THE UNIVERSITY OF VERMONT
EDUCATION AND SOCIAL SERVICES

Drivers of Custody Rates in Vermont's Public Child Welfare System

Part 1: Literature Review

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Phase 1 Report: Drivers of custody rates in public child welfare systems

Background

At the national level, 4 children in every 1,000 entered foster care in 2017. In Vermont, the foster care entry rate is above the national average, and the thirteenth highest in the country, with 6 children per every 1,000 entering foster care (Child Trends, 2019). For the past decade, Vermont's custody entry rates have consistently trended above the national average (see figure 1 below). As such, the Vermont State Legislature has contracted with the University of Vermont's College of Education and Social Services to conduct research that will help shed light and give an evidence-based understanding of the drivers of Vermont's custody rates over time. Specifically:

> *"This work will result in a report to the Vermont Legislature detailing the drivers of variance in Vermont's custody rates over time. Analyses informing the report will explain why custody rates have varied over time in Vermont. These analyses will consider the influences of policies, programs, casework practices, and other practices or conditions that are presumed to prevent or influence foster care placement.   (pg 5, UVM-JFO contract #39513)*

Figure 1: Children 0-17 entering foster care (rate per 1000) – 2008-2017
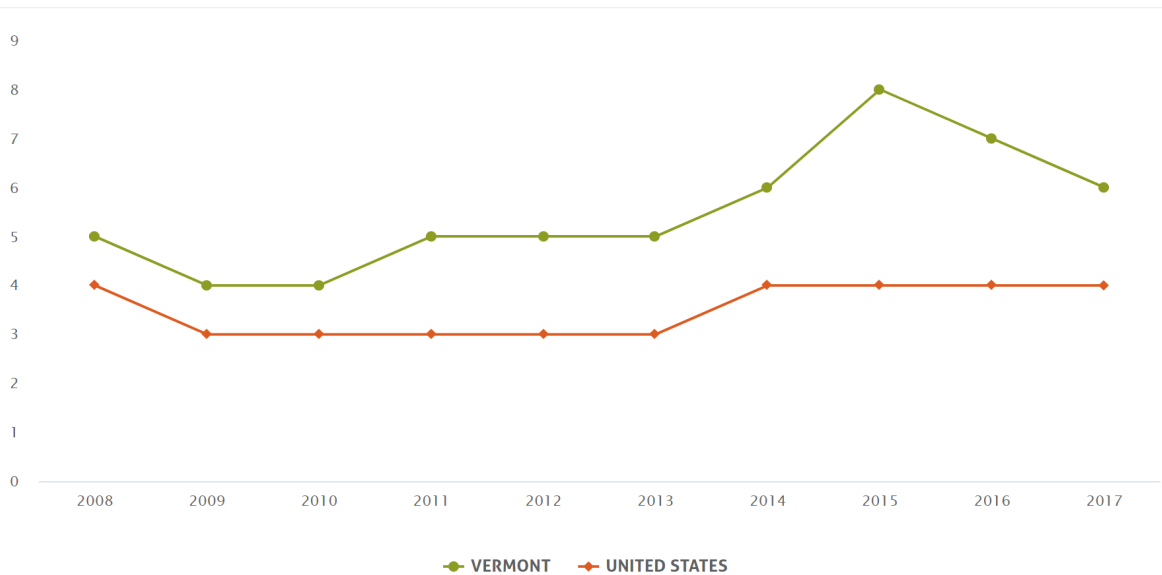
Purpose of report

This report represents the first phase in a multi-phase study and *should not* be considered as a stand-alone product. The findings will lay the foundation for the next phases of the overall study. Future phases will include quantitative analysis of state and national datasets, survey data collection, and follow-up interviews. This report shares findings from a literature review of over 80 articles and reports. It provides a rigorous, evidence-based analysis of the literature presenting correlates, causes and preventative practices impacting foster care entry and child custody rates.

Organization of report

Many decision points exist within public child welfare systems including screening (accepted hotline calls), assessment & investigation (substantiation), services (referrals/in home), custody/foster placement, and reunification. When looking across Vermont, Maine, and New Hampshire, there are fairly consistent rates of maltreatment investigations, however rates of established victims and foster care placements differed more notably (see Table 1).

Table 1. Rate of child protective services outcomes across states in 2017. All per 1,000 children in state population unless otherwise noted.

State	Screening (accepted for investigation)	Investigations (Substantiated victim)	Foster care entry
Vermont	40.3	7.5	6.5
New Hampshire	47.1	4.4	3.6
Maine	44.4	13.8	3.2

The data in Table 1 illustrate the complexity of a system with multiple decision points and decision making factors. In order to understand the outcome of foster care placement, we must understand the decision making stemming from four broad factors: Case Factors, Organizational factors, External Factors, and Decision Maker Factors, as depicted in the *Decision Making Ecology* framework in Figure 2 (Fluke, et al., 2014).

Figure 2: Decision Making Ecology (Baumann, Dalgleish, Fluke, & Kern, 2011)
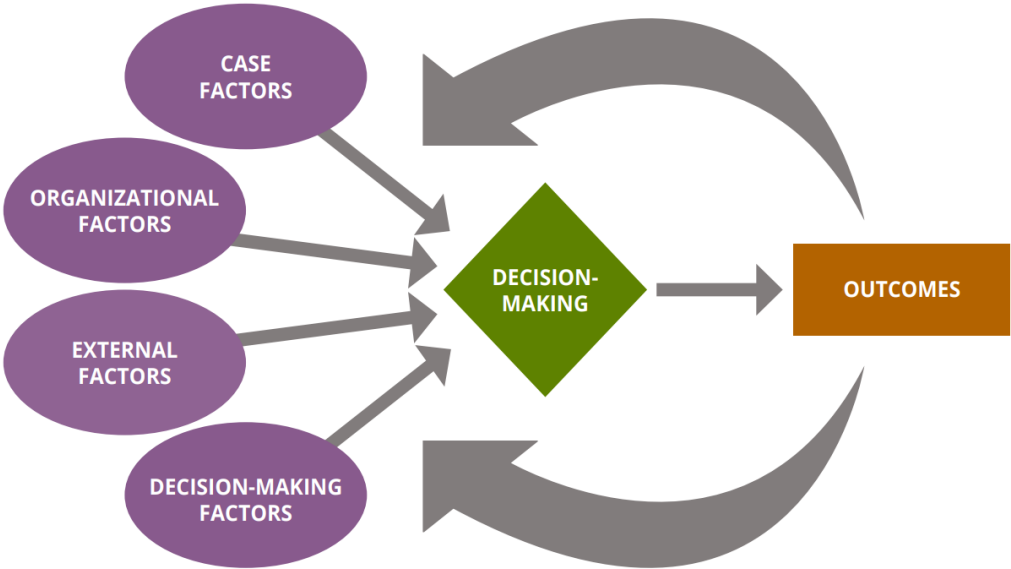
Literature Review

Case Factors

Case Factors include variables at the caregiver, family and child level that impact child welfare outcomes such as substance use, poverty, risk, and type of maltreatment.

Parent/caregiver and family

Substance use. The strongest substance use predictors for foster care entry appear to be opioid and amphetamine use, particularly when a mother uses substances while pregnant. Nationally, from 2000 to 2017, the proportion of foster care cases attributed to parental substance use has steadily increased from 15% to 36% (Meinhofer & Angleró-Díaz, 2019; Sulpaveda & Williams, 2019; Child Trends). Roscoe, Lery, and Chambers (2018) examined correlates of safety determinations that case workers made after completing the Structured Decision Making® risk assessments (National Council on Crime & Delinquency; Children's Research Center, 2015). Safety determinations included safe, safe with plan, or unsafe. They found that caregivers who experienced comorbid substance use and mental illness were almost ten times more likely to have children deemed unsafe to live at home than caregivers with neither substance abuse nor mental illness (54% versus 11%). Substance abuse alone was associated with higher prevalence of unsafe determinations (42%) than mental illness alone (23%). Over half of the effect of comorbid substance abuse and mental illness was accounted for by scores on three specific safety threats: failure to meet the child's immediate needs, presence of a drug-exposed infant, and caretaking impairment due to emotional stability, developmental status, or cognitive deficiency.

Prenatal exposure to substances has also emerged as a strong risk factor for foster care entry. A study of linked birth and child welfare records in reported that about 30% of infants diagnosed at birth with prenatal substance exposure entered foster care. The research shows that there is differential impact where foster care entry may be less associated with parental alcohol use than other substances. For example, children and/or mothers with diagnoses related to neonatal withdrawal, amphetamines, and opioids had the highest rate of foster care entry (Prindle, Hammond, and Putnam-Hornstein, 2018). Still, the rate of foster care for children with Fetal Alcohol Syndrome is higher than the rate for control children (Urban et al., 2016). Further, English, Thompson, and White (2015) also found parental alcohol abuse to predict foster care entry in a longitudinal sample of families across five regions of the US (LONGitudinal Studies of Child Abuse and Neglect; LONGSCAN), while accounting for many other family and child characteristics.

Mental health. Foster care rates are predicted by maternal depression and anxiety and paternal depression, though accurately reporting mental health problems is a challenge with current child welfare data systems. In the LONGSCAN study mentioned above, English et al. (2015) also reported higher foster care rates for children whose parents had depression or received mental health services. In a sample of low income mother/child dyads using linked data from the Departments of Social Services and Mental Health, Kohl, Jonson-Reid, and Drake (2011) found that children with mothers who had a mental illness (per diagnostic codes) entered foster care more than twice as often as children with mothers without a diagnosis. Foster care entry was also strongly associated with maternal anxiety disorders. These findings accounted for the effects of covariates,

including demographics, census track median income, type of maltreatment, and services received after the initial report.

Amidst a primary focus on maternal mental health, mental well-being of fathers has also been explored. Jackson Foster, Beadness, and Pecora (2015) recruited adult parents who had experienced foster care as children to participate in a study of caregiver factors related to foster care placement of their own children. Low social support for fathers mediated the association between fathers' depression and foster care placement. Low parental social support was also identified as a risk factor for foster care by English et al. (2015).

Intergenerational Maltreatment. The intergenerational cycle of foster care is largely explained by the higher rate of social and behavioral challenges that foster care alumni face during adulthood, such as limited education, poverty, and substance use. Wall-Wieler, Almquist, Liu, Vinnerljung, & Hjern (2018) conducted a study that followed children from birth to age 13 and examined whether parents who were alumni of foster care were more likely to have their own children enter foster care than parents who were never in foster care during childhood. Foster care alumni were less likely to be living with the child's other biological parent at time of child's birth, had fewer years of education, were more likely to be unemployed and receiving welfare benefits, and were younger than non-foster care alumni parents. They were also more likely to have had a psychiatric disorder, substance abuse problems, and criminal convictions prior to the child's birth. Results indicated that the likelihood of entering foster care was 48.7 times higher for children with two parents who were foster care alumni compared to children whose parents were never in foster care. When adjusting for relevant social and behavioral correlates (parental age, level of education, employment, reception of welfare benefits, parental psychiatric disorder, substance abuse, and criminal conviction), the odds decreased to 3.04. Though still significant, this change indicates that much of the augmented risk was due to social and behavioral correlates.

Domestic violence. Children exposed to domestic violence enter foster care 37% more quickly than children not exposed. Although domestic violence has been repeatedly linked to general CPS involvement (Henry, 2018; Holbrook & Hudziak, 2019; Victor, Grogan-Kaylor, Ryan, Perron, & Gilbert, 2018), far less literature exists regarding risks for foster care placement. Ogbonnaya and Guo (2013) examined cases of children who had been investigated for maltreatment and found that children exposed to domestic violence entered foster care 37% faster than those not exposed. These analyses were weighted to account for possible effects of variables that differed between families with and without domestic violence, including child age, substance use, history of abuse, substantiation status, and harm level of maltreatment report.

Poverty. Economic hardship increases risk of initial foster care placement and re-entry following reunification with parents, and these risks have been mitigated when families receive financial and material support. In Vermont, 17% of children receive some type of public assistance, with 6.7% receiving TANF (Kids Count, 2019), whereas 44.1% receive free and reduced cost school meals.

Economic hardship has repeatedly emerged as a strong associate of child maltreatment, and foster care more narrowly. Long-term economic hardship has been associated with entry into foster care (Hiilamo, 2009). Family poverty also predicted re-entry into care following reunification (Akin, Brook, Lloyd, & McDonald, 2017). Housing stability has correlates with economic status, and according to a study of data from National Child Abuse and Neglect Data System (NCANDS) in 2010, 23% of children entering state custody had insufficient housing (Pelton, 2015). In a study

comparing children in foster care to those who remained at home with services, parental income was the strongest predictor of out-of-home placement for preschool aged children, even stronger than reason for referral (Lindsey, 1991). In contrast, in Canada, where residents can rely more heavily on government-funded social benefits such as universal health care and childcare, income status was not associated with foster care placement (Fluke, Chabot, Fallon, MacLaurin, & Blackstock, 2010).

Economic and housing factors. Housing subsidies that cap rent at 30% of a family's monthly income have been shown to mitigate risk of foster care up to 50% compared to families with no such subsidies. In Vermont, 35% of families state-wide spend at least 30% of their monthly income on rent. In addition to affecting outcomes on the individual family level, community-level economic factors appear to influence foster care rates. Housing stability, in particular, has emerged as an economic correlate with a sizable association with foster care entry. In a study of neighborhood level factors, Lery (2009) found that impoverishment and residential instability were associated with foster care entry. To examine whether housing intervention could influence rates in foster care, Shinn, Brown, and Gubits (2017) randomized families living in shelters to either (a) receive permanent housing subsidies that reduced rent to 30% of monthly income, (b) temporary rapid re-housing subsidies with some housing and employment support services, or (c) transitional supervised housing with psychosocial support services, and all groups were compared to a treatment as usual group. Twenty months later, the group that received permanent housing subsidies had half the rate of foster care entry as the treatment as usual group and no other interventions showed a similar benefit. Homelessness was one of the primary predictors of parent-child separation and results indicated that subsidies benefited foster care rates through a reduction in homelessness.

Childcare access

A geocoding study of neighborhoods revealed that from 2000 to 2003, childcare burden was associated with high rates of foster care entry (Lery, 2009). It appears that when childcare needs are adequately met, risk of foster care may be mitigated. In another study, families in which children were maintained in their homes showed a higher rate of using childcare subsidies and longer duration of use compared to families with children in state custody (Lipscomb, Lewis, Masyn, & Meloy, 2012). In a study comparing state policies, easier access to childcare subsidies was associated with reduced foster care rates (Meloy, Lipscomb, & Baron, 2015). These data were merged from the Child Care and Development Fund Policies and AFCARS, and ease of access to subsidies was coded based on requirements for parents to receive subsidies, priority for subsidy receipt given to parents, and accommodations to reduce subsidy co-pay requirements.

Child

Age. Nearly half (44%) of Vermont children entering foster care do so by age six. Young age has been identified as a risk factor for foster care entry. AFCARS data from 2016-2017 reveal that nationally, 19% of children entering foster care (range 0-20 years old), are less than one year old, and 49% are less than six years old (US Department of Health and Human Services, Administration for Children and Families, Administration on Children, Youth and Families, & Children's Bureau, 2014). In Vermont, the 2017 percentages are similar, with 16% entering before age one and 44% by age six, which demonstrates a marked increase from 2008, at which time 31% of children entering foster care did so by age six (Child Trends, 2019).

Race. Across the country, Black children are two to three times more likely to enter foster care than White children, and in some studies this disproportionality is reduced when accounting for socioeconomic factors such as income, parental marital status, and parental age. In Vermont in 2019, non-Hispanic/Latino White children entered foster care at a rate of 6.4 per 1,000, and the rate for non-Hispanic/Latino Black children was 9.6 per 1,000. Non-white children enter foster care at a disproportionately high rate. Belanger (2002) studied racial disproportionality at three time points during a child welfare case: investigation, case opening, and removal to foster care. She found that from 1997 to 1999, Black children were referred to CPS twice as frequently as White children, and the discrepancy increased at subsequent stages (case opening and foster care). Estimates based on nationally reported foster care data (AFCARS) from 2000-2011 reported that 15.4% of Native American children and up to 11.5% of Black children enter foster care during their lifetime, which is a far higher rate than the overall child population (5.6%) (Wildeman & Emanuel, 2014). Further, in a study of CPS files from 2003-2005, Black children were 77% more likely to be removed to state custody than White children, even when accounting for risk and socioeconomic factors (Rivaux et al., 2008). Higher rate of foster care has also been demonstrated in Indigenous children in Canada relative to non-Indigenous children (Oviedo-Joekes et al., 2018).

Although this racial discrepancy has endured for many years, recently researchers have endeavored to determine whether this discrepancy is indeed due to racial bias or perhaps due to other confounding variables. Maloney, Jiang, Putnam-Hornstein, Dalton, & Vaithianathan (2017) examined linked birth records and administrative data and found that the rate of entry into foster care by age four was three times higher for Black children than White children. When they adjusted their statistical model to account for the effect of parental marital status and parental age at child's birth, the effect of race disappeared. They concluded that in their sample, racial differences could be attributed to differences in these parental factors, suggesting that Black and White families differed notably with regards to marital status and parental age.

Similarly, when assessing a cohort of children born in 2002, researchers initially found that Black children entered foster care more than White children. However, when they accounted for racial/ethnic differences in common socioeconomic and health correlates of child maltreatment, Black children and Latino children had lower rates of referral, substantiation, and foster care entry compared to White children of similar SES (Putnam-Hornstein, Needell, King, & Johnson-Motoyama, 2013). In a similar vein, using data from the National Survey of Child and Adolescent Well-Being data file (NSCAW), Ogbonnaya, Finno-Velasquez, and Kohl (2015) found that when accounting for variables such as presence of an intimate partner, household income, type of maltreatment, and number of children, the rate of entry into foster care did not differ between children of White, Black, or Hispanic caregivers who had reported domestic violence.

As part of a focus group in an impoverished area in the Southern US, Black families involved with CPS provided hypotheses as to why Black children are over-represented in the CPS system. Their responses closely aligned with the variables that carry much of the explanatory power in studies of racial disproportionality; they highlighted problems with severe and persistent poverty, health and mental health, socio-economic conditions, and profound lack of trust between families and CPS agencies (Kokaliari, Roy, & Taylor, 2019). It has become quite evident that minority race children enter foster care more frequently than White children, although the extent to which this can be attributed to other socioeconomic variables versus racial bias has yet to be conclusively determined, and likely varies between communities.

Developmental problems. Foster care rates are three times higher for children with Autism Spectrum Disorder than typically developing children. Although most research on risk factors has centered on caregiver characteristics, a few child characteristics have been identified as associated with foster care placement. In a six-year study of Medicaid-enrolled children in the US, heightened rates of foster care entry were found for children with Autism Spectrum Disorder and Intellectual Disability (8.1% and 5.7%, respectively, compared to 2.6% for typically developing children) (Cidav, Xie, & Mandell, 2018). In a study of LONGSCAN data, researchers examined many child variables and found that developmental problems, measured via the Battelle Developmental Inventory, were the only child characteristic assessed that was associated with entry into foster care (English et al., 2015).

Maltreatment & Risk

Type of maltreatment. In Vermont, the percentage of maltreatment victims that were substantiated for neglect is the lowest in the country and far lower than the national average, whereas physical abuse and sexual abuse percentages were 3.1 and 4.8 times the national average, respectively. Yearly Child Maltreatment reports of NCANDS data (U.S. Department of Health & Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau, 2019) shed light on which maltreatment types comprise the majority of foster care placements. In 2017, averaged across states, neglect was the type of maltreatment that relates to most (74.9%) foster care placements. Physical abuse was present in 18.3% of cases that result in foster care, and sexual abuse followed at 8.6% of cases.

Examining NCANDS data from 2017, maltreatment type of substantiated victims differed drastically between Vermont and the nation as a whole in three categories: neglect, physical abuse, and sexual abuse. The rate of neglect as the reason for substantiation is much lower in Vermont than the US (VT = 2.4%, US = 74.9%), whereas the rates of physical abuse (VT = 57.9%, US = 18.3%) and sexual abuse (VT = 41.7%, US = 8.6%) are much higher in Vermont than the US. It is important to note that this sample of substantiated victims differs from a sample of children entering foster care, as only a portion of substantiated victims enter foster care. A Child Trends (2015) report on reasons for foster care entry in 2015 shows much higher and more similar rates of neglect in Vermont to those found in the US overall. Definitions of neglect and other maltreatment types differ between states and likely contribute to state-level differences in prevalence of certain maltreatment types.

Risk. Higher scores on standardized risk assessment measures do appear to predict higher likelihood of foster care entry, though these data are not yet available for the state of Vermont. The most predictive risk models utilize variables gleaned from administrative databases, such as public benefit data and child protection records. Scores of youth and parent risk have been associated with placement decisions in a sample of youth in the Rhode Island child welfare system (Huang, Bory, Caron, Tebes, & Connell, 2015). In this study, outcomes included several different types of placements, which ranged in degree of restrictiveness. Variables that comprised youth risk scores included substance use, mental health/developmental, education, vulnerability, permanency, and medical/dental risk. Parental risk assessments were comprised of factors related to bonding, financial stability, support system, mental health, substance use, history of violence/criminal behavior, childhood history, and family violence. Study authors reported that more restrictive placements were associated with higher youth risk ratings, even when accounting for youth age,

gender, race, ethnicity, and maltreatment history. Children in kinship care and non-relative foster care had the highest parental risk ratings.

Actuarial risk assessments are currently used in many states to reduce the bias that plagues clinical judgments. The factors included in risk assessments vary from state to state, as the instruments are created to optimize risk prediction within each state. One such assessment, the California Family Risk Assessment (CFRA) generates risk scores in categories of low, moderate, high, and very high. A well-performing risk assessment should show higher rates of foster care placement as risk score increased. Accordingly, the CFRA showed this pattern for children with placement rates during following 18 months of 1.5% for low risk, 4.4% for moderate, 8.8% for high, and 13.4% for very high (Children's Research Center, 2014). This pattern held for children of all races except for Native American children, for whom placement rates increased minimally from low to very high risk (11.1% to 13.3%). Substantiated maltreatment rates during the following 18 months were 5.1% for low risk, 10.9% for moderate, 19.4% for high, and 25.9% for very high.

Vaithianathan, Maloney, Putnam-Hornstein, & Jiang (2013) created a risk model that predicted likelihood of substantiated maltreatment based on an algorithm of integrated public benefit and child protection records in New Zealand. Within the top 10% of risk scores, 47.8% of children experienced substantiated maltreatment by age five years. Although no data have been published regarding this model's prediction of foster care placements, these findings are an important step in predicting substantiation, which often prompts child removal.

History of child welfare involvement. Risk of foster care increases alongside the number of previous child maltreatment reports in a family, and 75% of children who enter foster care had an initial report that was unsubstantiated. In addition to current aspects of a case, a family's history of involvement with child protective services has also been found to influence the likelihood of foster care. Specifically, increased risk of foster care has been predicted by a higher number of prior reports, history of severe maltreatment, and early emotional maltreatment (English et al., 2015). Detecting early life neglect was identified as the largest contributor to one country's increase in foster care rates (Bilson, Cant, Harries, & Thorpe, 2017). Although prior substantiation determination provides a record of evidence for past allegations, it is not particularly predictive of custody, as over 75% of children removed from their parents' custody had an initial report that was unsubstantiated (Drake, Jonson-Reid, Way, & Chung, 2003).

Organizational Factors

Organizational factors includes variables such as staff turnover, climate and culture, policy, and caseloads.

Staff turnover. High rate of staff turnover is associated with high foster care entry rates and high number of placements. There are many avenues through which staff turnover can affect time in care, including training demands for new staff and instability in worker-child relationships. In a study that utilized both qualitative and quantitative analyses, number of caseworkers significantly predicted number of foster care placements for a sample of New York youth, while controlling for time in care (Strolin-Goltzman, Kollar, & Trinkle, 2009). An association between staff turnover and entry into foster care was first reported over thirty years ago (Pardeck, 1984) and continues to pose challenges for foster care placements today. However, in a multi-level analysis of data from the

Canadian Incidence Study of Reported Child Abuse and Neglect, when effects of organizational and case factors were modeled alongside family-level variables, staff vacancies did not significant predict placement decision (Fluke et al., 2010).

Culture/Climate. Foster care rates increase with inadequate organizational support, likely due to case workers' feelings of time pressure, caseload size, inadequate supervision and decreased risk tolerance. The climate and culture of a child protective services agency is challenging to measure as a wide array of variables contribute to it. One study found that placement rates were negatively associated with caseworker report of receiving organizational support (Graham et al., 2015). Additionally, other studies have found that a positive organizational climate predicts positive service outcomes service quality (Glisson & Hemmelgarn, 1998; Strolin-Goltzman, 2010).

Policy. Cross-state comparisons reveal differences in foster care rates based on distinct policies and practice guidance. These include mandated reporting requirements, definitions of abuse and neglect, and reunification timelines.

Structured decision making®. Counties using structured risk assessments have shown slightly lower foster care entry rates and higher rates of reunification as well as other permanent placements. Structured Decision Making® (SDM; Children's Research Center, 2008), an actuarial risk assessment framework used in many states across the US, including Vermont, has compared rates of foster care prior to and after implementation of their risk assessment instrument. Although it is not possible to assume causality, researchers found that after SDM implementation, high risk families in counties using SDM had slightly lower rates of foster care placement (4.1%) compared to families in non-SDM counties (5.2%) and higher rates of various types of permanent placement, including returning home, termination of parental rights, or adoption.

Differential response. In a summary of over 50 publications compiled by the Center for Child Policy's Differential Response Committee (Piper, Vandervort, Schunk, Kelly, & Holzrichter (2019), findings suggest that differential response has benefitted the child welfare system by encouraging a focus on family-centered best practices, yet has failed to show consistent evidence for positive safety outcomes. Differential response has been implemented in an increasing number of states across the country. Differential response allows screeners or caseworkers to assign families to either a traditional investigative response track (IR), in which a typical child maltreatment investigation is conducted, or an alternative response track (AR), which emphasizes connecting families with needed services (Child Welfare Information Gateway, 2014). Alternative response tracks are appropriate for low risk families for whom there is no immediate safety concern. Small differences in rates of foster care placements based on randomized studies have been reported by Loman and Siegel (2004, 2013; 2015). Janczewski (2015) examined NCANDS data from many states and found that foster care rates decreased following differential response implementation, but this effect no longer remained when accounting for the mediating role of prior decision points.

Piper and colleagues (2019) indicate that studies have shown that up to 50% of AR families decline services and service engagement rate is higher in the IR track, where service engagement is frequently mandated. This is in contrast to the fact that many states increased funding for AR services without similar increases in IR service funding, thereby not increasing service access for their highest risk cases. In a separate analysis, Piper (2016) reported that Vermont data indicate that, as hoped, adding an AR track increased service provision to lower risk families. Comparing the years

prior to and following AR implementation, screen-in rates of maltreatment reports increased from 19% to 26.6% and number of families provided services increased from 659 to 920. However, these services did not deter recurrence of maltreatment, as re-reports were 30% higher in the AR track than the IR track, despite the fact that AR track families are, in theory, lower risk. It is important to keep in mind that some children in the IR track enter foster care, which should be expected to reduce re-reports, but the higher rate of re-report for AR track children remains counter to expectations.

Caseloads. At the caseworker level, higher foster care entry rates are predicted by higher proportion of minority race and low-income children on a worker's caseload. In one study, high workload per case worker has been associated with lower custody rates (Texas Department of Family and Protective Services, 2010). Racial composition of caseload also appears to influence foster care rates. For example, the more minority race families on a case worker's caseload, the higher the likelihood of placement for any child on the worker's caseload (Fallon et al., 2015), and more African American or Hispanic families on a worker's caseload predicted a reduction in racially disproportionate placement decisions (Texas Department of Family and Protective Services, 2010). Authors posited that familiarity with a given culture, gained through increased proportion of non-White families on a caseload, may help reduce disproportionate decisions. In another report of caseload-level factors, Graham, Detlaff, Baumann, & Fluke (2015) found that higher average risk assessment across cases and higher proportion of caseload comprised of low-income families both predicted higher placement rates.

External Factors

External Factors include variables such as community resources and services, funding, critical incidents, and legal considerations.

Availability of community-based, evidence-informed prevention practices. Researchers reported that caseworkers' negative perceptions of services in their communities were related to higher rate of placements (Texas Department of Family and Protective Services, 2010). When services are available, several programs have been found to reduce entry into foster care and child maltreatment reports by up to 50% compared to families that did not receive services. The California Evidence-Based Clearing House for Child Welfare (CEBC) rates intervention programs according to the rigor and findings of the research studies that examine them.

- *Homebuilders ®* is a program that targets families in contact with the child welfare system who are at risk of having a child enter foster care or are moving towards reunification. Study results indicate that families enrolled in Homebuilders retained children in the home more often (74%) than families who received usual care (48%) (Wood, Barton, & Schroeder, 1988) and Homebuilders children in foster care reunified with their parents more often than children not in Homebuilders (Fraser, Walton, Lewis, Pecora, & Walton, 1996).

- *Family Group Decision Making* (FGDM) was also rated as "promising research evidence" and emphasizes the family and extended family's roles in making decisions related to child permanency. Families engaged in FGDM had half as many maltreatment events during the

follow up period compared to the period preceding enrollment, whereas the comparison group showed an increase in events during follow up (Pennell & Burford, 2000).

- *Nurse-Family Partnership* (NFP) provides in-home visits for low-income, first-time mothers during and after pregnancy and has been associated with fewer maltreatment reports in which the mother is the perpetrator, (Eckinrode et al., 2000) as well as fewer maltreatment reports with any perpetrator and less child punishment (Olds, Henderson, Chamberlin, & Tatelbaum, 1986).

- *The Sobriety Treatment and Recovery Team* (START) program was rated as "promising research evidence" and provides intensive substance and child welfare services to families in which children are at risk of foster care due to parental substance use. START pairs each family with a caseworker and peer mentor who is in long-term recovery to engage them with services. Data show that children in families participating in START entered foster care half as often as matched controls and mothers attained sobriety almost twice as often as matched controls (Huebner, Willauer, & Posze, 2012).

- SEEK relies on primary care providers to preventatively assess risk and make appropriate referrals as needed to mitigate risk of child maltreatment. SEEK has been associated with fewer child maltreatment reports and less harsh punishment by parents (Dubowitz, Feigelman, Lane, & Kim, 2009).

- Participation in *family treatment drug courts* (FTDC) shows decreased likelihood of subsequent maltreatment and variable associations with the length of time a child spends in foster care. As previously discussed, parental substance use is a risk factor for foster care entry. FTDCs provide services to parents with substance use problems who are involved with the child welfare system. Because most cases in FTDC place children in foster care while their caregiver(s) focus on treatment, research thus far has focused on the effect of FTDC on time to reunification or risk of reentering foster care following reunification, rather than initial entry into foster care (Gifford, Eldred, Vernerey, & Sloan, 2014). One study, in a rural setting, children whose parents completed FTDC had longer stays in foster care, but a much lower likelihood of future maltreatment (11%) than children whose parents abused substances but were not enrolled in FDTC (71%) (Pollock & Green, 2015).

- Access to early childcare and education through programs such as *HeadStart or childcare subsidies* decreases risk of foster care up to 93%. In a study of the National Survey of Child and Adolescent Well-Being (NASCAW-II), children enrolled in Headstart were 93% less likely to enter foster care than children with no early childcare and education (Klein, Fries, & Emmons, 2017). The authors found a heightened rate of foster care for families receiving multiple services which may be an effect of surveillance bias (having more mandated reporters in contact with a child), or may result from a parent's decreased ability to meet case plan goals if significant time is spent coordinating/applying for multiple early childcare services. Alternatively, using multiple early childcare services may represent residential mobility or change in eligibility criteria for such services, both of which may increase parental stress.

- Importantly, some evidence suggests that the link between economic hardship and foster care can be partially weakened through *financial and material assistance* (Ryan & Shuerman, 2004). These researchers studied outcomes of the Evaluation of Family Preservation and Reunification Programs (run by the US Department of Health and Human Services) such as Family Unification Program (FUP), and found that among families who reported difficulty paying bills, those who received cash assistance, housing subsidies, and material support (e.g., clothing, furniture, supplies) showed reduced odds of foster care compared to those who received other types of services (Fowler, Brown, Shoeny, & Chung, 2018).

High profile cases, media, and legislative response. Public, media, and legislative responses to grievous cases of child maltreatment contribute to a cycle of increased foster care entry. It is likely that "foster care panic" is only part of the problem, as preceding the high-profile child fatalities in 2014, Vermont already had higher rates of foster care entry than the national average. Chenot (2011) details the "vicious cycle" shown in Figure 1. In this cycle following internal and external investigations prompted by media attention and political action, some staff members are demoted or fired while the rest of the agency begins making more conservative decisions. This pattern leads to a sudden increase in foster care entry rates ("foster care panic"). Many resulting policy changes emphasize heightened accountability, which increases paperwork requirements, and alongside continued negative media coverage, staff morale wanes and staff turnover increases. As time progresses, public outcry diminishes into what Chenot deems "business as usual" until another high-profile case occurs, which triggers the cycle to recommence.

Figure 3. The Vicious Cycle of media and legislative response, as outlined by Chenot (2011), p. 71
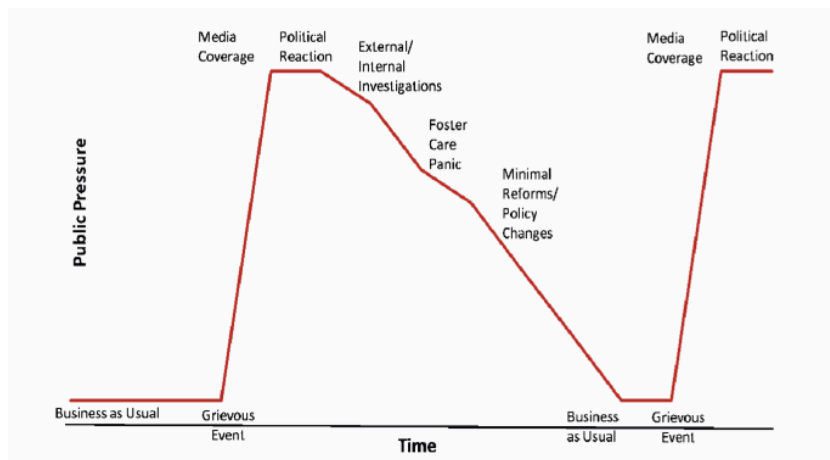
Chenot (2011) offered an example of this cycle occurring in Connecticut following the death of a 10-month old child due to physical abuse. The governor urged the child welfare system to "err on the side of safety" and in the three weeks following the governor's statement, state court orders for temporary custody of children doubled. However, it appears that not all media attention to child maltreatment cases is problematic. Although correlational, not causal, in nature, research suggests that high levels of media attention are associated with state child welfare policy changes that emphasize prevention (Douglas, 2009).

In their report on possible solutions to this cycle, Thomlison and Blome (2012) point to weak relationships between child welfare agencies and journalists. With journalists' fast approaching deadlines and child welfare agencies' duty to maintain confidentiality, thorough and thoughtful

communication between the two parties is challenging. In already strained child welfare systems, engagement with the media tends to occur during the chaotic time following a tragic event. Thomlison and Blome recommend that child welfare agencies take time (when not in crisis) to develop a relationship with media outlets that have been vetted for a commitment to representing both sides of a situation.

Thoma (2013) described "defensive social work" as a culture of unnecessary child removals that is driven by a desire to avoid negative outcomes and their accompanying criticism and media attention. Thoma cited a few examples of increases in foster care rates following a high-profile death or policy change, including the *Wallace case* which occurred in Chicago. After a stay in foster care, Joseph Wallace was reunified with his mother two months before she killed him. Joseph's death attracted significant media attention, including over 100 mentions in the Chicago Tribune, including one front-page story and its coverage was awarded a Pulitzer Prize. Within 14 months after Joseph's death, the foster care population in Chicago had increased by 30% (Wexler, 1995). As reported by Wexler (2005) in the Chicago Reader, "At the root of Chicago's panic was fear. Telephone operators for the DCFS hotline were afraid to screen out even the most unlikely calls. Workers sent to investigate were afraid to leave almost any child at home. And judges were afraid to let any child in foster care return to a parent. All feared the Chicago media, especially the Tribune."
The expectation that child fatalities will decrease as removals increase is not foolproof. The Center for Public Policy Priorities (2009) reported that child abuse deaths were not predicted by rate of removals, reporting of abuse, or screening in reports. Report authors reported that child abuse deaths were positively associated with poverty and teen pregnancy rates and negatively associated with services aimed at preventing maltreatment.

Economic policies. Although money per child spent on foster care appears negatively associated with reunification, money spent on preventive services or cash assistance is associated with positive child welfare outcomes. In a longitudinal study of maltreatment recurrence, although AFDC status at time of study enrollment was not associated with maltreatment recurrence, receiving AFDC or TANF after the initial maltreatment report reduced recurrence (Jonson-Reid, Chung, Way, Jolley, 2010). Perhaps for the families who did not initially receive financial assistance, starting to do so mitigated some risk associated with maltreatment. In a separate study, Goldhaber-Fiebert and colleagues (2014) examined the association between state-level economic and demographic factors and placement outcomes. Their findings indicated a small positive association between Title IV-B (prevention) funding per child and timeliness and stability of reunification, and a small negative association between Title IV -E (foster care) funding per child and timeliness and stability of reunification. In both cases, these factors explained a small amount of the variance in reunification outcomes. Study authors found no link between state foster care maintenance rates (amount provided to support housing and caring for a foster child) and placement outcomes.

Opioid prescriptions, overdose rates, and alcohol sales. Vermont showed a positive association between opioid prescription rates and foster care rates over a five-year period. In a national study of the association between county-level opioid prescription rates and foster care, notable variation among states emerged (Quast, 2018). The association was positive for 23 states, negative for 15 states, and no significant association for 12 states. Vermont showed a significant positive association, while accounting for demographics, poverty rate, and unemployment rate. In Vermont, for each standard deviation increase in opioid prescriptions (number of prescriptions per 100 people) from 2010 to 2015, foster care rate increased zero to five percent in the same time frame. Exact state-level regression coefficients were not reported, and instead states were categorized by

range and valence of effect. Opioid overdose fatalities also increased alongside foster care rates throughout different regions of the country. Of the six states with the highest opioid overdose rates in 2016 (West Virginia, New Hampshire, Ohio, the District of Columbia, Maryland, and Massachusetts), five reported increases in foster care rates. However, in Vermont, this percentage decreased by 10% from 2016 to 2017 (Sepulvida & Williams, 2019).

Legal representation. Counties using independent firms had fewer foster care placements than counties using county-affiliated legal representation. We identified one study of the role of parent legal representation in foster care placement. Goodman, Edelstein, Mitchell, and Myers (2008) studied rates of foster care entry across types of legal representation in California. Their findings indicated that counties using independent types of legal representation, such as private firms or a panel of court-appointed attorneys, had fewer foster care placements than counties using county-affiliated legal representation, such as district attorneys, public defenders, and county counsel. This finding controlled for the effects of number of first-time entries, median family income, and percentage of non-minorities, all at the county level.
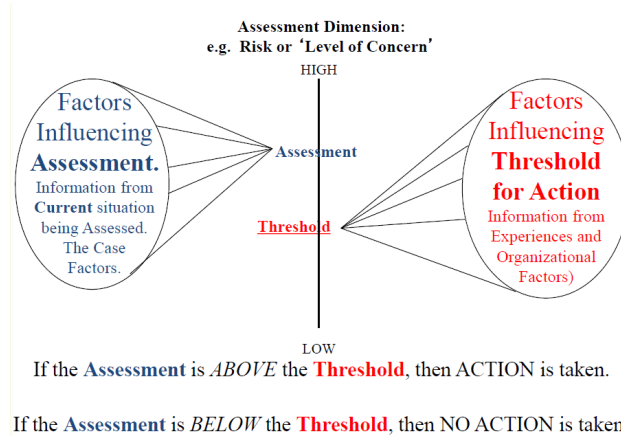
Funding allocation. Casey Family Programs reported that nationally, the United States spends $5,015,057,310 on Title IV-E services and spends $556,788,538 on prevention services. Of the total money spent, 11.1% is for prevention services. In Vermont, of combined Title IV-E and prevention spending, 9.2% is spent on prevention services (Casey Family Programs, 2019).

Legislative and child welfare reports. Between 2009 and 2018, 32 reports regarding child welfare were submitted to the Vermont state legislature, with topics ranging from mandated reporting policies to caseload assignments. With an additional 12 reports published within the Department of Children and Families in recent years, a comprehensive assessment of foster care entry rates as they relate to the timing and substance of these reports is warranted. Further, Vermont definitions of particular types of maltreatment, such as neglect and child sexual abuse, differ from definitions in other states, and examining these differences will provide some clarity as to why Vermont's rates of neglect, sexual abuse, and physical abuse differ so markedly from rates in other nearby states.

Decision Maker Factors

Risk threshold / Attitudes toward removal. Decisions about foster care placement are influenced by risk tolerance/threshold, attitudes toward removal, and self-reported casework skills. The risk threshold of those individuals influencing the direction of a case (caseworker, supervisor, court professionals, community partners, etc) impacts custody entry rates. The risk threshold is based on their history, previous experiences, and values related to the consequence (Dalgleish and Drew, 1989). For instance, a previous experience of a child fatality will impact the risk threshold, as will an individual's values related to foster care. When a worker has positive views of foster care as a consequence of their actions, the threshold for action is lower than another who may have less positive views of foster care. Risk threshold is important because it allows an understanding of how cases with very similar drivers may end up with different outcomes. For example if a standardized risk assessment is completed and results in a risk score of 6 on a 10 point scale, the resulting action will differ depending on the risk threshold of the decision maker at that decision point. A decision maker with a risk threshold of 5 will take action, whereas the decision maker with a risk threshold of 7 will not act. Figure 4 below created by Fluke and colleagues illustrates the impact of threshold on action.

Figure 4: Assessment and Threshold influence on Action

Assessment Dimension:
e.g. Risk or 'Level of Concern'
HIGH

Factors Influencing **Assessment.** Information from **Current** situation being Assessed. The Case Factors.

Assessment

Threshold

Factors Influencing **Threshold for Action** Information from Experiences and Organizational Factors)

LOW

If the **Assessment** is *ABOVE* the **Threshold**, then ACTION is taken.

If the **Assessment** is *BELOW* the **Threshold**, then NO ACTION is taken.

In one study, case workers completed the *Child Welfare Attitudes Questionnaire* and provided risk assessments and recommendations based on a case vignette (Arad-Davidzon & Benbenishty, 2008). Findings show that lower risk threshold and more favorable views of foster care were associated with higher risk assessment and entry into care. Risk thresholds have been found to vary geographically (higher in New York than Texas and Michigan) by gender (higher in women than men) (Rossi, Schuerman, & Budde., 1999). Case workers differ in their risk assessments, recommended interventions, and attitudes towards child welfare based upon locality of employment. When given identical case vignettes, caseworkers in different localities differed significantly in their assessments and recommendations (Gold, Benbenishty, & Osmo, 2001). Another study of caseworker response to vignettes demonstrated country-level differences in child welfare attitudes, maltreatment substantiation, risk assessments, and recommended interventions (Benbenishty et al., 2015). Attitudes against child removal showed the least variability across countries. It is feasible that the risk threshold in Vermont is lower than surrounding, similar states.

Confirmation bias. Case worker interpretation of evidence can be influenced by caseworkers' existing attitudes toward child protection, family preservation, and a child's right to safety. Spratt, Devaney, & Hayes (2015) conducted a study working from the assumption that three previously identified hypotheses drive case workers' interpretation of evidence: "child protection," "kinship defense", and "children's rights," the last of which weighs children's right to grow up in a family while being safe doing so. Their findings suggested that case workers tend to interpret evidence positively or negatively in a manner that aligns with their pre-existing attitudes towards child welfare.

Secondary traumatic stress & burnout. Risk assessment scores are positively associated with case worker stress, whereas more years of employment predicted diminished caseworker ability to empathize with clients, resulting in lower placement rates. As evidence of the link between stress and decision-making, LeBlanc, Regehr, Shlonsky, & Bogo (2012) reported that case workers who participated in simulated scenarios with parents provided higher risk assessment scores when the scenario was confrontational than when it was not. The first trial of a role play, in which the conversation was reportedly more novel, elicited a cortisol stress response in workers, whereas the second confrontational scenario elicited a subjective report of anxiety but no cortisol response.

Compassion fatigue shows similarities to stress and burnout but is defined uniquely as "a worker's diminished ability to empathize with clients" (Denne, Stevenson, & Petty, 2019). In a study of employees who worked with children in dependency court, more years of experience was associated with increased likelihood of determining that a mother in a case vignette was fit for full custody. This link was mediated by compassion fatigue, such that more years of experience predicted higher compassion fatigue, which in turn predicted increased likelihood of determining a mother fit for custody.

Conclusions

This review of the literature provides a grounding and organizational framework that will inform next steps in the research undertaken in Vermont. It further confirms the complexity that must be taken into account when trying to understand the drivers of a child welfare outcome. Often, states try to understand the rationale for particular child welfare outcomes by looking only at *case factors*, ignoring the context and influence of the organization, the external environment, and individual decision making thresholds. . As illustrated above, the forces at play in foster care entry rates are complex and interactive. Case factors, organizational factors, external factors and decision maker factors all impact outcomes at various decision points in the life of a case.

The *Decision Making Ecology* helps us understand the other factors that impact the relationship between risk, decision-making, and outcome. Additionally, decisions about foster care placement are influenced by decision maker risk threshold, attitudes toward removal, and self-reported casework skills. The risk threshold of those individuals influencing the direction of a case (caseworker, supervisor, court professionals, community partners, etc) impacts custody entry rates. For instance, a previous experience of a child fatality will impact the risk threshold, as will an individual's values related to foster care. When a worker has positive views of foster care as a consequence of their actions, the threshold for action is lower than another who may have less positive views of foster care (see pg. 17 in full report for image). Risk threshold is important because it allows an understanding of how similar cases can end up with different outcomes, explaining variance in custody rates. Thus, case factors alone and those items that are captured in the state's child welfare databases will be insufficient in gaining a holistic picture of what drives custody rates. When studying the reasons behind increased foster care rates in Vermont, it will be essential to study administrative data in concert with individual-level survey and interview data and external contextual factors.

Phase 2 of this study will utilize existing and new data from state databases, decision maker surveys, and interviews to understand Vermont's decision making ecology as related to foster care placement.

Next Steps

Building on the variables and factors identified in the Phase 1 final report, the UVM research team will engage in in depth data collection and analysis with the goal of gaining a comprehensive understanding of the drivers of decision making and custody in Vermont.

Plan and Timeline

I.   Literature Review – January 2020
II.   Decision Maker Survey (Spring/Summer 2020)
III.   Quantitative Data Modeling (Spring/Summer 2020)
IV.   Qualitative Interviews (Summer-Fall 2020)

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