Overview
This study is designed to examine multidisciplinary teams as a strategy to improve information gathering and safely increase referral to, and engagement with community-based agencies for moderate risk families referred to child welfare services. Specifically, the study is designed to assess whether front-end decision-making by multidisciplinary teams results in (1) more families referred to community-based agencies for services; (2) greater likelihood that families will engage in community-based services; (3) no greater likelihood of re-referral for maltreatment; and (4) more or different information available to staff to guide their initial contact with the family. The study included qualitative and quantitative methods to examine outcomes, and qualitative methods to study the processes associated with implementation.

Background
Decision-making about how to best serve children and families referred to the child welfare system is difficult under the best conditions. In most California counties, “hotline” staff accept child maltreatment referrals, then assess the information provided to them. If staff determine a referral warrants investigation, they decide, in concert with their supervisor, whether the referral requires an immediate or 10-day response from Emergency Response (ER) staff. If the case is not opened for services following the ER assessment, families are typically referred to community-based family resource centers (FRCs) for support services. In the county associated with this study, a new initiative was developed to gather information about maltreatment referrals and to make decisions about next steps. In contrast to the usual two-person approach to referral assessment, the new initiative examined 10-day referrals in-depth using a multidisciplinary team composed of public agency and FRC staff. Adapting the “Review, Evaluate, Direct” (RED) Team Consultation Framework developed by Sawyer & Lohrbach (2005), the team assessed family strengths, needs, and risks. With more shared information available, staff anticipated more families could be referred to FRCs for access to community-based services. The present study was designed to assess whether the team decision-making framework (the treatment condition) resulted in more families referred to community-based family resource centers for services than the traditional response (the control condition), and whether families in the treatment condition were more likely to engage in services than families served in the non-team decision making context.

Summary of findings
A large proportion of referred families (66%) had prior child maltreatment referrals and about one-fifth had a prior open case. Referrals that received a multidisciplinary team response were more than twice as likely to be assigned to a FRC for services. About half of all referrals handled by a multidisciplinary team were ultimately referred to FRCs in contrast to about 20% of referrals in the control condition. Referrals discussed by multidisciplinary teams were more likely to receive a joint response where the public child welfare professional met with the referred family together with a FRC staff member. Among families referred to FRCs, about 50% subsequently engaged in services, regardless of whether their referral was handled by a multidisciplinary team. Families with prior child welfare contact were no less likely to engage in FRC services. There were no differences
in child welfare case outcomes (i.e., substantiation, re-referral, case opening, family maintenance (FM), or family reunification (FR)).

**Research Questions**
The following includes the detailed research questions addressed in this study:

**Referral and Engagement with FRCs**
1. Are multidisciplinary teams associated with a change (increase or decrease) in the proportion of families referred to FRC services?
2. Are referrals handled with multidisciplinary teams more likely to receive a joint response?
3. Are multidisciplinary team referrals more likely to engage with a FRC provider?

**Family Outcomes**
4. Do multidisciplinary team referrals have different FRC dispositions, re-referral, or case outcomes following investigation?

**Staff Communication and Experiences**
5. Is more or different information available to staff to guide their initial contact with the family when a multidisciplinary team is used?
6. What is the nature of staff expectations and experiences with multidisciplinary teams?

**Methods**
The methods for this study are described in greater detail at the end of this Executive Summary. The following provides an overview, in brief.

**Design.** This study utilized a pseudo-randomized clinical trial comparing processes and outcomes for moderate risk families referred to the child welfare hotline who received a conventional Emergency Response (ER) response (control condition) vs. a multidisciplinary team discussion prior to the ER response (treatment condition).

**Sample.** The preliminary sample of 490 families is described in the table below.

<table>
<thead>
<tr>
<th>Characteristics of families N and (%)</th>
<th>Multidisciplinary team</th>
<th>Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Referrals randomized to two groups</td>
<td>189</td>
<td>474</td>
</tr>
<tr>
<td>Final sample after exclusions</td>
<td>159*</td>
<td>331†</td>
</tr>
<tr>
<td>Prior referral to FCS</td>
<td>110 (69%)</td>
<td>213 (64%)</td>
</tr>
<tr>
<td>Prior open case with FCS</td>
<td>29 (18%)</td>
<td>56 (17%)</td>
</tr>
<tr>
<td>Mean number of children in family</td>
<td>mean=1.89, sd=1.06</td>
<td>mean=1.85, sd=1.06</td>
</tr>
<tr>
<td>Age of the oldest “victim” child</td>
<td>mean=11.35, sd=4.55</td>
<td>mean=9.81, sd=5.21</td>
</tr>
<tr>
<td>Age of youngest “victim” child</td>
<td>mean=7.88, sd=4.84</td>
<td>mean=6.85, sd=4.97</td>
</tr>
<tr>
<td>Age of oldest “perpetrator” adult</td>
<td>mean=41.62, sd=11.00</td>
<td>mean=39.26, sd=10.51</td>
</tr>
<tr>
<td>Age of youngest “perpetrator” adult</td>
<td>mean=38.51, sd=9.67</td>
<td>mean=36.82, sd=10.29</td>
</tr>
<tr>
<td>Female perpetrator</td>
<td>122 (77%)</td>
<td>252 (77%)</td>
</tr>
</tbody>
</table>

* 7 were excluded from final sample because they were logged on Sunday, Monday, Friday, Saturday, or Thursday after 2:00 pm. An additional 5 families were excluded because they included children who had already randomized to the study on a previous referral. Finally, 18 families were excluded after randomization because they were mistakenly treated as control families by FRCs.

† 118 were excluded from final sample because they were logged on Tuesday, Wednesday, or Thursday before 2:00 pm. An additional 25 families were excluded because they included children who had already randomized to the study on a previous referral.
Mean allegations  |  mean=2.53, sd=1.76  |  mean=2.58, sd=2.23
Allegations for neglect  |  103 (65%)  |  208 (63%)

Chi-square analyses suggest the equivalence of the treatment and control groups on almost all variables. About two-thirds of the entire sample had a prior referral to child welfare (66%), 18% had a prior open case, and of those with a history of a case (n=86), 47% had been involved in foster care (FR). Regarding the referral that was the subject of the study, the groups were similar. The number of children subject to the referral did not differ significantly by condition (1.87). We examined the age of the oldest “victim” and the youngest “victim” on the referral. The age of the oldest “victim” differed significantly (treatment group age: 11.35; control group age: 9.81 ((t=-3.21, p=.001)), as did the age of the youngest “victim” (treatment group age: 7.88; control group age: 6.85 ((t=-2.17, p=.03). The age of the “oldest perpetrator” also differed by condition. The average age of the treatment group oldest perpetrator was 41.62 compared to the control group oldest perpetrator 39.26. (t=-2.26, p=.02). A male perpetrator was identified in 62% of referrals; a female perpetrator was identified on 76% of referrals. The mean number of allegations on each referral was 2.56; the majority were for general neglect (63%), followed by physical abuse (33%).

Measurement. Data were derived from three sources:

1. **Lead FRC agency data.** These data include all FRC referral information including FRC referral date, intake status (intake completed, declined, or no response), type of FRC service (case management or family assistance), FRC assignment, and whether a joint response meeting was conducted. FRC data were provided for all referrals received between 01/21/2018 and 3/31/2019.

2. **Secondary FRC agency data.** These data include all FRC service dates, duration of each service, and location where each service was rendered. Data were provided for all service dates between 01/21/2018 and 3/31/2019.

3. **Child welfare data.** These data, provided by the public agency, include information about the following events: randomization condition, prior referrals, allegations, investigations, and their dispositions, prior cases (FM or FR), cases that were open at the time of the study referral (FM or FR); study referral information such as: number, age, and gender of perpetrator(s), number, age, and gender of victim(s), number and type(s) of allegation(s); allegation outcome (substantiated, unfounded, inconclusive); and post-investigation information including: open case within 60 days of referral, FM, or FR services, and type of placement. Data were provided for all events occurring between 04/04/2000 and 07/08/2019. Data from 04/04/2000 – 1/20/2018 were used to establish history of child welfare involvement prior to program implementation.

Analysis

**Quantitative assessment of outcomes**
Quantitative analyses described in this Executive Summary include descriptive statistics, chi-square, t-tests, and regression analysis where appropriate.

**Qualitative assessment of outcomes**
To answer Question #5, the study included a qualitative analysis of 25 randomly selected referrals that were reviewed by the multidisciplinary team from the treatment condition. Using Dedoose qualitative software, we downloaded de-identified text from the Hotline Narrative and the Consultation Framework. Comparing the information included in each source, we examined whether new or different information was revealed in the Consultation Framework than what was available in the Hotline Narrative. Findings from this analysis were coded as “strong,” “medium,” or “weak” signals, either indicating new and important information obtained through the Consultation Framework, modest new information, or no new information.

**Qualitative assessment of processes**
To answer Question #6, telephone interviews were conducted with a sample of public child welfare agency staff and FRC staff prior to the implementation of the multidisciplinary team initiative, and approximately eight months following implementation. Interviews focused on staff expectations of the new model, and staff experiences.

**Results**

**Referral and Engagement with FRCs**

1. Are multidisciplinary teams associated with a change (increase or decrease) in the proportion of families referred to FRCs for services?

Referrals handled by multidisciplinary teams were more likely to be referred to FRCs within 60 days compared to control group referrals. In total, 147 families were referred to the FRCs. Of the 159 referrals to multidisciplinary teams, 80 (50%) were referred to FRCs. In contrast, of the 331 control group referrals, 67 (20%) were referred to FRCs. The difference was statistically significant in chi square testing ($X^2(1)=46.25$, $p \leq 0.0001$). Logistic regression models confirmed this finding even when controlling for prior child welfare involvement. (Details on analyses can be made available upon request.)

2. Are referrals handled with multidisciplinary teams more likely to receive joint contact with families?

A *joint response* occurs for families assessed by a multidisciplinary team when a child welfare and FRC staff member approach the family simultaneously; a *transitional meeting* occurs for control families following an ER investigation and after determining that a case will not be opened; the ER and FRC staff meet for a warm hand-off with the family. Of the 147 families that were referred to the FRCs, 79 (53%) received a joint response or transitional meeting. Chi square tests showed that significantly more multidisciplinary team referrals received joint response meetings (63%) than control group referrals received a transitional meeting (45%), ($X^2(1)=4.63$, $p \leq 0.05$). Logistic regression models confirmed this finding even when controlling for prior child welfare involvement.

3. Are multidisciplinary team referrals more likely to engage with a FRC provider?

FRC providers designate “family engagement” as completing the intake process. Of the 147 families that were referred to the FRCs within 60 days, 67 families (46%) completed intake, 42 (32%) did not respond to outreach attempts, and 23 (17%) declined services. There was no statistically significant difference between the treatment (39%, n=31) and control group referrals (54%, n=36). There was no difference in the likelihood of engagement between families who had prior child welfare contact and families who did not.

Families in the treatment condition who experienced a joint response were more likely to engage in services compared to families in the control condition who received a transitional meeting.

Families in the treatment condition were significantly more likely to complete intake (versus no response to outreach) if they had a joint response meeting (RRR=11.89, $p \leq 0.001$); this was not true of transitional meetings in the control condition however (RRR=2.71, $p=0.10$).

Families received about 7 visits (mean=7.2) from FRC service providers following referral. This includes the number of attempts to engage the family as well as the number of service visits following intake. There were no significant differences between treatment and control referrals.

**Family Outcomes**
4. Do multidisciplinary team referrals have different child welfare dispositions, re-referrals, or case outcomes following investigation?

Following the investigation, there were no differences in the proportion of referrals that received a substantiated, unfounded, or inconclusive designation by ER staff. The total number of substantiated allegations also did not differ by condition (mean=0.25, sd=0.04).

Almost one-quarter (24%) of families were re-referred for maltreatment allegations between 1-6 months following the date of the study referral. We counted a new referral for a family as a re-referral if the new referral was made at least 31 days, or one month, following the original referral. We chose a 6-month follow-up window based on federal child welfare measures. There were no significant differences by condition with respect to the number of families that were re-referred. There were also no differences in outcomes for treatment or control group referrals including the likelihood of an in-home or out-of-home case opening.

Staff Communication and Experiences

5. Is more or different information available to staff to guide their initial contact with the family?

Based on our qualitative analysis, we found that approximately half of the time (56%), a modest amount of new information was revealed in the multidisciplinary team meeting with the use of the Consultation Framework. This information went beyond the information provided in the Hotline Narrative (i.e., a “medium” signal). Most of the time, the additional information included in the Consultation Framework referred to questions about the family’s cultural background and its potential relevance to an engagement strategy or to enlisting informal supports. Other information included in the Consultation Framework that was missing from the Hotline Narrative was the identification of potential family strengths.

In one-fifth of the referrals, new information was surfaced in the context of the multidisciplinary team, suggesting safety concerns that had not been sufficiently revealed in the Hotline Narrative. In most of these cases with a “strong” signal, the 10-day referral was elevated to an Immediate Response. In the remaining 28% of referrals, no new information was discerned in the Consultation Framework.

6. What is the nature of expectations and experiences with multidisciplinary teams?

Prior to the implementation of the new initiative, child welfare staff were relatively well informed about the general idea of multidisciplinary teams. Although there were concerns expressed about how much time team meetings might require, most were optimistic about implementation and generally held the view that the new approach might help parents engage more readily in services.

Staff from the FRCs had very positive expectations about the teams, with hopes that they would better understand the child welfare agency’s processes and the ultimate decisions made about families. Some staff were optimistic that their opinions would be listened to and honored in the team meetings. Staff were also hopeful that the new approach would reveal more information about the family, their circumstances, and their needs.

Following implementation of the initiative, non-court FM staff offered positive views of the multidisciplinary team meetings. They described the benefits of group decision-making and the value of including community agency providers. Staff were especially appreciative of hotline staff who were described as well prepared, thorough, and articulate about conveying a wide range of information relating to each referral. ER staff offered a different perspective. Although some indicated that the group process might be helpful in organizing an understanding of borderline cases, they did not feel that their presence at the team meetings was necessary to the conversation. These staff indicated that their presence only served to repeat information that was already contained in the hotline narrative, and that they could not form an opinion about the family until meeting them. All ER staff
conveyed their concerns about the amount of time team meetings required. Some also raised concerns that the nature of the conversations veered too much toward speculation, rather than fact.

All of the FRC staff were very enthusiastic about the use of multidisciplinary teams. In particular, they noted that the process made FRC staff feel much more informed about the overall child welfare process, and about decisions made regarding individual families. Moreover, each FRC staff member spoke about “voice” – that the team meetings now allowed community-based agency staff to have a say in the service response to families. All FRC staff also spoke about the new distribution of power made possible through the team meetings.

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**Research Methods in Detail**

**Outcome study**

This study was conducted in collaboration with a public child welfare agency in California and local community-based agencies. It examines child welfare referrals handled by a multidisciplinary team (treatment condition) compared to referrals handled via the current treatment-as-usual screening and investigation process (control condition).

The study design mimicked a randomized controlled-clinical trial (referred to as “pseudo-randomization”). Participants included all families who were screened in for investigation at the hotline following a child maltreatment referral and whose case was assigned to a “10-day response” within the study period (January 21, 2018 through December 31, 2018). All hotline referrals that were logged on Tuesdays and Wednesdays (and Thursdays until 2:00 pm) and that were deemed a 10-day response were handled by multidisciplinary teams (treatment condition), and all 10-day referrals that were logged on the remaining 4.5 days of the week were handled with a conventional ER response (control condition). This design followed an analysis of one prior year of data (2017) showing no difference in the characteristics of referrals based upon the day of the week.

**Experimental Condition.** The treatment condition used a team decision-making process wherein a group of approximately 5-10 individuals with multidisciplinary expertise determined the best course of action for non-emergency hotline referrals. Team members typically included staff from child welfare, FRC staff, and specialty providers from the fields of domestic violence, mental health, substance abuse treatment, and/or nursing. The multidisciplinary teams used a standardized Consultation Framework that identified key facts, strengths, and risks for a referral. The composition of staff members at these teams and the consultation framework used to guide decision-making followed the RED Team model (Sawyer & Lohrbach, 2005). All members of the team were engaged in completing the Consultation Framework so that they could jointly determine next steps for the family. It should be noted that RED Teams are typically used, in part, as a decision-making tool to aid case assignment (usually to traditional or Differential Response services). This agency did not use the team model for these purposes and we, therefore, do not refer to the initiative as an example of “RED Teams” as envisioned by the model’s authors.

Maltreatment referrals that were assigned a 10-day response were randomized to the treatment or control condition. During the multidisciplinary team meeting, group members reviewed the information available regarding each referral. Collaboratively, they determined (1) if the case should be elevated to an Immediate Response; (2) if not, what the family was likely to need in terms of resources or supports; (3) whether the family was potentially appropriate for a community based service response simultaneous to a traditional ER investigation. Families that were identified as potentially appropriate for community-based services were referred for a joint response. A joint response refers to a child welfare worker and a FRC staff member going together to a family home. The child welfare worker would conduct the investigation and make a safety determination. In the event that a case need not be opened, the child welfare and FRC staff would attempt to engage the family in FRC services. If a joint response were not possible, FRC staff had 10 days to make contact with the family.
Control Condition. Families randomized to the control condition were handled via a traditional, treatment-as-usual emergency (ER) response. Traditional response involved the standard child welfare investigation wherein a child welfare worker visits the family’s home and makes a safety determination. At any time during or at the completion of an ER investigation, ER staff may make a referral to a FRC for follow-up services if a child welfare case is not opened.

Upon receiving a referral, FRC staff reached out to child welfare staff to arrange for a transitional meeting—a meeting that would allow the child welfare professional to offer a warm hand-off to the FRC staff member. If no transitional meeting were possible, FRC staff were asked to make contact with families within 10 days of receiving the referral.

The information provided in this Executive Summary includes child welfare service information based on the entire sample of families enrolled in the study (January – December, 2018). It also includes information about FRC services from January 2018 through March 2019, allowing us to examine FRC service use over a three-month follow-up period for all families, and it includes child welfare case outcome and re-referral data through July 30, 2019.

Process study

Berkeley staff were provided a list of child welfare staff who work in Emergency Response (ER) and non-court Family Maintenance (FM). They were also provided a list of FRC staff relevant to the new initiative. A random sample of 17 staff from the child welfare agency was selected and recruited to the study; five participated. Fifteen FRC staff were contacted and asked to participate; six consented to do so.

Following approximately 8 months of multidisciplinary team implementation, research staff re-contacted the original study sample in addition to staff who regularly participated in the multidisciplinary teams (but who were not interviewed for the pretest), and they contacted five hotline staff to request their participation in the posttest. The original five ER staff, three FRC staff, two additional ER staff and four non-court FM staff participated in post-test interviews. No hotline staff responded to requests for participation.