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Care Arrangements for Children Exposed to Maternal Incarceration: Evidence From Wisconsin

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ABSTRACT

Objective: This study examines care arrangements for children before, during, and after maternal incarceration.

Background: Family systems theory suggests that maternal incarceration may drastically alter family life for marginalized children, but little is known about how children's care arrangements change during and after maternal incarceration versus other forms of criminal legal system (CLS) involvement.

Method: Leveraging longitudinal linked administrative data on 14,704 children whose biological mothers encountered the CLS in early and middle childhood, we use linear probability models and difference-in-difference analysis to examine how maternal incarceration shapes placement in foster care, adoption or guardianship, and other informal relative care.

Results: Among children with maternal CLS contact, children with upcoming maternal incarceration had higher probabilities of foster care, adoption or guardianship, and informal relative care than those without upcoming maternal incarceration. Maternal incarceration was associated with a 2 percentage point increase in both foster care placement and informal nonparental care within the 6 months following onset; adoption and guardianship arrangements increased by nearly 2 percentage points within three years. Associations were largely driven by children whose mothers were incarcerated immediately upon the onset of CLS involvement or entering carceral spells longer than 6 months.

Conclusions: Maternal incarceration has both immediate and long-term implications for children's family environments.

Nearly 1.9 million U.S. adults are in jail or prison (Carson and Kluckow 2023; Zeng 2023). Given that most incarcerated women (McCampbell 2005; Sawyer and Bertram 2022) are the parents of at least one minor child, exposure to maternal contact with the criminal legal system (CLS) is common. More than one-tenth of children born in urban areas have experienced maternal incarceration by adolescence (Turney and Haskins 2019). Maternal incarceration is also widely recognized as an adverse childhood experience (ACE), one that is associated with especially high cumulative ACE burdens among affected children (Copp and Johnson 2025; Turney 2018). Given the commonality of maternal incarceration and its concentration among marginalized populations, social scientists have asserted that incarceration

perpetuates and exacerbates family inequalities (Wakefield and Uggen 2010; Wildeman 2009).

Family systems theory, which emphasizes the interconnectedness and interdependence of family members, highlights that maternal incarceration exacerbates inequality in part through changing children's care arrangements (Cox and Paley 1997; Minuchin 1985). Maternal incarceration is a disruption that destabilizes entire family units, straining existing caregiving arrangements as caregivers renegotiate roles and responsibilities in a mother's absence (Arditti 2012; Siegel 2011). These disruptions may be greatest when mothers were sole or primary caregivers prior to incarceration (Glaze and Maruschak 2008),

as incarceration precludes mothers—at least temporarily—from residing with their children and serving as caregivers. Incarceration of a non-primary or nonresident mother may also disrupt relationships and family financial resources (Arditti 2012). Family systems theory, which also highlights the role of adaptation and resilience following strain, suggests the strain of maternal incarceration may be short-lived and temporary, consistent with the idea that families adapt to a crisis (Broderick 1993; also see Johnson and Arditti 2023). Alternatively, maternal incarceration may generate long-term and cumulative disadvantages that are difficult to overcome (O’Rand 1996).

Despite theoretical reasons to expect that maternal incarceration could restructure children’s formal and informal care arrangements, with these consequences either temporary or persisting throughout children’s life courses, little contemporary research examines care arrangements during and after maternal incarceration. A rigorous assessment of how maternal incarceration shapes care arrangements—that is, one that accounts for non-random selection into maternal incarceration (Turney and Wildeman 2015) and that carefully considers the temporal dimensions of this relationship—imposes considerable data requirements. First, precise measures of children’s care arrangements before, during, and after maternal incarceration are necessary to distinguish whether nonparental care arrangements preceded or followed the onset of maternal incarceration and examine the duration of these arrangements. Second, given the striking differences in demographic and familial characteristics between children who are and are not exposed to maternal incarceration (e.g., Johnson and Easterling 2012), accounting for selection into exposure to maternal incarceration with an appropriate comparison group and rigorous analytic approach is critical.

We examine children’s care arrangements before, during, and after mothers’ CLS involvement by leveraging longitudinal linked administrative data from Wisconsin on 14,704 children born in 2009–2011 whose mothers had CLS involvement, comparing children who do and do not experience maternal incarceration. We focus on formal custody changes (foster care, guardianship, and adoption) and informal (no known court involvement) arrangements in which children are not living with either biological parent. Grounded in family systems theory that highlights the interconnectedness of family members and their adaptation, and considering the selectivity of children exposed to maternal incarceration, the study addresses the following research questions: (1) What are children’s care arrangements prior to the onset of maternal CLS involvement, and do patterns differ between children who experience maternal incarceration and children who experience maternal CLS contact but not maternal incarceration? (2) How do children’s care arrangements change immediately following maternal CLS contact, and do patterns differ between children who do and do not experience maternal incarceration? (3) Is maternal incarceration associated with permanent care arrangements apart from both biological parents (adoption or guardianship)? We also consider heterogeneity in these associations by race and ethnicity.

1 | Background

Family systems theory provides a useful lens for understanding how maternal incarceration may prompt substantial changes in family life (Cox and Paley 1997; Minuchin 1985). This theory emphasizes the interconnectedness of family members, wherein strains and stressors endured by one family member can have proliferating repercussions for the entire family unit. The removal of mothers, especially custodial mothers, from their homes via confinement likely has rippling consequences for children’s care arrangements, but several features of this relationship remain unresolved. First, it is unknown whether these shifting care arrangements are temporary, consistent with a model of adaptation, or represent a chronic strain that facilitates cumulative disadvantage long after the mother’s incarceration (Hill 1949; McCubbin and Patterson 1983; O’Rand 1996). It is also unknown whether these care arrangements shift in response to features of the incarceration experience such as immediacy or duration. Second, any investigation into care arrangements during and after maternal incarceration must consider the possibility of selection into exposure to maternal incarceration (i.e., that children’s care arrangements began prior to the incarceration, given the disadvantages endured by families who experience maternal incarceration). Third, as strains unfold in a social context, the relationship between maternal incarceration and children’s care arrangements may vary by race/ethnicity. We consider these points in turn.

1.1 | Care Arrangements Following Maternal Incarceration: Crisis or Chronic Strain?

The incarceration of custodial mothers necessitates new care arrangements for children, aligned with family systems theory highlighting the interconnectedness of family members (Cox and Paley 1997; Minuchin 1985). Children have three main options for alternative care during maternal incarceration: (1) residing with their fathers, (2) entering foster care, where they may be placed with a relative, an unrelated family, or a group or residential facility; or (3) living with a relative or family friend outside of the formal foster care system. Existing evidence is mixed as to whether maternal incarceration increases foster care entries (Gifford et al. 2020; Swann and Sylvester 2006), but children most commonly live with relatives outside of the foster care system during maternal incarceration (Crockett and Larsen Gibby 2021; Johnson and Waldfogel 2002; Tasca et al. 2011).

Though unsurprising that maternal incarceration necessitates temporary changes in children’s care arrangements when mothers are sole or primary caregivers prior to incarceration, the duration of these arrangements is an open question. On the one hand, family systems theory suggests that families adapt to crises over time (Broderick 1993; also see Johnson and Arditti 2023); accordingly, the altered caregiving arrangements may be short-lived and temporary, reverting back to maternal care after release. Research using the Future of Families and Child Wellbeing Study (FFCWS) found that more than 90% of children with a history of maternal incarceration resided with their mothers (Turney and Wildeman 2015). However, such estimates may be biased due to differential sample attrition or

nonresponse: indeed, the prevalence of at least one form of alternative care, foster care, is substantially lower in the FFCWS than expected based on other samples and population prevalence (Drake, Barth, et al. 2023; Drake, Jones, et al. 2023). Maternal incarceration may generate or exacerbate long-term and cumulative disadvantages that inhibit family reunification following release, consistent with the chronic strain model that has developed alongside the crisis model (Pearlin 1989; also see O'Rand 1996). Therefore, theory and existing research suggest that changes in children's care arrangements following maternal incarceration may be either short-lived or long-lasting, and our analyses adjudicate between these two hypotheses.

The relationship between maternal incarceration and children's care arrangements, including the duration of these changing care arrangements, is also likely complicated by family context. The probability a child returns to their mother upon her release from confinement likely depends on the formality of the child's care arrangement during incarceration (Lee et al. 2010). For example, if a child enters formal foster care during maternal incarceration, reunification may not occur unless or until a judge determines the parent can provide a safe and appropriate residence. Lengthy incarceration spells may facilitate adoption or guardianship before the mother is released (George et al. 2011; U.S. Department of Health and Human Services 2024), due to federal policies that pressure states to move foster children to adoption or other permanent care arrangements within 15 months (Adoption and Safe Families Act 1997). Adoption leads to the termination of parental rights without an option to regain custody. Alternatively, with informal relative placement, the mother can reassert custodial rights upon release. Relatives may pursue guardianship, either through the child welfare system or independently, and if approved, the parent typically must go to court to have the guardianship dissolved. Overall, formal child custody transfers may result in a higher prevalence of long-term or permanent mother-child separation. Formal care arrangements may be unnecessary or overly difficult for a short incarceration episode where reunification is expected; consequently, we anticipate long-term maternal incarceration to create cumulative disadvantages that lead to formal care arrangements and persistently higher rates of children living apart from both biological parents. Because the duration of incarceration and potential for reunification is sometimes unknown, increases in permanent alternative care (adoption/guardianship) are unlikely within the first year following maternal incarceration. In contrast, increases in temporary alternative care (foster care and informal relative care) are likely to be immediate.

The immediacy of incarceration is another unexplored dimension, despite its likely importance for care arrangements. Mothers, given the choice, would likely elect to avoid their children's entry into foster care. When mothers are incarcerated at the time of the criminal offense, they may lack sufficient advance warning to ensure the availability of a relative or friend to provide care during their incarceration. Law enforcement, at the time of an arrest, may also contact child protection to take custody of children, particularly if they are perceived to have been abused or neglected. In contrast, a mother awaiting sentencing or considering a plea bargain likely anticipates the possibility of incarceration. The mother can plan for her absence by creating a power of attorney or other legal framework to

ensure her children are cared for according to her preferences. Most research focuses on post-disposition jail and prison sentences (rather than pre-disposition jail, which may co-occur with arrest) or is unable to differentiate the precise timing of incarceration and thus cannot address the role of immediacy of incarceration. We hypothesize that immediate—but not delayed—incarceration will be strongly associated with foster care entry, whereas informal relative care will increase in the aftermath of CLS contact regardless of the timing of incarceration.

1.2 | Considering Selection Into Care Arrangements Following Maternal Incarceration

Although a family systems perspective suggests that maternal incarceration reshapes children's care arrangements, in either a temporary or permanent fashion, selection factors complicate the understanding of the repercussions of maternal incarceration on these care arrangements. First, the social and economic conditions associated with children living apart from both biological parents—foster care, guardianship and adoption, and various forms of informal care—are also precursors of maternal CLS involvement generally, and incarceration specifically. Incarceration is concentrated among families with health and social problems likely to adversely influence childrearing, including substance abuse (Belenko and Peugh 2005; Caravaca-Sánchez et al. 2023), mental illness (Caravaca-Sánchez et al. 2023), and domestic violence (Weatherburn and Rahman 2018). These factors are also among the main circumstances associated with children's contact with Child Protective Services and entry to foster care (Palmer et al. 2024). Children raised solely or primarily by relatives outside of the formal foster care system come from similarly disadvantaged circumstances (Goodman et al. 2004), as parents may place their children with relatives to avoid their entry into foster care (Gupta-Kagan 2020). For example, mothers' substance abuse is a common precursor to formal and informal alternative care arrangements (Buckles et al. 2023; Gherthner et al. 2018).

Differentiating the experience of maternal incarceration from the endogenous factors associated with selection into maternal incarceration is challenging. One approach is to compare children of mothers who experience incarceration to children of mothers with CLS involvement without incarceration, an approach we take in this paper given our use of detailed administrative data. Most prior research on the consequences of maternal incarceration lacks information on CLS involvement beyond incarceration; much less the detailed case-level CLS data on pretrial detention and sentencing to specific cases (and charges).

Beyond generating a relevant comparison group for mothers who are incarcerated (i.e., mothers whose CLS involvement does not result in incarceration), a thorough exploration of selection bias requires an understanding of how care arrangements evolve in the immediate lead-up to CLS contact. Although research broadly demonstrates that children living apart from both biological parents are more likely to have experienced parental incarceration (Muentner et al. 2023), it is not well-established whether incarceration typically

precedes or follows the change in living arrangements (George et al. 2011). A 2007 national study of prison populations found that 55% of mothers in prison were living with their children in the month before their arrest (Glaze and Maruschak 2008), consistent with qualitative research detailing varying levels of mothers' involvement and caregiving roles prior to incarceration (Turanovic et al. 2012). However, prison populations constitute a small share of mothers who experience incarceration, and mothers in prison may have more severe barriers to safe parenting than mothers who experience jail only. This highlights a related issue—duration of incarceration—that is underexplored in the literature. We would expect a higher share of mother–child co-residence in the lead-up to CLS cases that result in no or short-term incarceration than long-term incarceration. However, to our knowledge, no studies to date provide such estimates.

1.3 | Heterogeneity by Race and Ethnicity

Lastly, the relationship between maternal incarceration and care arrangements may vary by race/ethnicity. Maternal incarceration and alternative care arrangements are both more common among Black children compared with White and Hispanic children (Wildeman 2009; Yi et al. 2020). Thus, we anticipate that Black children will experience elevated rates of alternative care arrangements compared with White and Hispanic children both before and after maternal CLS contact, regardless of whether their mother was incarcerated. Yet, it is unclear whether the association between maternal incarceration and alternative care varies across racial/ethnic groups. Prior research shows that, compared with White children, Black and Hispanic children are less likely to live with their fathers during maternal incarceration (Foster 2011), which likely shapes patterns of foster care, adoption or guardianship, and informal relative care. In addition, despite lower overall rates of exposure to parental incarceration, White children are more likely than others to enter foster care because of parental incarceration (Morrison and Drake 2023). More generally, Black and Hispanic children enter foster care at a lower rate than would be expected based on risk factors such as poverty (Drake, Barth, et al. 2023; Drake, Jones, et al. 2023), potentially reflecting higher availability or use of informal relative care. Thus, although structural inequalities in life circumstances of families contribute to disproportionately elevated levels of maternal incarceration and alternative care arrangements for Black children (Drake, Barth, et al. 2023; Drake, Jones, et al. 2023; Manduca and Sampson 2019), maternal incarceration itself may not substantially alter their care arrangements. We examine race/ethnic variation in the relationship between maternal incarceration and children's caregiving arrangements with our longitudinal data that accounts for selection into exposure to maternal incarceration.

1.4 | The Current Study

The extent literature on variation in children's care arrangements during or following maternal incarceration is limited in several respects, including reliance on cross-sectional data (Crockett and Larsen Gibby 2021; Glaze and Maruschak 2008; Jackson et al. 2023; Muentner et al. 2023), lack of information

on jail sentences (Crockett and Larsen Gibby 2021; Glaze and Maruschak 2008; Johnson and Waldfogel 2002) or pretrial incarceration (Andersen and Wildeman 2014; Gifford et al. 2020), inability to establish temporal ordering or measure pre-incarceration living arrangements (Jackson et al. 2023; Muentner et al. 2023), and lack of information on post-incarceration living arrangements. Overall, studies have focused extensively on where children live during or after an episode of parental incarceration, and relatively little is known about how children's care arrangements change over time, to what extent children with an incarcerated mother are placed in permanent care arrangements apart from both biological parents, and whether incarceration itself is likely a causal agent in those care changes. Therefore, in this paper, we leverage unique longitudinal data with detailed, case-level CLS records to understand how maternal incarceration is associated with children's care arrangements before, during, and after incarceration, focusing our comparison on children of mothers who endure incarceration and children of mothers who endure other CLS contact but not incarceration. This approach allows for a substantive understanding of changes in children's care arrangements over time with a rigorous comparison group.

2 | Method

2.1 | Data and Sample

The current study used data from the 2021 version of the Wisconsin Administrative Data Core (WADC), a linked administrative database maintained by the Institute for Research on Poverty at the University of Wisconsin-Madison that includes child welfare, child support, public benefits, education, and other information systems for all residents of Wisconsin. This study's target sample consists of misdemeanor and felony CLS cases for mothers of biological children born in 2009–2011. We collapsed cases that were filed and sentenced concurrently into a single case. We excluded cases initiated (with an offense or charge date) before the child was six months old or within three years of the end of the observation period (12/2021) to ensure six months of pre-CLS observation and three years of follow-up (17,942 children with a total of unique 34,806 maternal CLS cases). From this possible sample, children are excluded if they left the state (8.5%; $n = 1507$) or died (1.7%; $n = 192$) during the observation period or were missing demographic information (2.0%; $n = 324$). The remaining sample was 15,919 children with 41,188 child-maternal CLS case (dyadic) observations. As explained in the analytic approach section, most of our analysis focuses on the first CLS case since the child's birth (14,704 children) and exact sample sizes may vary by model due to exact matching requirements.

2.2 | Criminal Legal System Involvement and Incarceration

Mothers' criminal legal involvement was discerned from the Wisconsin Consolidated Court Automation Program (CCAP) database, which includes case-level information on criminal charges, hearings, dispositions, and sentences. For each case—identified by a unique masked ID—the onset of criminal legal

involvement is defined by offense start date, which typically corresponds to the time of initial contact between the parent and law enforcement. For the small number of cases with a missing offense date, we use the date that criminal charges were filed.

The determination of whether an individual was incarcerated on a specific case was based on two sets of records. First, pre-conviction jail incarceration was identified from the events table within the CCAP database, which records all hearings and other events by case ID. From those records, we identify an individual as in jail prior to trial, dismissal, or plea if they were remanded at their arraignment hearing or received but did not post bail or bond. Second, post-conviction incarceration was based on the sentence imposed by the judge as recorded in the CCAP data and was presumed to begin on the date of the sentence. Our primary measure of case-specific incarceration is equal to 1 if the case sentence involved jail or prison or if the individual experienced pretrial detention at the onset of the case, and 0 otherwise (comparison). Supplemental measures differentiate immediate (pretrial detention or same-month disposition and sentencing) from delayed (sentences imposed after the month of case onset) and consider sentence length.

Figure 1 depicts the monthly probability of incarceration in the six months preceding and 36 months following case onset, by our primary case-specific incarceration measure. This Figure demonstrates that our incarceration group designation reflects large and sustained differences in both monthly and cumulative exposure to incarceration. However, many mothers whose index case did not involve pretrial detention or incarceration sentence were nevertheless incarcerated during the observation period, reflecting bail revocations as well as new case filings and dispositions.

Covariates related to the mother's CLS case include charge types and levels. Classification of criminal charges is based on the CJARS coding scheme (Choi et al. 2023) and reflects the charges filed for each specific case, regardless of conviction. Although an individual can have multiple charges per case, index charges were collapsed into a mutually exclusive categorical variable prioritizing the offenses that may trigger formal care arrangements independent of incarceration. Charges were categorized as domestic violence, child victimization offenses (e.g., child abuse or endangerment), drug-related offenses (sales or possession), driving under the influence (DUIs), or other offenses. We additionally include a 6-category variable indicating the highest level of criminal charge attached to the case, ranging from unspecified misdemeanor to A-level felony.

2.3 | Children's Care Arrangements

We focus on three mutually exclusive types of alternative living arrangements: formal foster care (including kinship foster care, nonrelative foster care, and group homes or institutions), adoption or guardianship, and informal relative care. Informal relative care does not include multi-generational households (e.g., when a child lives with both a biological parent and a relative).

To identify children's care arrangements before, during, and after experiencing maternal incarceration, we primarily rely on data from three systems: the Statewide Automated Child Welfare Information System (SACWIS; including child protection and services cases, formal foster care, and state-funded voluntary kinship care arrangements), the Wisconsin Child

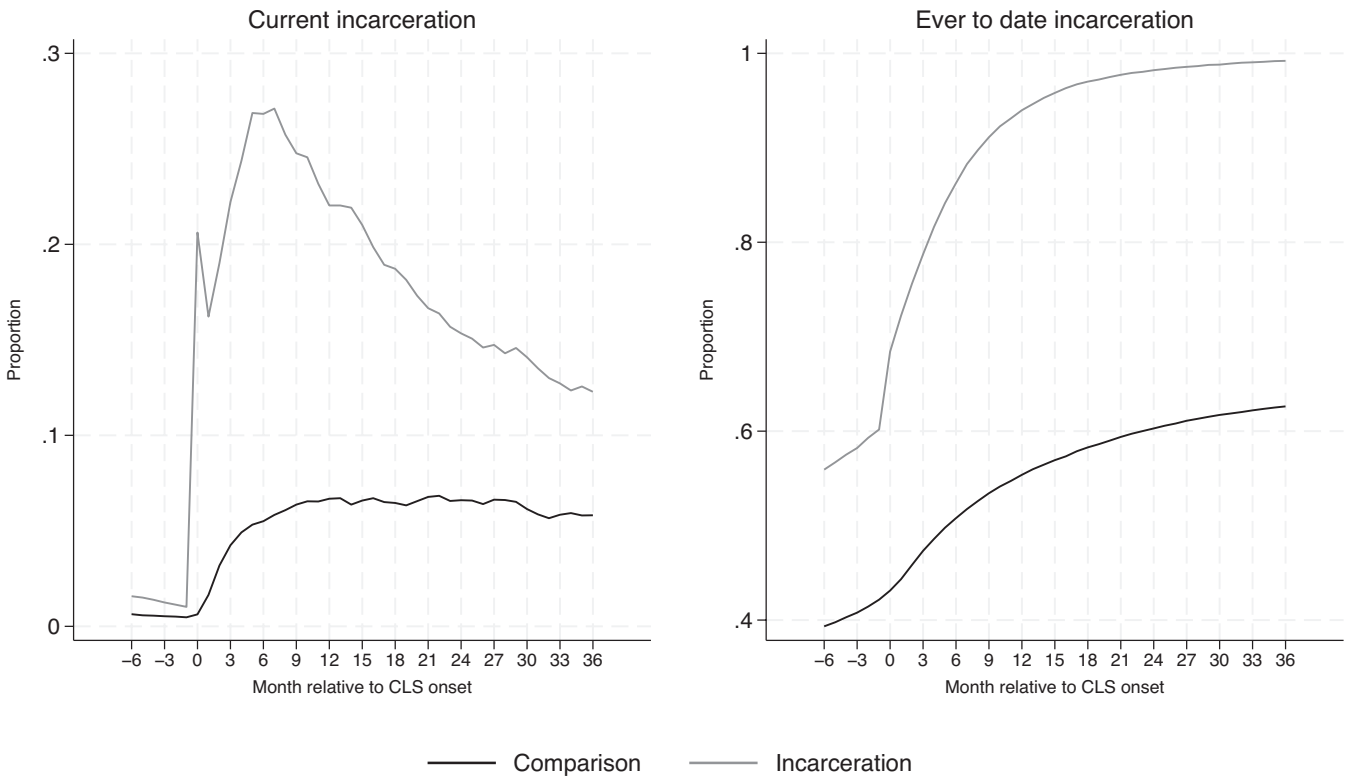


FIGURE 1 | Monthly probability of incarceration six months prior to and 36 months following case onset. CLS = criminal legal system. Month 0 is the month of CLS case onset. Incarceration includes pretrial detention, jail sentences, and imprisonment across all CLS cases involving the mother.

Support System, and the Wisconsin Client Assistance for Re-Employment and Economic Support (CARES, which includes food, medical, and cash assistance programs).

SACWIS data include multiple files with varied levels of organization; however, we primarily rely on foster care and voluntary kinship care records. We also use discharge information from the foster care record to determine if a child exited foster care to reunification (return to biological parent), adoption, or guardianship. The CARES data are organized by month; we assert that a child receiving benefits in a given month resides with other individuals listed as either receiving benefits or as the primary person case (i.e., head of household) on the same case. The child support data are also organized by month and include the payer and payee; we assert that the child is living with the payee while the support order is active (since child support is owed to a custodial parent/caregiver).

Our first type of care arrangement, foster care, is measured with exact dates and contains no missing values. Each foster care episode statewide is recorded with start and end dates. The second care arrangement, adoption/guardianship, is derived from three sources. The most common source is discharge information from the SACWIS system, which identifies when a child exited foster care to adoption or guardianship. Given that these are designed (and federally defined) as permanent arrangements, we treat adoption/guardianship exits as continuing indefinitely absent evidence to the contrary (e.g., a re-entry to foster care). That is, we do not require that adoptions or guardianships have proof of continuity in each month of the data. We also integrate role/relationship information from the full SACWIS system (including child protection reports and voluntary kinship cases), which includes guardian and adoptive parent as role options. We also leverage a parent role code generated by the Institute for Research on Poverty, which differentiates biological, adoptive, and other parent roles across multiple systems. Our data are unlikely to include private or intercountry adoptees, as those children would not have identified biological mothers in our data.

Our final type of care arrangement, informal relative care, poses greater challenges. Informal relative care is indicated only if there is evidence that the child resides with a relative, but no concurrent foster care placement, no indication that the relative caregiver is a legal guardian or adoptive parent, and no indication of living with a biological parent. A primary data source for informal relative care is the voluntary kinship care records, which (like foster care records) are precisely dated and contain no missingness. However, the voluntary kinship care program is not an entitlement, and not all relative caregivers are eligible or elect to participate. Thus, informal care is also indicated in a given month if (1) a child is on a benefits case (CARES) or a child protection report (SACWIS) with a relative and neither parent is listed as a household member or (2) a relative (and not a parent) is the payee on the child's support order.

To be clear, however, our estimate of informal relative care is conservative (lower-bound) because some children reside with relatives temporarily without a documented change in any systems. We only identify informal relative care arrangements if

the relative caregiver applies for the voluntary kinship care program, puts the child on their public benefits case, or is the designated payee on a child support case for the child. The reasons that a caregiver may or may not take these steps are not fully known or observable (i.e., missing not at random). Thus, we must grapple with two related but distinct issues: (1) no information, or missingness; and (2) potentially inaccurate information, or error. Missing data on care arrangement primarily occurs when a child is not participating in any included program. This would mean that the child was ineligible or their caregiver opted not to apply for any programs. However, we note that both public benefit and child support involvement are prevalent among CLS-involved parents. Moreover, an estimated 63% of relative caregivers live below 200% of the federal poverty line (Annie E. Casey Foundation 2012) and uptake of food assistance, one of the public benefits tracked by CARES, exceeds 90% in Wisconsin among those who are income-eligible (Cunningham 2025). Less commonly, children's program enrollment may not identify any other case members (this can occur, for example, when a child receives Medicaid because of their Supplemental Security Income (SSI) enrollment not under the income eligibility category). However, our covariate adjustment includes measures of children's SSI receipt.

Error in measurement can occur when a benefits case does not get updated immediately, or is not updated at all, to reflect the change in living arrangements. The likely consequence is that we miss (undercount) short-term informal relative care or identify the care arrangement as beginning later than it did. To address lags in updating benefits cases, we used interpolation, assuming continuity of trends in the absence of conflicting information, to fill in missing values for informal relative care only. Missing values on informal relative care were observed for 17% of case-months, but the median child was missing only 2% of months. After interpolation, this was reduced to 9% of case-months (with 0 missing months for the median child). In the final measure of informal relative care, unresolved months are treated as 0s. Ultimately, these steps made little difference: in the final version (with interpolation and treating uncertain months as 0), the estimated proportion of informal relative care was 1 point lower in both the incarceration and comparison groups.

2.4 | Additional Covariates

In addition to maternal criminal charge type and severity, we included two groups of covariates: sociodemographic characteristics and time-varying characteristics of children and their parents. Sociodemographic characteristics included child race (White, Black, Hispanic, Other), sex (female, male), indicators of the calendar year of the charged event, number of children the mother had, the birth order of the child, and whether the mother or the father had Supplemental Security Income (SSI). We used SSI as a proxy for disability and the absence of income or resources in the household. Paternal CLS status at the onset of the maternal CLS was categorized as none, onset, ongoing CLS involvement without incarceration, or incarceration. Additional time-varying characteristics were ever-to-date maternal and paternal substance use disorder diagnosis from Medicaid claims and three indicators of child disability status (serious medical condition, developmental disability,

and receiving SSI benefits). We include multiple indicators of child disability status because these children may be more likely to enter formal care due to elevated needs and care-related expenses.

2.5 | Analytic Approach

We structured the data into a monthly “relative time” framework, in which month 0 was the month a maternal CLS case commenced, with month –1 referring to the month preceding contact and month 1 being the first month following contact. Contact is defined by the date of offense or, if the offense date is missing, the date that charges were filed. We focus on the relative time period of month –6 through month 36. We conducted all analyses in Stata 18.

The analysis proceeded in three steps. To address our first research question, we used linear probability models to examine children’s likelihood of residing in various care arrangements in the month prior to maternal CLS onset (–1). We focused on whether the mothers’ upcoming charges and incarceration were associated with care arrangements. The models explore selection bias—that is, whether children whose mothers *will* be incarcerated differ in their living arrangements.

To address the second and third research questions pertaining to the consequences of incarceration on care arrangements, we present models that estimated changes in care arrangements (relative to month –1) for months –6 through –2 and 0 through 36, comparing children whose maternal CLS case led to incarceration (treatment group; hereafter, maternal incarceration group) and children whose maternal CLS case did not (comparison group). Standard errors were clustered by child and maternal CLS case. Our models follow a difference-in-difference framework, in which each care arrangement measure is regressed on dummy indicators of relative time (–6 through 36), the maternal incarceration measure, the interactions of relative time and maternal incarceration, and a series of covariates (as described in the measures section). For ease of interpretation, we plot the main coefficients of interest (incarceration-time interactions) in figures and provide full tables in the appendix.

The basic model takes the form:

$$\text{CareArrangement}_{it} = \sum_{t \neq -1} \text{Incarceration}_i \varphi_t + X_{it} \beta + \epsilon_{it} \quad (1)$$

where the outcome is care arrangement for child i in month t . Incarceration is a binary indicator representing the treatment (1) or comparison (0) condition. Incarceration is interacted with five lag (pre-CLS) month indicators (months –6 through –2, where –1 is the omitted reference group) and 37 lead month indicators (0 through 36), represented by φ_t . X_{it} is a vector of stable and time-varying covariates and ϵ_{it} is an error term. To further address selection bias in our estimates, we apply inverse propensity to treatment weights. We first apply exact matching based on child age at CLS onset and offense

severity and then generate propensity scores based on all time-stable predictors. Weights are separately generated for the main models and each supplemental analysis. The combination of the difference-in-differences approach and inverse propensity to treatment weighting allows us to make plausibly causal inferences about the role of maternal incarceration in children’s care arrangements.

The key assumption of our models is that, had mothers in the incarceration group avoided incarceration on their first offense, their children’s care arrangements would have followed a similar post-treatment pattern as observed for mothers in the comparison group. Parallel trends during the pre-treatment period (same trajectory in months –6 to –1 for treatment and comparison groups, conditional on covariates)—provide an initial test of this assumption. We assessed for parallel trends by examining incarceration-time interactions for the pre-onset period (months –6 to –2, compared with –1). In the full sample of cases, the likelihood of foster care and adoption or guardianship increased more rapidly in the lead up to CLS onset for the incarceration group than the comparison group. In contrast, parallel pre-trends were observed for the first case subsample, which is the analytic sample for the main models.

One reason for nonparallel trends is an anticipation effect—for example, if a mother believes she is about to be incarcerated, she may initiate a transfer of custody prior to incarceration. Given that we use the onset of CLS contact—typically the arrest—as the anchor time (month 0), this is unlikely. Mothers are likely to anticipate sentencing to incarceration based on the charges or consultation with their attorneys, but are unlikely to anticipate their initial arrest or charges, given that law enforcement is unaware of the majority of criminal offenses, especially misdemeanors, and the arrest rate for known crimes is low (Gramlich 2024; U.S. Department of Justice 2019). Moreover, this threat is especially unlikely to affect our estimates for foster care placement, given that voluntary entries to foster care in the U.S. generally, and Wisconsin specifically, are extraordinarily rare (based on author analysis of national foster care data and Wisconsin placement records). Instead, we argue that the trends violation in the full sample, but not the first case sample, may be due to children’s care arrangements being altered following a prior CLS case.

3 | Results

3.1 | Sample Description

Table 1 presents descriptive statistics for the full sample of first cases and subgroups categorized by whether the child’s mother’s CLS case led to incarceration or not (See Appendix A1 for description of all cases). For the full sample, a plurality of children was White (44%), 52% were male, and 23% had a developmental disability or delay. Differences between the incarcerated and comparison groups in the distribution of race, sex, or various indicators of medical fragility or disability were relatively small. Mothers who were incarcerated on their first case were more likely to have a substance use disorder (52% vs. 41%).

TABLE 1 | Sample description.

	Full sample		Comparison group		Maternal incarceration		
	(N = 14,704)		(N = 10,388)		(N = 4,316)		
	N	Col. %/M(SD)	N	Col. %/M(SD)	N	Col. %/M(SD)	p
Child characteristics							
White	6,399	43.52	4,556	43.86	1,843	42.70	0.198
Black	2,886	19.63	1,943	18.70	943	21.85	0.000
Hispanic	2,809	19.10	2,087	2.09	722	16.73	0.000
Other race or ethnicity	2,610	17.75	1,802	17.35	808	18.72	0.047
Male	7,584	51.58	5,380	51.79	2,204	51.07	0.423
Serious medical condition	2,400	16.32	1,727	16.62	673	15.59	0.123
Dev. disability or delay	3,375	22.95	2,439	23.48	936	21.69	0.019
SSI disability	862	5.86	617	5.94	245	5.68	0.536
Birth order [Mean SD]	2.30	1.46	2.29	1.45	2.33	1.48	0.223
Maternal characteristics							
Medicaid SUD diagnosis	6,522	44.36	4,262	41.03	2,260	52.36	0.000
SSI disability	833	5.67	620	5.97	213	4.94	0.014
Age at child's birth [Mean SD]	24.50	5.22	24.34	5.20	24.89	5.27	0.000
Number children [Mean SD]	3.59	1.83	3.62	1.84	3.52	1.82	0.004
CLS Case Characteristics							
Child's age at onset							
< 1 year	1,315	8.94	876	8.43	439	1.17	0.001
1–2 years	4,481	3.47	3,023	29.10	1,458	33.78	0.000
3–4 years	3,345	22.75	2,333	22.46	1,012	23.45	0.193
5–7 years	3,357	22.83	2,445	23.54	912	21.13	0.002
8+ years	2,206	15.00	1,711	16.47	495	11.47	0.000
Case charges							
Domestic violence	3,963	26.95	3,103	29.87	860	19.93	0.000
Child victimization	1,420	9.66	1,059	1.19	361	8.36	0.001
Drug-related	2,219	15.09	1,485	14.30	734	17.01	0.000
Driving under influence	1,331	9.05	231	2.22	1,100	25.49	0.000
Other	5,771	39.25	4,510	43.42	1,261	29.22	0.000
Highest charge level							
Unspecified misdemeanor	4,314	29.34	2,972	28.61	1,342	31.09	0.003
B/C level misdemeanor	1,379	9.38	1,161	11.18	218	5.05	0.000
A level misdemeanor	4,781	32.51	3,779	36.38	1,002	23.22	0.000
Low-level felony	4,054	27.57	2,441	23.50	1,613	37.37	0.000
B/C level felony	161	1.09	35	0.34	126	2.92	0.000
A level felony	15	0.10	0	0.00	15	0.35	0.000

(Continues)

TABLE 1 | (Continued)

	Full sample		Comparison group		Maternal incarceration		
	(N = 14,704)		(N = 10,388)		(N = 4,316)		
	N	Col. %/M(SD)	N	Col. %/M(SD)	N	Col. %/M(SD)	p
Paternal characteristics							
Medicaid SUD diagnosis	3,010	2.47	2,130	2.50	880	2.39	0.875
SSI disability	501	3.63	360	3.68	141	3.50	0.614
Concurrent CLS involvement							
None	9,057	65.56	6,406	65.45	2,651	65.83	0.667
Encounter	849	6.15	668	6.82	181	4.49	0.000
Ongoing without incarceration	2,227	16.12	1,596	16.31	631	15.67	0.355
Incarceration	1,682	12.18	1,118	11.42	564	14.01	0.000
Child care arrangements (ever during observation period)							
Biological mother	11,921	81.16	8,589	82.80	3,332	77.22	0.000
Biological father	6,214	42.42	4,381	42.34	1,833	42.61	0.766
Foster care	2,406	16.36	1,587	15.28	819	18.98	0.000
Guardianship/Adoption	979	6.66	603	5.80	376	8.71	0.000
Informal relative care	2,125	14.45	1,300	12.51	825	19.11	0.000

Note: First maternal CLS cases.

Abbreviations: CLS = criminal legal system. SSI = Supplemental security income. SUD = Substance use disorder.

A total of 27% of first CLS cases involved domestic violence, 10% involved child victimization, 15% were drug-related, and 9% were DUIs. Domestic violence charges were overrepresented in the comparison (no maternal incarceration) group, and DUIs were underrepresented. Approximately 34% of fathers had concurrent CLS involvement.

More than four-fifths (81%) of children lived with their biological mother at some point during the observation period (the six months preceding or 36 months following maternal CLS onset), with lower rates in the maternal incarceration group (83% vs. 77%). However, many children also experienced alternative care arrangements, including 16% experiencing foster care, 7% experiencing adoption or guardianship, and 14% experiencing informal relative care. All forms of alternative care arrangements were more common in the maternal incarceration group than the comparison group.

3.2 | Pre-Incarceration Care Arrangements

Figure 2 presents linear probability coefficients from models in which alternative care arrangements in the month prior to the onset of mothers' CLS involvement are regressed on demographic characteristics and attributes of the mother's upcoming criminal case. In addition to the coefficients shown, models included all covariates described in the methods section as well as county and year fixed effects (for complete regression results, see Appendix A1). In the month prior to the first CLS onset, children of mothers who will be incarcerated were 1.5% points

(PP) more likely to be in foster care than children of mothers whose first CLS case did not involve incarceration; they were also 1.3 PP more likely to be in adoption or guardianship and 1.2 PP more likely to be in informal relative care. Upcoming drug charges and younger child age were associated with increased probability of foster care. In sum, care arrangements already differed in the lead-up to criminal case onset, both by types of upcoming criminal charges and upcoming incarceration.

3.3 | Changes in Living Arrangements

Figure 3 contains six plots: the left side plots are unadjusted trends in foster care, adoption/guardianship, and informal non-parental care by incarceration status, and the right-side plots show the estimated relationship between maternal incarceration and each care arrangement. For all plots, time spans from six months before CLS onset (−6) through 36 months after.

The unadjusted trends show, first, that foster care increased substantially in the month of maternal CLS onset, both for maternal incarceration and comparison cases. Regression-adjusted estimates show that maternal incarceration increased the probability of foster care by 1.8 PP immediately, with the gap between the incarceration and comparison group widening through month 5. Incarceration had no statistically significant effect on foster care in months 11–31, but by month 32, maternal incarceration was associated with a reduction in the probability of foster care (−2.0 PP).

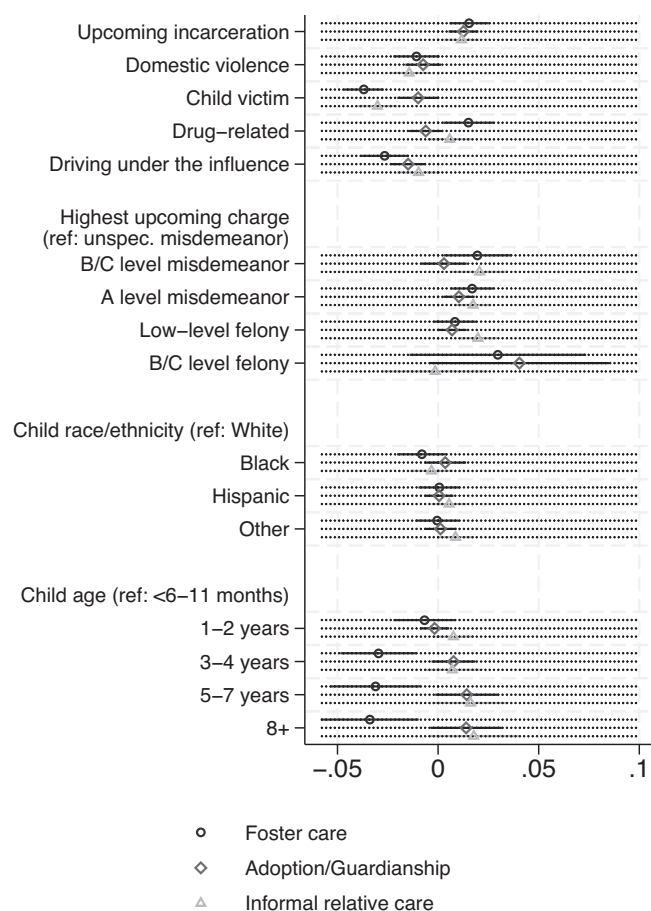


FIGURE 2 | Differences in alternative care arrangements one month prior to mother's CLS involvement onset. CLS=criminal legal system. Linear probability coefficients and 95% confidence intervals from regression modeling. Outcomes are binary indicators of each alternative care arrangement in month -1 (the month immediately preceding first maternal CLS onset). Models include all controls described in the methods section as well as county and year fixed effects.

Adoption and guardianship also increased in both the maternal incarceration and comparison groups; however, the maternal incarceration group had a comparatively steeper increase, with inflection points near months 7 and 18. The regression-adjusted estimates suggest that maternal incarceration significantly increased the probability of adoption or guardianship in month 20, peaking at a difference of 1.9 PP at month 36. Lastly, the final plots show that informal relative care increased following the onset of maternal CLS involvement, but maternal incarceration further increased informal relative care by 2.4 PP at 12 months and remained 1.5 PP higher at month 36. Complete regression results are in Appendix B1, which also provides evidence of parallel trends. There were no statistically significant trend differences in the lead-up to CLS onset.

3.4 | Incarceration Duration and Immediacy

We then explored two dimensions of incarceration: duration and immediacy. First, we divided the maternal incarceration group into mothers who were sentenced to 1-5 months versus six or more months on their first CLS case (Figure 4; see also Appendix C1). Sentences longer than six months accounted for

4.0% of first cases (16.4% of first cases with an incarceration sentence). We found that increases in alternative care arrangements were concentrated among children whose mothers were incarcerated for at least six months. Maternal incarceration of at least six months (compared with no incarceration) was associated with an immediate 8.4 PP increase in foster care at month 0 and a 15.6 PP increase at month 6. In contrast, short incarceration episodes were associated with a modest 1-2 PP reduction in foster care beginning in month 24 (though coefficients were only statistically significant in some months).

Short-term maternal incarceration had no relationship with adoption or guardianship, or with informal relative care. In contrast, incarceration longer than six months was associated with increasing probability of adoption or guardianship beginning in month 18 and an immediate increase in informal relative care. By month 36, children whose mothers were incarcerated at least 6 months, compared with those who experienced no incarceration, had a 3.8 PP higher probability of adoption or guardianship and 9.5 PP higher probability of informal relative care. However, these findings should be interpreted with caution, as there was evidence of divergent trends in the pre-CLS period, where adoption/guardianship and informal relative care increased in the lead up to CLS onset with longer-term incarceration.

Second, we characterized the incarceration as immediate if the mother was incarcerated in month 0 (i.e., at the same time as their offense onset) and delayed if the mother was incarcerated after that month. Increases in foster care placement were entirely concentrated within the immediate incarceration group (Figure 5; see also Appendix C2). In contrast, compared with no maternal incarceration, both immediate and delayed incarceration were associated with increases in adoption/guardianship and informal relative care.

3.5 | Heterogeneity by Race and Ethnicity

To explore potential racial and ethnic heterogeneity, the main models were reproduced and plotted separately for White, Black, and Hispanic children in Appendix Figures D1-D3. Results show that maternal incarceration increases foster care placement more for Hispanic children than Black or White children; increases in foster care were not statistically significant for Black and White children and were meaningfully smaller in magnitude.

Maternal incarceration was associated with statistically significant increases in adoption/guardianship at month 36 for White (3 PP) and Hispanic children (4 PP) but not for Black children (1.3 PP). Lastly, maternal incarceration significantly increased informal relative care for Black children in nearly all of months 0 through 24; associations were weaker and typically not statistically significant among White or Hispanic children.

3.6 | Additional Robustness Analyses

We confirm that the findings were robust to the exclusion of time-varying covariates, which could be affected by the treatment and thus bias estimates. Additionally, we conducted

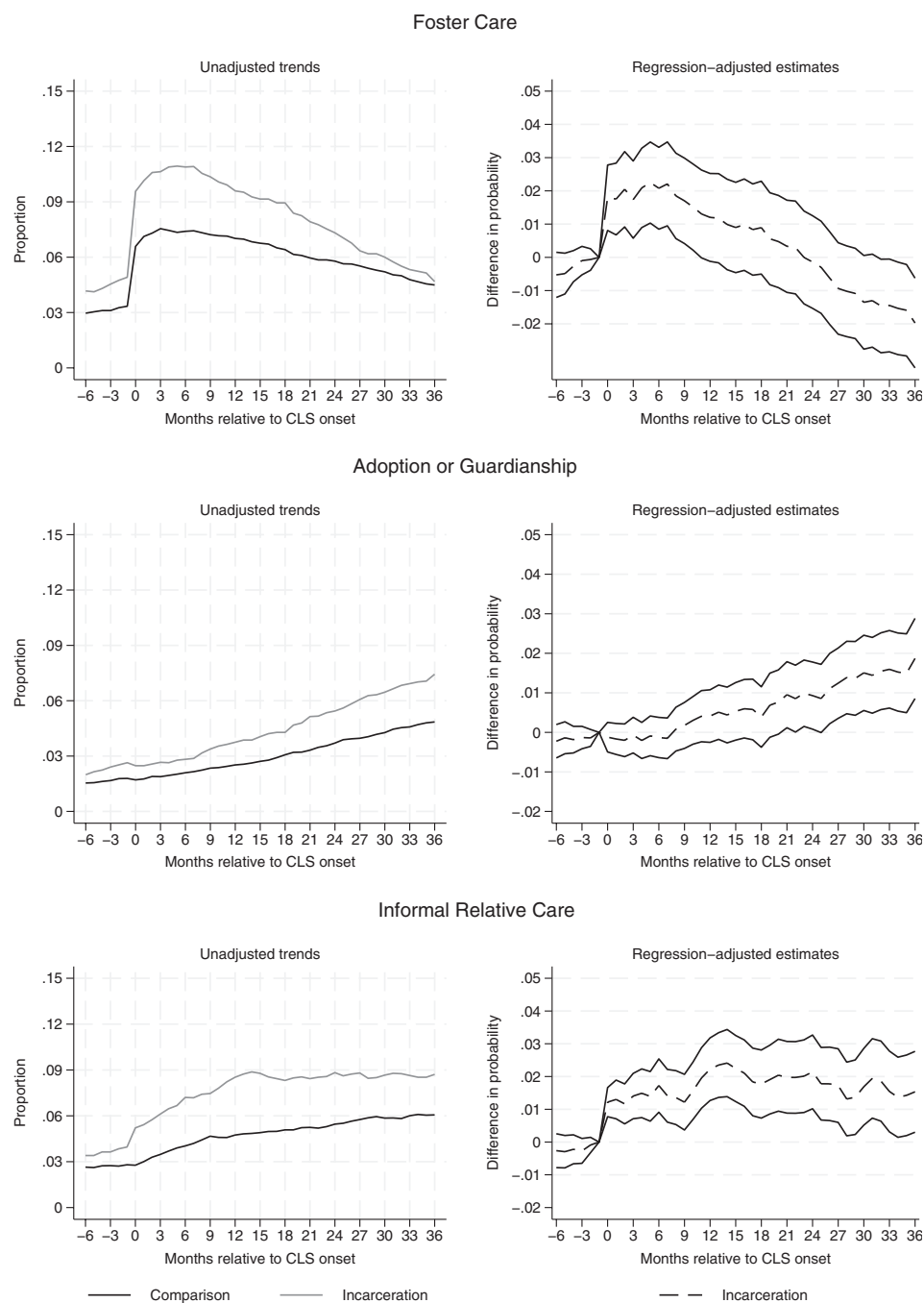


FIGURE 3 | Unadjusted trends and regression-adjusted estimates for children's care arrangements. CLS=criminal legal system. Month 0 represents the month of mothers' first CLS case onset. The plots on the left (column 1) depict the proportion of children in each month who are in each of the three care arrangements, sub-grouped into the incarceration and comparison conditions. The plots on the right (column 2) are from our difference-in-difference models. Dashed lines represent point estimates from multivariable linear regression and are interpreted as the difference in proportions in each living arrangement for the incarceration group relative to the comparison group. The outer solid lines are the upper and lower bounds of the 95% confidence interval. The reference (comparison) group is CLS cases not resulting in incarceration. The regression models include inverse propensity of treatment weights and control for demographics, criminal charge characteristics, county, year, and other variables detailed in the measures section. Standard errors are clustered by child and mother.

an exploratory analysis of the role of fathers. We subset the sample into two groups—children who had lived with their father at some point between birth and month –6 and children who had not—and re-estimated our main models. Several differences emerged, some of which are counterintuitive. First, children with a history of father co-residence experienced

larger and more sustained increases in foster care following maternal incarceration than children without father co-residence history. This may suggest that co-resident fathers were involved in the criminal activity that led to mothers' incarceration, thus raising questions about their suitability to provide care. Second, maternal incarceration was associated

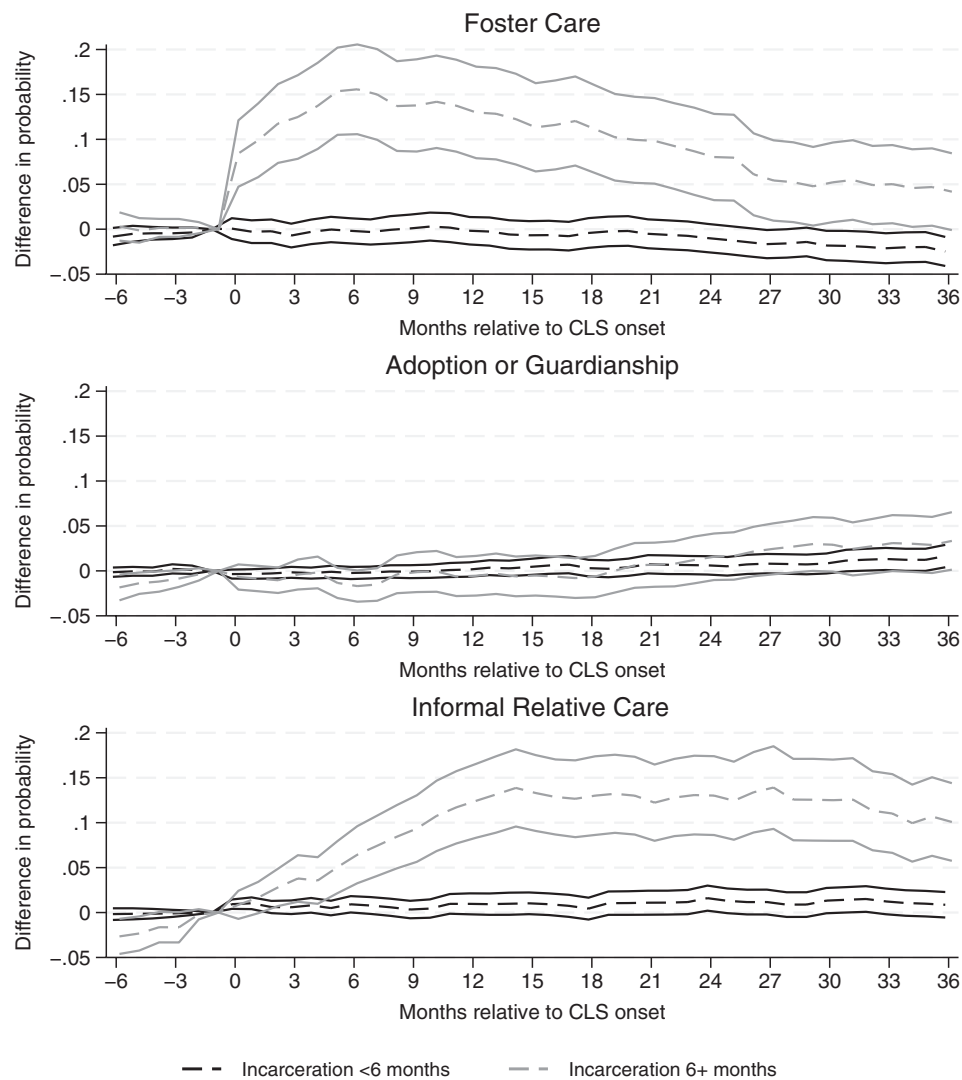


FIGURE 4 | Changes in care arrangements by mothers' incarceration spell duration. CLS = criminal legal system. Month 0 represents the month of mothers' first CLS case onset. Dashed lines represent point estimates from multivariable linear regression, and outer solid lines are the upper and lower bounds of the 95% confidence interval. The reference (comparison) group is CLS cases not resulting in incarceration. The regression models include inverse propensity of treatment weights and control for demographics, criminal charge characteristics, county, year, and other variables detailed in the measures section. Standard errors are clustered by child and mother.

with an increase in adoption/guardianship only among children without father co-residence history. Lastly, among children with father co-residence history, maternal incarceration was not associated with an increase in informal relative care until 10 months post-CLS onset. Yet, for children without father co-residence history, maternal incarceration predicted an immediate and sustained increase in informal relative care. This may suggest that co-resident fathers initially took on the role of primary caregiver when mothers were incarcerated but required support from relatives in the longer term. A final set of models considered children's ever-to-date exposure to alternative care arrangements. Results were broadly similar to our point in time estimates, suggesting that—for many children—the onset of maternal CLS was an inflection point in their life trajectories, rather than part of a cycle of changes in care arrangements. All analyses in this section are available on request due to space restrictions for online supplements.

4 | Discussion

Given that maternal CLS contact is unevenly distributed across economic, racial, ethnic, and geographic groups, incarceration may contribute to growing stratification and inequality in family life (Western et al. 2008; Wildeman 2009). This study, grounded in family systems theory that highlights the interdependency of family members, examined children's care arrangements following maternal incarceration, adjudicating whether these shifts in care arrangements are temporary (consistent with a crisis model) or long-term (consistent with a chronic strain or cumulative disadvantage model). We build on extant research by examining children's living arrangements longitudinally and comparing children with incarcerated mothers to children whose mothers have CLS involvement without incarceration, aspects of our research design that allow us to rigorously account for selection into maternal incarceration. We highlight three key findings.

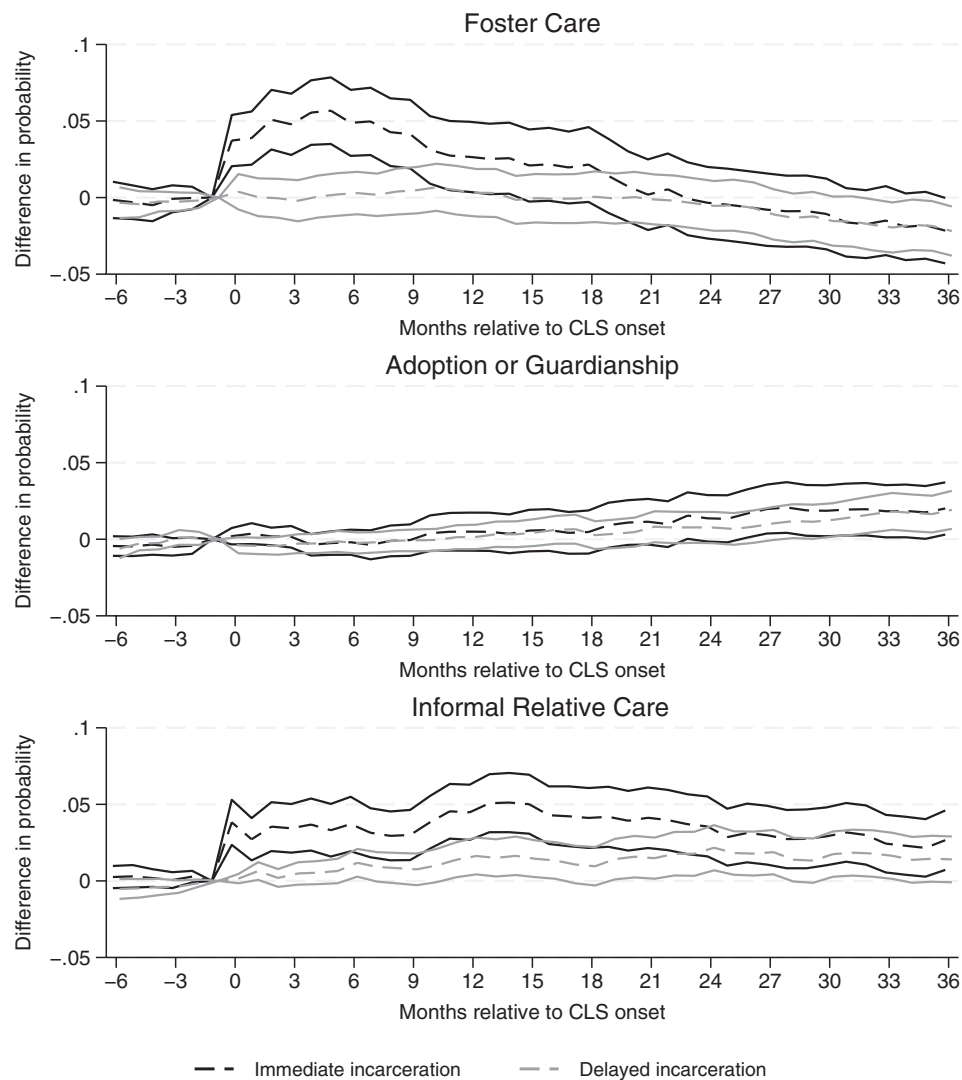


FIGURE 5 | Changes in care arrangements by the immediateness of the mother's incarceration. CLS = criminal legal system. Month 0 represents the month of mothers' first CLS case onset. Dashed lines represent point estimates from multivariable linear regression, and outer solid lines are the upper and lower bounds of the 95% confidence interval. The reference (comparison) group is CLS cases not resulting in incarceration. The regression models include inverse propensity of treatment weights and control for demographics, criminal charge characteristics, county, year, and other variables detailed in the measures section. Standard errors are clustered by child and mother.

First, consistent with selection bias, a meaningful share of children experienced alternative care arrangements before the onset of maternal CLS involvement, especially children whose mothers would become incarcerated. This has both theoretical and methodological implications. Theoretically, our findings highlight the need for parallel attention to both the consequences of parents' CLS involvement and the consequences of criminal activity and associated conditions that surround CLS involvement and incarceration. Many mothers involved with CLS, regardless of incarceration, had criminal charges involving drug- or alcohol-related offenses, domestic violence, or offenses committed against children, or had a diagnosed substance use disorder. Parental substance abuse and exposure to family violence increase children's risk of maltreatment, mortality, and an array of adverse health outcomes (Berg et al. 2022; Dong et al. 2004; Evans et al. 2008; Walsh et al. 2003). Consistent with research on ACEs, maternal incarceration appears embedded in a broader constellation

of cumulative family disadvantage and instability, meaning that its consequences are likely to depend on the overlapping ecological risks around it (Copp and Johnson 2025; Turney and Haskins 2019). In this context, the child safety and wellbeing implications of remaining in parental care versus entering an alternative care arrangement are ambiguous. Methodologically, our models show that comparing incarcerated individuals to their CLS-involved but not incarcerated counterparts does not address selection, even when controlling for charge types or levels, demographic characteristics, and other individual attributes. Studies without precise identification of timing or without observation of pre-incarceration living arrangements are prone to overstate the contribution of incarceration to family disruption.

In addition, our analysis demonstrates how the likelihood of living apart from biological parents in the lead-up to incarceration increases disproportionately for mothers with recurrent

CLS involvement. That is, the parallel trends assumption held for mothers' first CLS cases but was violated for all cases. This may suggest limited impacts of recurrent maternal CLS involvement on children, as those mothers likely to experience recurrent incarceration disproportionately lose or relinquish custody earlier in their criminal careers. The selection findings are not a mere inconvenience on the path to causal inference; rather, they provide suggestive evidence of deterioration in caregiving capacity in the lead-up to maternal CLS involvement, particularly for mothers who will recidivate. Likewise, the selection findings highlight divergent paths, in which some children experience their mothers' CLS involvement from a physical distance (already in an alternative care arrangement) and others experience two major family shocks concurrently—the arrest or incarceration of their mother and their placement into alternative care.

Second, although the incidence of alternative care arrangements increased in both the maternal incarceration and comparison group following CLS onset, the increases were larger in the maternal incarceration group. This finding, which provides evidence that maternal incarceration is one factor influencing alternative care, aligns with a family systems perspective that highlights how the acute stressor of maternal incarceration disrupts the broader family system. Again, however, this study cannot speak to whether alternative care is a desirable outcome for these children or not. Unnecessary separation from caregivers can be traumatizing to children and even separations that are necessary for a child's safety are likely to impose distress, at least temporarily. Although recent research finds that foster care improves safety and wellbeing for maltreated children (Baron and Gross 2024; Font et al. 2023; Gross and Baron 2022; Schneiderman et al. 2021), associations are quite heterogeneous, depending on factors such as child age, type of placement, and stability (Font and Kennedy 2022). Limited research on informal care arrangements indicates that these arrangements often receive little screening and oversight and caregivers may receive limited economic or parenting support (Annie E. Casey Foundation 2013; Gupta-Kagan 2020). Additional research on the comparative effects of formal and informal care arrangements during and after maternal incarceration is needed. Given that many children with incarcerated mothers reside with relatives outside of the formal foster care system, our findings highlight the need to expand support for kin caregivers—such as financial assistance, caregiving guidance, access to legal services to secure temporary or permanent custody when appropriate—so that those relatives who step in can provide stable and well-resourced care for children.

Third, there were some notable differences by race/ethnicity. Black and Hispanic children were more likely than White children to live in adoption/guardianship or informal relative care in the lead-up to maternal CLS onset. In addition, maternal incarceration increased informal relative care but did not influence foster care entry or adoption/guardianship for Black children. Both of these findings are consistent with prior research indicating racial and ethnic differences in reliance on kinship networks. One unexpected finding was that maternal incarceration more strongly influenced foster care for Hispanic children than for White or Black children. It is possible that Hispanic children—despite being largely U.S. citizens themselves—face barriers to relative care (either informal or via guardianship) due

to relatives' legal residency status. Approximately one-fourth of Hispanic children have an undocumented parent (Clarke et al. 2017) and more have undocumented grandparents or other relatives (Passel 2009). Assuming temporary custody—even in an informal arrangement—could require relatives to interact with various government systems and present identification; as such, relatives without legal residency could risk detention or deportation. However, further research is needed to ascertain whether and how immigration status concerns affect children's care arrangements.

Lastly, consistent with a chronic strain model, wherein family stress and disruption endure over time (Pearlin 1989), exposure to maternal incarceration resulted in potentially permanent changes in care arrangements. Specifically, maternal incarceration increases the probability of child adoption or guardianship; arrangements that are intended to be permanent. The increase in adoption and guardianship emerges approximately 18 months after the onset of the first maternal CLS case, consistent with the federal time frame in which children in foster care are supposed to be placed in permanent alternative care arrangements if they cannot be safely reunified with their family of origin (Adoption and Safe Families Act 1997). Consistent with the federal emphasis on permanency for children who enter foster care, the positive relationship between maternal incarceration and foster care placement was temporary: by the end of the observation period, children exposed to maternal incarceration were no more likely to be in foster care than children whose mothers did not receive pretrial detention or an incarceration sentence. Rather, most children who were not in biological parent care were in informal relative care, adoption, or guardianship.

There has long been a tension in child and family policy between prioritizing children's needs, especially early in life, for safe and stable caregivers and the desire to preserve and unify families wherever possible. The Adoption and Safe Families Act (1997) has been criticized for potentially increasing permanent separations when mothers face lengthy incarcerations (Roberts 2012). This criticism is largely centered on the requirement that states pursue termination of parental rights after children have been in foster care for 15 of the last 22 months. However, the prolonged increase in informal care arrangements suggests that, even when children are not in foster care and thus subject to no federal timelines, reunification is not at all certain. Incarcerated mothers face numerous challenges to reunification with their child after release, regardless of whether the child welfare system and family courts are involved. While incarcerated, limited services are available and mothers may be unable to demonstrate progress in resolving child safety concerns in the absence of formal service completion. In addition, geographic and logistical barriers substantially limit parent-child visitation (Poehlmann 2005), which may weaken or inhibit repair of the parent-child bond and reduce the likelihood of mothers reasserting their custodial rights upon release. Even when mothers are highly motivated to regain custody, their criminal record may diminish employment opportunities and restrict access to rental housing (Pager 2003). Absent economic support from family or community, mothers may be unable to demonstrate that they can provide a stable environment for their child. Together with the high prevalence of informal relative care, these barriers

suggest that children who remain outside of formal foster care should not fall completely out of the supervision of child and family serving systems. Policy efforts should prioritize ongoing accompaniment of these families through periodic assessments of children's wellbeing, supports for kin caregivers, and structured opportunities to maintain or rebuild contact with mothers when appropriate.

5 | Limitations

We note two key limitations of this analysis. First, data are limited to Wisconsin. Wisconsin is similar to the United States in most foster care attributes, including age at entry, time in care, and exits to adoption or guardianship (U.S. Department of Health and Human Services 2022, 2024). However, specific features of Wisconsin that may threaten generalizability include large Black-White disparities in incarceration, the concentration of Black and Hispanic families in a small number of urban counties, and a longstanding financial support program for informal kinship care. Second, our estimates of informal relative care is conservative (lower-bound). In addition, we may underestimate private adoptions and guardianships—those initiated without child welfare system involvement. Identification of informal changes in living arrangements may be lagged due to variation in when records are updated and very short-term informal changes may not be identified at all.

6 | Conclusions

Maternal CLS involvement, including maternal incarceration, affects a sizable share of the U.S. population, especially children from socially disadvantaged backgrounds. This study demonstrates that the onset of maternal CLS involvement is preceded and followed by a period of increased parent-child separation in the form of foster care, adoption, guardianship, and informal relative care. In many cases, children may enter long-term or permanent alternative care arrangements. Whether these care arrangements improve children's life prospects remains the subject of robust debate. Nevertheless, as downward trends in incarceration and arrests stalled or reversed in the post-COVID years (Kang-Brown 2022; Widra 2022), states face serious shortages of foster homes (U.S. Government Accountability Office 2018), adoptions have declined (U.S. Department of Health and Human Services 2021), and states face financial and logistical barriers to improving their use of kinship care (Fitzgerald 2023). Renewed attention to the care needs of children in vulnerable family situations is needed.

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Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

The data that support the findings of this study are available from Wisconsin Administrative Data Core. Restrictions apply to the availability of these data, which were used under license for this study. Data are available from <https://www.irp.wisc.edu/wadc/> with the permission of Wisconsin Administrative Data Core.

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Supporting Information

Additional supporting information can be found online in the Supporting Information section. **Appendix A1.** Full regression results for Figure 2. **Appendix Table B1.** Full regression results from Figure 3. **Appendix C1.** Full regression results for Figure 4. **Appendix Table C2.** Regression Results for Figure 5 (key coefficients only). **Figure D1.** Unadjusted trends and regression-adjusted estimates for children's foster care placement by race and ethnicity. **Figure D2.** Unadjusted trends and regression-adjusted estimates for children's adoption/guardianship by race and ethnicity. **Figure D3.** Unadjusted trends and regression-adjusted estimates for children's informal relative care placement by race and ethnicity.