENTRY BY RACE AND ETHNICITY**

	White				Black			
MODEL 2 - Child Characteristics, Index Case Characteristics								
	OR	95% CI	se	p-value	OR	95% CI	se	p-value
Sex								
Female	1	-	-	-	1	-	-	-
Male	1.4	(0.52,3.78)	0.71	0.51	1.27	(0.63,2.57)	0.46	0.51
Race								
White	-	-	-	-	-	-	-	-
Black	-	-	-	-	-	-	-	-
AI/AN	-	-	-	-	-	-	-	-
Asian	-	-	-	-	-	-	-	-
Multi-racial	-	-	-	-	-	-	-	-
Hispanic								
Yes	0.95	(0.25,3.61)	0.65	0.94	-	-	-	-
No	1	-	-	-	-	-	-	-
Age at index report	0.93	(0.83,1.04)	0.05	0.22	1.03	(0.96,1.11)	0.04	0.44
Time in Index Placement								
1-30 days	40.08	(1.80,894.13)	63.49	0.02	3.64	(0.86,15.45)	2.68	0.08
31-180 days	0.82	(0.13,4.97)	0.75	0.83	1.37	(0.58,3.20)	0.59	0.47
181-364 days	3.17	(0.97,10.36)	1.92	0.06	0.48	(0.18,1.25)	0.23	0.13
365 days or more	1	-	-	-	1	-	-	-
Trail Home Visit								
Yes	0.1	(0.01,0.66)	0.09	0.02	0.36	(0.14,0.90)	0.17	0.03
No	1	-	-	-	1	-	-	-
Reason for Removal								
Child's behavior problem-delinquency	-	-	-	-	4.82	(0.69,33.71)	4.78	0.11
Allegation at index report								
Neglect (not medical neglect)	3.15	(0.48,20.51)	3.01	0.23	1.76	(0.66,4.70)	0.88	0.26
Physical abuse	0.38	(0.08,1.83)	0.31	0.23	0.93	(0.38,2.28)	0.42	0.87
Sexual abuse	0.67	(0.08,5.38)	0.71	0.7	0.25	(0.04,1.39)	0.22	0.11
Reporter type								
Human and social service staff	2.77	(0.69,11.07)	1.96	0.15	1.75	(0.58,5.25)	0.98	0.32
Family and friends	7.56	(1.70,33.58)	5.75	0.01	3.28	(1.08,9.98)	1.86	0.04
Other professional	1	-	-	-	1	-	-	-
Anonymous/other	2.46	(0.50,12.03)	1.99	0.27	5.04	(1.64,15.49)	2.89	0.01
Alleged victim	-	-	-	-	-	-	-	-
Alleged offender	-	-	-	-	-	-	-	-
MODEL 3 - Child Characteristics, & Multisystem Involvement								
	OR	95% CI	se	p-value	OR	95% CI	se	p-value
Sex								
Female	1	-	-	-	1	-	-	-
Male	1.22	(0.52,2.86)	0.53	0.64	1.25	(0.65,2.40)	0.42	0.51
Race								
White	-	-	-	-	-	-	-	-
Black	-	-	-	-	-	-	-	-
AI/AN	-	-	-	-	-	-	-	-
Asian	-	-	-	-	-	-	-	-
Multi-racial	-	-	-	-	-	-	-	-

Alaskan Native/American Indian				Multiracial				Hispanic				Non-Hispanic			
OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
1.3	(0.52,3.26)	0.61	0.57	0.6	(0.15,2.48)	0.44	0.48	1.22	(0.27,5.50)	0.94	0.8	1.25	(0.81,1.93)	0.28	0.32
-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	1.24	(0.69,2.25)	0.38	0.48
-	-	-	-	-	-	-	-	-	-	-	-	1.48	(0.76,2.86)	0.5	0.25
-	-	-	-	-	-	-	-	8.35	(1.13,61.53)	8.51	0.04	0.17	(0.02,1.39)	0.19	0.1
-	-	-	-	-	-	-	-	11.82	(1.38,101.31)		0.02	0.77	(0.36,1.66)	0.3	0.51
0.51	(0.14,1.81)	0.33	0.3	3.25	(0.68,15.53)	2.59	0.14	-	-	-	-	-	-	-	-
1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
0.96	(0.87,1.07)	0.05	0.51	1.23	(1.05,1.45)	0.1	0.01	1.15	(0.97,1.36)	0.1	0.12	1.01	(0.96,1.06)	0.03	0.68
28.23	(4.71,169.04)	25.78	<.01	4.88	(0.06,407.15)	11.01	0.48	16.93	(0.92,313.07)	25.2	0.06	5.69	(2.21,14.62)	2.74	<.01
2.27	(0.64,8.02)	1.46	0.2	28.24	(3.33,239.54)	30.8	<.01	7.74	(0.94,63.69)	8.32	0.06	1.48	(0.83,2.65)	0.44	0.19
0.38	(0.11,1.32)	0.24	0.13	16.41	(2.12,127.01)	17.13	0.01	7.61	(1.03,56.27)	7.77	0.05	1.02	(0.59,1.76)	0.28	0.96
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
0.09	(0.02,0.31)	0.06	<.01	0.86	(0.15,5.04)	0.77	0.86	0.81	(0.10,6.31)	0.85	0.84	0.31	(0.18,0.56)	0.09	<.01
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
0.46	(0.02,12.57)	0.77	0.64	-	-	-	-	-	-	-	-	3.79	(0.99,14.59)	2.61	0.05
0.25	(0.03,2.20)	0.28	0.21	28.25	(0.94,849.21)	49.05	0.05	0.6	(0.05,7.01)	0.75	0.68	1.43	(0.70,2.93)	0.52	0.33
0.27	(0.03,2.13)	0.28	0.21	3.6	(0.54,24.16)	3.5	0.19	0.08	(0.01,1.18)	0.11	0.07	0.76	(0.41,1.41)	0.24	0.39
0.56	(0.04,7.12)	0.72	0.65	-	-	-	-	1.05	(0.04,27.68)	1.76	0.98	0.27	(0.09,0.82)	0.15	0.02
0.66	(0.18,2.47)	0.45	0.54	-	-	-	-	0.25	(0.02,2.65)	0.3	0.25	1.4	(0.72,2.72)	0.48	0.32
1.11	(0.33,3.79)	0.7	0.86	0.16	(0.02,1.66)	0.19	0.13	0.86	(0.05,16.07)	1.29	0.92	2.18	(1.17,4.05)	0.69	0.01
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
0.1	(0.01,1.37)	0.14	0.09	10.12	(1.94,52.83)	8.53	0.01	6.06	(0.91,40.59)	5.88	0.06	2.2	(1.11,4.38)	0.77	0.03
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value
1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-
1.03	(0.48,2.22)	0.4	0.94	1.25	(0.43,3.61)	0.68	0.68	1.13	(0.36,3.59)	0.67	0.84	1.23	(0.81,1.87)	0.26	0.33
-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	1.06	(0.60,1.86)	0.31	0.85
-	-	-	-	-	-	-	-	2.41	(0.51,11.34)	1.9	0.27	1.51	(0.81,2.83)	0.48	0.19
-	-	-	-	-	-	-	-	-	-	-	-	0.21	(0.03,1.66)	0.22	0.14
-	-	-	-	-	-	-	-	5.56	(1.19,26.02)	4.38	0.03	0.74	(0.35,1.60)	0.29	0.45

	White				Black			
	OR	95% CI	se	p-value	OR	95% CI	se	p-value
Hispanic								
Yes	0.58	(0.18,1.80)	0.34	0.34	-	-	-	-
No	1	-	-	-	-	-	-	-
Age at index report	0.93	(0.84,1.02)	0.05	0.12	0.99	(0.92,1.06)	0.04	0.71
Number of prior CPS out-of-home placements	1.24	(0.19,7.92)	1.17	0.82	2.11	(1.09,4.08)	0.71	0.03

MODEL 4 - Child Characteristics & Family Characteristics (SDM)

	OR	95% CI	se	p-value	OR	95% CI	se	p-value
Sex								
Female	1	-	-	-	1	-	-	-
Male	1.24	(0.53,2.91)	0.54	0.62	1.2	(0.61,2.34)	0.41	0.59
Race								
White	-	-	-	-	-	-	-	-
Black	-	-	-	-	-	-	-	-
AI/AN	-	-	-	-	-	-	-	-
Asian	-	-	-	-	-	-	-	-
Multi-racial	-	-	-	-	-	-	-	-
Hispanic								
Yes	0.54	(0.17,1.69)	0.32	0.29	-	-	-	-
No	1	-	-	-	-	-	-	-
Age at index report	0.95	(0.85,1.05)	0.05	0.3	0.99	(0.93,1.06)	0.03	0.83
Father, Stepfather, Boyfriend, or Male Roommates Provides Unsupervised Childcare to a Child < 3 years								
Yes	1.03	(0.34,3.09)	0.58	0.96	0.57	(0.21,1.50)	0.28	0.25
No	0.61	(0.19,2.00)	0.37	0.42	1.66	(0.79,3.50)	0.63	0.18
N/A	1	-	-	-	1	-	-	-

MODEL 5 - Child Characteristics & Education

	OR	95% CI	se	p-value	OR	95% CI	se	p-value
Sex								
Female	1	-	-	-	1	-	-	-
Male	0.15	(0.02,1.29)	0.16	0.08	0.36	(0.12,1.12)	0.21	0.08
Race								
White	-	-	-	-	-	-	-	-
Black	-	-	-	-	-	-	-	-
AI/AN	-	-	-	-	-	-	-	-
Asian	-	-	-	-	-	-	-	-
Multi-racial	-	-	-	-	-	-	-	-
Hispanic								
Yes	2.85	(0.43,18.91)	2.75	0.28	-	-	-	-
No	1	-	-	-	-	-	-	-
Age at index report	0.98	(0.78,1.23)	0.11	0.85	1.02	(0.86,1.21)	0.09	0.81
Primary Home Language History								
Other	0.5	(0.06,4.36)	0.55	0.53	-	-	-	-
English	1	-	-	-	-	-	-	-
Number of prior disciplinary events	-	-	-	-	1.23	(1.09,1.38)	0.07	<.01

NOTE: Children identified as Asian were not included in this analysis due to insufficient sample size.

Alaskan Native/American Indian				Multiracial				Hispanic				Non-Hispanic			
OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value
0.67	(0.24,1.92)	0.36	0.46	2.9	(0.90,9.29)	1.72	0.07	-	-	-	-	--	--	--	--
1	-	-	-	1	-	-	-	-	-	-	-	--	--	--	--
1.02	(0.93,1.11)	0.05	0.68	1.15	(1.02,1.29)	0.07	0.02	1.12	(0.98,1.28)	0.08	0.09	0.99	(0.94,1.03)	0.02	0.59
1.16	(0.50,2.67)	0.49	0.73	1.42	(0.74,2.73)	0.47	0.29	1.53	(0.48,4.85)	0.9	0.47	1.74	(1.16,2.61)	0.36	0.01
OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value
1	-	-	-	1	-	-	-	1	-	-	-	1	--	--	--
0.95	(0.43,2.09)	0.38	0.9	1.44	(0.49,4.24)	0.79	0.51	1.06	(0.33,3.40)	0.63	0.93	1.19	(0.78,1.81)	0.26	0.42
-	-	-	-	-	-	-	-	1	-	-	-	1	--	--	--
-	-	-	-	-	-	-	-	-	-	-	-	1.09	(0.62,1.94)	0.32	0.76
-	-	-	-	-	-	-	-	3.17	(0.72,13.95)	2.4	0.13	1.53	(0.82,2.88)	0.49	0.18
-	-	-	-	-	-	-	-	-	-	-	-	0.28	(0.04,2.17)	0.29	0.22
-	-	-	-	-	-	-	-	6.39	(1.39,29.34)	4.97	0.02	0.91	(0.43,1.91)	0.34	0.79
0.84	(0.29,2.46)	0.46	0.75	2.74	(0.83,9.02)	1.67	0.1	-	-	-	-	--	--	--	--
1	-	-	-	1	-	-	-	-	-	-	-	--	--	--	--
1.01	(0.92,1.10)	0.05	0.84	1.13	(1.00,1.27)	0.07	0.04	1.12	(0.98,1.27)	0.07	0.1	0.99	(0.95,1.04)	0.02	0.74
0.52	(0.16,1.66)	0.31	0.27	0.24	(0.06,1.03)	0.18	0.06	0.51	(0.10,2.49)	0.41	0.4	0.61	(0.34,1.09)	0.18	0.1
1.2	(0.44,3.27)	0.61	0.72	0.51	(0.14,1.83)	0.33	0.3	0.57	(0.13,2.56)	0.44	0.47	1.14	(0.69,1.89)	0.29	0.62
1	-	-	-	1	-	-	-	1	-	-	-	1	--	--	--
OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value	OR	95% CI	se	p-value
1	-	-	-	1	-	-	-	1	-	-	-	1	--	--	--
0.55	(0.17,1.73)	0.32	0.31	0.39	(0.09,1.69)	0.29	0.21	0.56	(0.10,3.00)	0.48	0.5	0.43	(0.22,0.82)	0.14	0.01
-	-	-	-	-	-	-	-	1	-	-	-	1	--	--	--
-	-	-	-	-	-	-	-	-	-	-	-	2.21	(0.68,7.18)	1.33	0.19
-	-	-	-	-	-	-	-	1.22	(0.20,7.47)	1.13	0.83	7.51	(2.21,25.48)	4.68	<.01
-	-	-	-	-	-	-	-	-	-	-	-	2.9	(0.24,35.41)	3.7	0.4
-	-	-	-	-	-	-	-	2.43	(0.35,16.95)	2.41	0.37	4.09	(1.10,15.26)	2.75	0.04
1.13	(0.25,5.13)	0.87	0.88	4.2	(0.71,24.93)	3.82	0.11	-	-	-	-	--	--	--	--
1	-	-	-	1	-	-	-	-	-	-	-	--	--	--	--
0.88	(0.73,1.05)	0.08	0.16	1.02	(0.81,1.29)	0.12	0.86	0.93	(0.72,1.21)	0.12	0.6	0.95	(0.86,1.05)	0.05	0.3
-	-	-	-	-	-	-	-	0.25	(0.04,1.57)	0.24	0.14	--	--	--	--
-	-	-	-	-	-	-	-	1	-	-	-	--	--	--	--
1.1	(0.76,1.58)	0.2	0.61	1.16	(0.92,1.47)	0.14	0.2	1.07	(0.63,1.82)	0.29	0.8	1.17	(1.08,1.28)	0.05	<.01

Appendix E: Key Findings (Figures)

FIGURE E1. FACTORS THAT INCREASE/DECREASE RISK FOR RE-REPORTING BY RACE AND ETHNICITY (2014-2016)

		Factors decreasing risk						Factors increasing risk							
		Black	A/AN	White	Asian	Multiracial	Hispanic	Non Hispanic	Black	A/AN	White	Asian	Multiracial	Hispanic	Non Hispanic
Child Characteristics	Age (Older)	■**	■	■	■*	■*	■								
	Family Characteristics	Fewer adults in the household										■			■
		Age of primary caregiver (younger)							■*	■**					■
		Age of youngest child (older)				■**		■*							■
		Homelessness							■**			■**			■**
		Home primary language is not English	■**		■**			■**	■**						
		Poverty													■**
		Caregiver has parenting skills					■*	■*							
		Caregiver mental health problem								■	■*			■*	■
		Caregiver drug or alcohol use			■										
		Male in home employed			■										
		Male unemployed							■*					■**	■*
		Male provides unsupervised care to young child	■*												
		Caregiver history of abuse									■			■*	
		Child has history of developmental disability											■*		
		Child history of developmental disability and delinquency												■	
		Child history of delinquency					■*							■	
Case Characteristics	Number of prior CPS reports							■		■	■*		■	■	
	History of CPS OHP										■*	■			
	Allegation is neglect											■**			
	Allegation is physical abuse											■	■**		
	Allegation is sexual abuse	■						■**							
	Reporter is mandated reporter	■			■	■	■			■**					
	Reporter is family or friend				■**										
	Reporter is other relative (non-foster parents)					■**									
	Reporter is human or social services staff											■**			
	Offender is parent											■*	■*	■	
	Offender is unmarried partner of parent							■					■*	■*	
	Offender is other relative (non-foster parents)						■*								
	Moderate risk case								■	■	■**	■*	■*	■	
	High risk case								■	■		■*	■*	■	
	CPS CM services needed and received								■**	■**					
	CPS CM needed but not received									■					
	CPS CM not needed but received								■*	■*	■*			■*	
Cross System Involvement	Concurrent CMH case									■				■	
	CMH case within 12 mos							■	■**	■				■	
	History of CMH case							■				■		■	
	Child history of delinquency					■								■	

*All children **School aged children only

FIGURE E2. FACTORS THAT INCREASE/DECREASE RISK FOR RECURRENCE BY RACE AND ETHNICITY (2014-2016)

		Factors decreasing risk						Factors increasing risk							
		Black	A/AN	White	Asian	Multiracial	Hispanic	Non Hispanic	Black	A/AN	White	Asian	Multiracial	Hispanic	Non Hispanic
Child Characteristics	Age (Older)	■	■**					■							
	Gender - female					■**		■**							
Family Characteristics	Caregiver mental health problem												■*	■*	
	Caregiver behavior out of control	■*						■*							
	Caregiver drug or alcohol abuse	■**				■		■							
	Male provides unsupervised care to young child													■*	
	Caregiver history of abuse								■*	■*	■**				■
	Child has history of developmental disability		■*								■*				
	Child history of developmental disability and delinquency								■	■	■*		■**		■
	Child history of developmental disability and delinquency								■	■	■*		■**		■
Case Characteristics	Number of prior CPS reports								■*	■*					
	Number of prior CPS substantiated reports									■*				■*	
	History of CPS OHP									■			■*		
	Allegation is neglect	■*	■*					■*							
	Allegation is sexual abuse	■		■		■**		■							
	Offender is parent								■						■
	Offender is unmarried partner of parent								■		■		■	■	■
	Child is in imminent danger										■**				
	CPS CM services needed and received										■**			■	
	CPS CM needed but not received								■*		■			■	■*
	CPS CM not needed but received									■	■			■	■
	Cross System Involvement	Concurrent CMH case									■	■			■

*All children **School aged children only

FIGURE E3. FACTORS THAT INCREASE/DECREASE RISK FOR RE-ENTRY BY RACE AND ETHNICITY (2014-2016)

		Factors decreasing risk						Factors decreasing risk							
		Black	AI/AN	White	Asian	Multiracial	Hispanic	Non Hispanic	Black	AI/AN	White	Asian	Multiracial	Hispanic	Non Hispanic
Child Characteristics	Age (Older)														
Case Characteristics	Number of prior OHP														
	Allegation is sexual abuse														
	Reporter is family or friend														
	Reporter is anonymous/other														
	Removal is for child behavior - delinquency														
	< 30 days in index OHP														
	31-180 days in index OHP														
	181-365 days in index OHP														
	Trial home visit received														
Cross System Involvement	Number of prior disciplinary incidents														

**School aged children only