



Substance Use, the Opioid Epidemic, and Child Welfare Caseloads: Methodological Details from a Mixed Methods Study

By Annette Waters, Ph.D., Melinda Baldwin, Ph.D., Gilbert Crouse, Ph.D., Robin Ghertner, and Laura Radel

INTRODUCTION

This brief describes the research methods used to produce the findings in *Substance Use, the Opioid Epidemic, and Child Welfare Caseloads: A Mixed Methods Study*. It is a part of a series of briefs that discuss different aspects and issues surrounding the relationship between substance use disorders and the child welfare system.¹

Why a mixed methods study?

We used a mixed methods research design consisting of statistical modeling, geospatial analysis, and qualitative interviewing and analysis in this study. The relationship between child welfare and substance use is nuanced and complex. A mixed methods design, combining elements of qualitative and quantitative data collection and analysis, is necessary to achieve the breadth and depth necessary to understand and corroborate our findings (Creswell, & Plano Clark, 2007; Johnson, Onwuegbuzie & Turner, 2007). We found that the information that we obtained through our interviews with people in the field was valuable in providing the context and texture needed to understand and triangulate the statistical analysis (Miles, Huberman, & Saldana, 2014; Teddlie & Tashakkori, 2013).

In our study, statistical modeling quantified the strength of the relationship between indicators of substance use prevalence and child welfare caseloads. However, we could not discern through the statistical models alone the specific ways that parental substance use may lead to the rise in foster care caseloads experienced in many communities. By gathering perspectives from the field through the qualitative research, we were able to better understand how substance use impacts children, their families, child welfare caseworkers, and other members of the community. Although specific counties experienced similar increases in the percentages of children and youth in foster care, the systems' response to this problem varied across the country.

OBJECTIVES

The research sought to answer six broad questions:

What is the relationship between substance use prevalence and child welfare caseloads, including reports of child maltreatment, substantiated reports of child maltreatment, and foster care entries?

¹ Briefs can be found at <https://aspe.hhs.gov/child-welfare-and-substance-use>.

What are the mechanisms by which parental substance use, including opioid misuse, affects child welfare caseloads and outcomes?

1. In what ways, if at all, does opioid misuse impact child welfare differently than other types of substance misuse do?
2. What challenges does the child welfare system face in working with families affected by substance use disorder?
3. What is the role of community-level factors, and how do they contribute to the relationship between substance use and child welfare caseloads?
4. What is the role of substance use treatment in families involved in the child welfare system?

Using statistical modeling and geospatial analysis, we addressed the first research question in the quantitative portion of our study, using national child welfare data and data from other nationally representative surveys. We addressed the remaining five research questions in our qualitative analysis through semistructured interviews with professionals working in the field.

METHODOLOGY

Quantitative Methods

Data Child Welfare Data

Nationwide child welfare data were derived from two federally sponsored data sets. The National Child Abuse and Neglect Data System (NCANDS) annually collects case-level data on all children who received a response from a child protective services agency in either an investigative or alternative response format.² It is a voluntary reporting system. Data are collected from all 50 states, the District of Columbia, and Puerto Rico. Collected case-level data include demographic characteristics of screened-in reports of child maltreatment, the children involved, their caregivers, and the perpetrators of the abuse. NCANDS also collects information about the type of maltreatment, dispositions of those reports, risk factors of the child and of the caregivers, services that are provided to the family, and identified perpetrators.³

The Adoption and Foster Care Analysis and Reporting System (AFCARS) collects case-level data from state and tribal title IV-E agencies in all 50 states, Puerto Rico, and the District of Columbia on all children in foster care and those who have been adopted with title IV-E agency involvement. It is a

² Alternative response is most frequently used in instances where the child is determined to be at low or moderate risk of maltreatment. The primary purpose of the alternative response is to focus the efforts of the child welfare agency on the service needs of the family. See <https://www.acf.hhs.gov/sites/default/files/cb/cm2016.pdf>.

³ Details on NCANDS can be found at <https://www.acf.hhs.gov/cb/research-data-technology/reporting-systems/ncands>.

mandatory reporting system, and data are collected semiannually by the Children’s Bureau.⁴ Counties with fewer than 10 entries into foster care during any year are excluded.

We calculated three measures of child welfare caseloads that reflect three decision points in the child welfare continuum: the number of referrals alleging maltreatment to title IV-E child protective services agency in the state, the number of children who received either a finding of substantiation through an investigation or a referral to alternative response designated in NCANDS as a disposition, and the number of children who were placed into foster care.

The measures used in this study are rates. The first measure is the total number of reports of maltreatment per 100,000 children aged 0 to 17 in a county. The second measure is the total number of substantiated reports for children of any age, per 100,000 children. In addition to substantiated reports, it also includes reports not substantiated but referred for alternative response, an approach taken in many states to provide services in cases that are not deemed serious enough for a full investigation. The third measure is the number of children entering foster care per 100,000 children.

Substance Use Data

We are aware of no direct measures of substance use prevalence that provide geographic and temporal granularity. Nationally-representative surveys, such as the National Survey of Drug Use and Health, can provide national estimates, but yearly estimates within states are not possible. To proxy for substance use we use two measures derived from administrative records: drug overdose death rates and drug-related hospitalizations. Neither source directly measures substance use, however we believe they are the best available measures to capture relative differences in substance use, to the extent that greater prevalence of substance use corresponds with greater prevalence of fatal overdoses and drug-related hospitalizations. Using both measures helps to triangulate substance use prevalence and how it may relate to child welfare caseloads.

Our drug overdose death rates are age adjusted per 100,000 persons, drawn from small-area estimates produced by the Centers for Disease Control and Prevention (Rossen, Bastian, Khan, & Chong, 2017).

⁵ Data are available for all counties from 2011 through 2016, and through the estimation process producing the data no suppression was necessary. The rates include deaths from any substance, excluding alcohol and tobacco. Drug-related hospitalizations include unduplicated hospital stays and emergency department visits related to any type of substance use, excluding alcohol and tobacco, per 100,000 persons. Data are derived from the State Inpatient Databases (SID) and State Emergency Department Databases (SEDD) within the Healthcare Cost and Utilization Project (HCUP). States voluntarily report patient-level hospital stay data to HCUP, following standardized International Classification of Diseases (ICD) codes. Relevant ICD-9 codes, following established practice, were identified based on specific substances. Patient records were aggregated to the county-level based on county of patient residence, and were available for 99 percent of counties. In addition, we also have hospitalizations related to specific substance groups: opioids (including prescription opioids, illicit or synthetic opioids, and heroin), stimulants (including cocaine and methamphetamine, among other substances), and hallucinogens. To provide a basis for comparison, we also model hospitalizations related to alcohol.

⁴ Details on AFCARS can be found at <https://www.acf.hhs.gov/cb/resource/about-afcars>.

⁵ See <https://www.cdc.gov/nchs/data-visualization/drug-poisoning-mortality/>.

Data for retail prescription opioid sales come from the Drug Enforcement Administration's Automation of Reports and Consolidated Orders System (ARCOS), for all counties in the United States. ARCOS reports contain information on the inventories, acquisitions, and dispositions of certain controlled pharmaceuticals. Opioids that are schedules I, II, and III controlled substances are reported into ARCOS. We selected commonly prescribed and misused opioids, and which have been consistently reported to ARCOS over the time period of study. These include buprenorphine, dextropropoxyphene, dihydrocodeine, fentanyl, hydrocodone, hydromorphone, levorphanol, meperidine, methadone, morphine, oxycodone, oxymorphone, and tapentadol. Though buprenorphine and methadone are commonly used to treat OUD, ARCOS does not identify specific formulations nor purpose of prescription. Excluding them does not affect the results. ARCOS reports the weight of sales of each drug, and we converted those weights to morphine equivalents using conversion factors provided by FDA. The DEA publishes ARCOS data for three-digit zip codes (e.g. 209 would include zip codes 20902 and 20906). To convert to counties, the three digit zip codes were first converted to five-digit zip codes by distributing the share of opioid sales across the appropriate zip codes based on population proportions.

Sample

We made several adjustments to the sample. When measuring changes in caseload rates, small numeric changes for counties with low caseloads can appear to be relatively large. Therefore, we restricted all modeling to county-year observations with at least 10 cases, which removed 3,264 county-year observations, or 17 percent of the total. Bivariate analysis showed that the removed counties tended to have a smaller population and be rural (as expected), and have a slightly older population, though did not differ statistically on other demographic or socioeconomic variables.

In addition, models using hospital stays restricted the sample to counties that had at least one substance-related hospital stay. For the years with hospital data (2011 through 2014), 6 percent of all county-year observations had no substance-related stays. While it may be that these counties differ in substantive ways from counties that had at least one stay, it is likely that there are systematic differences in how HCUP data are reported across counties. Statistical models of the number of substance-related stays in counties predicted these counties would have had higher rates of stays, which suggests there may be measurement error in these counties not found in other counties. Our models may be biased to the extent that the actual hospitalization rates in these counties are correlated with child welfare caseloads, which is not observable. Analysis looking at the differences between these observations and those with any drug-related hospitalization shows they are much more likely to be rural, with less than one-tenth the average population as those with such hospitalizations. After accounting for demographic and socioeconomic characteristics, however, there was no statistical difference in their foster care entry rates.

After including the various control variables, the total sample size for models using overdose death rates ranged from 12,687 to 12,693. The total sample size for models using drug-related hospitalizations ranged from 8,286 to 8,290.

Statistical Analysis

Separate models were run for each measure of substance use to avoid multicollinearity. The AFCARS and NCANDS measures exhibit substantial positive skew and their mean and variance differs substantially. As a result of these characteristics, negative binomial regression models were used, a modeling family appropriate for variables measuring counts that exhibit positive skew and are non-negative. Overdispersion of the dependent variables indicates a negative binomial model is more appropriate than a Poisson model. Models include an offset, permitting the interpretation of the coefficients as incidence rate ratios. The offset for most models is the number of children ages 0 to 17, and the coefficients can be interpreted as the predicted proportional change in caseloads per children for a given change in the independent variable. Models estimating the ratio of foster care entries to reports use foster care entries as the outcome variable, and the number of total reports as the offset, leading to the interpretation of the coefficients as the rate of removal for all reports.

Our model includes state-year fixed effects, which account for unique state characteristics, such as legislation, policies, and institutional and cultural factors, as well as year shocks unique to each state. The latter could include enactment of new legislation, such as restrictions on opioid prescribing practices or changed definitions of child maltreatment. The models reflect pooled county variation within a state-year. We include a number of county-specific control variables that account for a number of confounding factors related to demographics, socioeconomics, and child welfare practice. We do not include county fixed effects, as we are identifying the extent to which substance use indicators explain cross-county variation as much as within-county variation.

We use cluster-robust standard errors to account for the clustered nature of our data. With 30 coefficients tested across the various measures of substance use and child welfare caseloads, there is the risk of falsely identifying a significant result due to multiple testing. To adjust for this risk, we use the false discovery rate (FDR), as defined by Benjamini and Hochberg (1995), where 0.05 set as the FDR threshold.

Control variables include median income (adjusted for inflation), from the US Census Bureau's Small Area Income and Poverty Estimates, uninsured rates from the Census Small Area Health Insurance Estimates, and race-ethnicity. We account for the role of statewide prescription drug monitoring programs (PDMP) as a confounder, as the operation of a PDMP may both impact the availability of prescription opioids and indicate a change in the policy environment around how substance use and opioid misuse is viewed (Reifler et al., 2012; Simeone & Holland, 2006). We include two indicators for whether the PDMP has mandatory or voluntary prescriber access, as well as indicators for whether the state has instituted legislation restricting pill mills (Mallatt, 2017). Annual data on population size, race, and age are drawn from the American Community Survey, from the US Census Bureau. We include Urban Influence Codes to account for urbanicity, produced by the USDA's Economic Research Service.

Other control variables include reciprocity rates of Medicare disability benefits, as individuals receiving Medicare disability benefits have high rates of opioid prescriptions (Morden et al., 2014). We include workplace injury rates from OSHA, as individuals suffering a workplace injury have a high likelihood of being prescribed opioids (Bernacki, Yuspeh, Lavin, & Tao, 2012). To account for county-level child welfare practices, we include the percentage of all cases diverted to alternative or differential response, an approach intended to respond to maltreatment in a less adversarial manner than a traditional investigation. In addition we include the percentage of substantiated reports of

abuse/neglect that were removed to foster care in 2010. We find that there is on average about a one-to-one relationship between the percentage removed in 2010 and later years, confirming the relative stability of practices. This holds even when accounting for changing demographic and economic conditions in counties. Finally, we include annual Title IV-E expenditures (federal and state), from administrative reports from the federal Administration for Children and Families.

Limitations of Quantitative Research

The use of AFCARS and NCANDS data in this kind of analysis has limitations. First, data are not available for all counties. For example, in 2015, approximately 7 percent of all counties (233) had no AFCARS data reported, and nearly 1 percent of counties (27) had no NCANDS data reported. In addition, child protective services for counties with low populations may be managed by neighboring counties, and AFCARS and NCANDS numbers may be reported accordingly.

Second, we did not have objective measures of parental substance use in our quantitative data. The measures used in the statistical modeling—drug overdose deaths and drug-related hospitalizations—are likely highly correlated with substance use but may not accurately measure it. The study was not designed to identify causal relationships. The statistical modeling identified a strong correlation between substance use indicators and the child welfare caseload rates, and the qualitative data provided explanations for how substance use in families may lead to children being placed in foster care. However, the research design did not uncover a causal pathway. Finally, when changes in the numbers of children in foster care are studied, small numeric changes in counties with low caseloads can appear to be relatively large. To account for this limitation, we restricted all modeling to county-year observations with at least 10 cases. For example, this restriction eliminated 891 counties, or 28 percent of all counties, from the analysis for 2015.

Results of our quantitative analysis are detailed in the brief [*The Relationship between Substance Use Indicators and Child Welfare Caseloads*](#).

Qualitative Methods

We used the qualitative analysis to provide the rich, contextual information that explained the relationships identified in the quantitative analysis, and additionally respond to the remaining research objectives (Marshall & Rossman, 2011; Padgett, 2008). Through semi-structured interviews, we explored the experiences and perspectives of community professionals whose work touched families in the child welfare system that are challenged with substance use and misuse. We emphasized the participants' meanings, views, and experiences. We began to understand the complex, multifaceted nature of the space between substance use and child welfare outcomes in which families and professionals find themselves when protecting children from maltreatment.

Site Selection Process

We first used purposive sampling to select qualitative research sites that would allow us to answer our research question most productively. We went through four stages to select sites for the study.

In the first step, we used a bivariate model to classify U.S. counties into four categories:

1. high foster care entry rate and high drug mortality rates by county
2. high foster care rate and low drug mortality rates by county
3. low foster care rate and low drug mortality rates by county
4. low foster care entry rate and drug mortality rates by county

The entry rates did not exclude counties with ten or less foster care entries. We classified counties as “High foster care” if their foster care rate was above the national median of 906 children in care per 100,000 children in the county. “Low foster care” counties were below this median. High/low drug mortality refers to counties whose rate is either above or below the median of 15.4 per 100 thousand. High/low foster care entry rates refers to counties whose entry rate is either above or below the median of 906 per 100 thousand children.

In the second step, we used a bivariate model to classify U.S. counties into four categories:

1. high foster care rate and per capita high retail opioid sales
2. high foster care rate and per capita low retail opioid sales
3. low foster care rate and per capita high retail opioid sales
4. low foster care rate and per capita low retail opioid sales

We classified counties as “high or low foster care” in the same manner as above. “High prescription opioid sales” counties had per capita opioid sales above the national median (76.4 kilograms of morphine equivalent per 100,000 people). “Low prescription opioid sales” counties were below this median. Counties that had a low foster care rate and low prescription opioid sales were eliminated as possible sites.

In addition to taking into consideration a county’s per capita retail opioid sales, drug mortality rates, and foster care entry rate, the site selection criteria included the following:

- *Geographic diversity.* We ensured that the sites covered different regions of the United States, as well as a mix of large urban, small urban, suburban, and rural counties.
- *Presence of substance use treatment facilities.* Because our objectives focused on how treatment relates to child welfare practice, we ensured that every site had at least one substance use treatment facility.
- *The county’s use of an alternative response system.* We selected both sites that actively used alternative response and those that did not.

- *State versus county administration of child welfare.* All states are responsible for compliance with federal and state requirements; however, state- and county-administered child welfare systems may differ in how programs and services are delivered.⁶ We included sites with both types of administration.
- *Native American populations.* Knowing the challenges that Native American populations face in terms of substance use and child welfare, we included a community with a large Native American population, the Cherokee Nation jurisdiction in Oklahoma.
- *The racial and ethnic makeup of counties.* We sought a mix of counties that were diverse in their racial and ethnic composition.

The first selection step identified 60 counties. In the second step, we held meetings with Administration for Children and Families (ACF) and Substance Abuse and Mental Health Services Administration (SAMHSA) regional program managers to ask for their input on the counties identified in the first selection step. We presented the quantitative data for the 60 counties and focused the conversations on the managers' knowledge of the child welfare and substance use treatment programs present in each of the states in their regions. Based on this discussion, and on the criteria above, we selected 21 counties within 11 states and one American Indian nation to be included in the study (see Figure 1).

⁶ See <https://www.childwelfare.gov/pubs/factsheets/services/>.

Figure 1: Map of the United States depicting counties that were selected as sites for qualitative research.

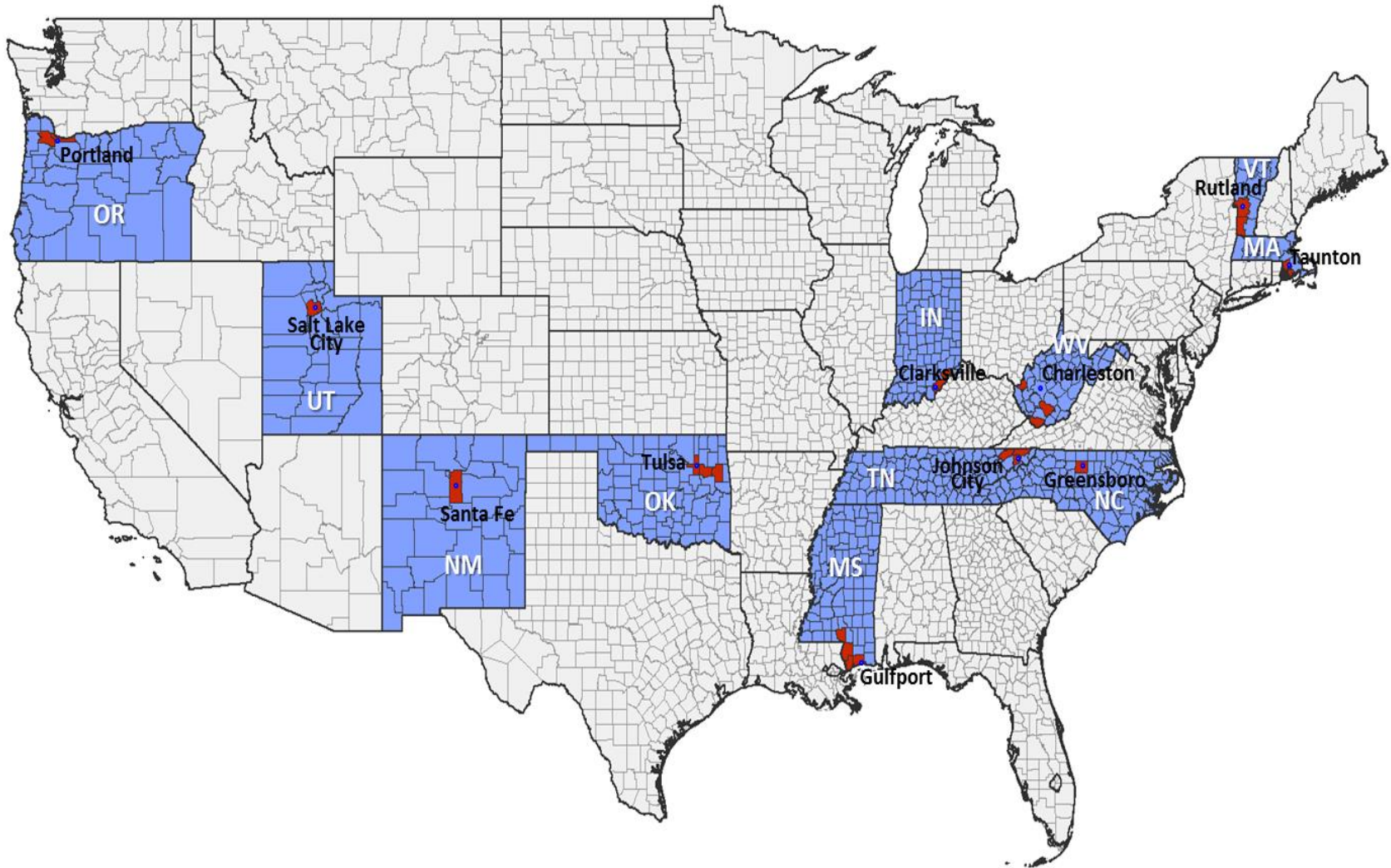


Figure 2. Interviews Conducted in 24 Locations in 11 States

Indiana

- Clark County
- Floyd County
- Jefferson County

Massachusetts

- Bristol County

Mississippi

- Hancock County
- Harrison County
- Marion County
- Pearl River County

New Mexico

- Santa Fe County

Oklahoma

- Cherokee Nation jurisdiction
- Tulsa County
- Wagoner County

North Carolina

- Guilford County

Tennessee

- Hawkins County
- Sullivan County
- Washington County

Oregon

- Multnomah County
- Washington County

Vermont

- Bennington County
- Rutland County

Utah

- Salt Lake County

West Virginia

- Cabell County
- McDowell County
- Raleigh County

Participants and Recruitment

We used a combination of purposive and snowball sampling in the selection of participants for the interviews. On the basis of our prior knowledge of child welfare and substance use treatment, we identified the roles in which interviewees would provide the richest contextual information for our study. The recruitment efforts and interviews began in April 2017 and ended in September 2017.

As a first step in the recruitment process, the Children’s Bureau (Administration on Children, Youth & Families/ACF) regional program managers contacted administrators from state child welfare agencies using a draft e-mail template created by the research team. The regional program managers informed the state child welfare agencies about the study and asked them to connect with local child welfare administrators in the identified sites. After the research team made contact with the local child welfare administrators, they used snowball sampling; including recommendations from study participants, and Internet research on organizations that could be a source of respondents. The respondents had to be actively working with or in the child welfare system and working with families affected by substance use.

At the same time as the child welfare agencies were being contacted, the research team contacted the Women’s Treatment Service Coordinators from SAMHSA, as well as several regional SAMHSA administrators. They helped to identify local substance use treatment providers. The research team drafted e-mail templates for the SAMHSA regional administrators to assist with their outreach. Other methods used to identify possible participants included reviewing county government websites (to find contacts in law enforcement and the court system), using the SAMHSA Behavioral Health Treatment Services Locator,⁷ and conducting other Internet searches. Table 1 reports the numbers of people recruited, including by type of respondent, for each study site. In each site, we held at least eight interviews or small group interviews.

Semi structured Interview Guides

We created five semi structured interview guides to meet the research objectives of the study and to tailor the information gathered to the role of the participant. Although the guides consisted of a series

⁷ The Behavioral Health Treatment Services Locator is at <https://findtreatment.samhsa.gov/>.

of targeted questions that solicited exact information about different issues, a series of probing questions and open-ended questions allowed for free-flowing discussion.

Table 1. Summary of Study Participants by Site

Site	Virtual/ on-site	Total number of participants	Number of completed interviews	Number of child welfare administrato rs	Number of child welfare practitioners	Number of substance use treatment administrators	Number of substance use treatment practitioners	Number of other respondents
IN Jefferson, Clark, Floyd	Virtual	16	6 interviews 1 group	3	5	1	1	Law enforcement (1) Legal representative (3) Drug/alcohol educator (1) Therapist (1)
MA Bristol ^a	Virtual	10	9 interviews	1	2	1	3	Law enforcement (1) Legal representative (1) Judicial representative (1)
MS Marion, Pearl River, Hancock, Harrison	Virtual	9	8 interviews	2	4	1	0	Court Appointed Special Advocate (1) Parenting skills educator (1)
NC Guilford ^a	Virtual	12	7 interviews 1 group	1	4	1	4	Law enforcement (1) Legal representative (1)
NM Santa Fe	On-site	16	7 interviews 2 groups	2	4	2	1	Other service administrator (1) Law enforcement (4) Judicial (1) Department of Children and Families attorney (1)
OK Tulsa, Wagoner, Cherokee Nation	On-site ^b	25	10 interviews 2 groups	6	9	4	1	Legal representative (5)
OR Multnomah, Washington	On-site	22	8 interviews 1 group	5	7	5	3	Policy and program staff (2)
TN Hawkins, ^a Sullivan, ^a Washington ^a	On-site ^b	13	10 interviews	2	3	2	1	Legal representative (2) Therapeutic foster care agency (1) University public health staff (2)
UT Salt Lake	Virtual	9	9 interviews	3	2	1	1	Legal representative (2)
VT Rutland, ^a Bennington ^a	On-site ^b	26	8 interviews 2 groups	4	10	2	3	Law enforcement (3) Legal representative (4)
WV Cabell, McDowell, Raleigh	On-site	30	4 interviews 7 groups	8	12	0	0	Legal representative (9) Director of nursing (1)

^a Counties that have implemented an alternative response program.

^b On-site visits where a portion of the interviews took place virtually because of scheduling conflicts.

Site	Virtual/ on-site	Total number of participants	Number of completed interviews	Number of child welfare administrato rs	Number of child welfare practitioner s	Number of substance use treatment administrators	Number of substance use treatment practitioner s	Number of other respondents
TOTALS		188	86 interviews 16 small discussion groups	37	62	20	18	51

The five distinct interview guides targeted the following groups:

1. Child welfare administrators
2. Child welfare practitioners
3. Other administrators and practitioners
4. Substance use treatment administrators
5. Substance use treatment practitioners

The interview guides can be found in Appendix A.

Data Collection

Our data collection plan included the participant recruitment strategy, discussion guides, and consent forms. The plan was reviewed and approved by the U.S. Office of Management and Budget (OMB No. 0990-0421), Mathematica Policy Research’s New England institutional review board, and the Oklahoma Department of Human Services institutional review board. No financial incentives were offered for participating in the study.

The research team was composed of both experienced and junior qualitative researchers. All site visitors had expertise in either substance use disorder treatment or child welfare. The site visitors received training on issues related to substance use and child welfare, data collection procedures, the discussion guide protocols, and qualitative coding and analysis. A template was developed to help guide the researchers’ note-taking during the interviews. This template became standardized throughout the project. It was organized by study objectives and by questions in the discussion guides.

Two team members (one lead and one junior researcher) conducted each visit. Because of budget constraints, we conducted only six of the visits in person. The other five were done virtually through audio and visual conference-calling equipment. The researchers spend two to three days at each of the onsite locations. We scheduled site visits on dates when the majority of staff who agreed to participate were available in person. If a particular staff person was not available during the onsite visit, the research team followed up with an interview held virtually. Interviews varied in length from one to two hours, depending on staff role. Some participants were interviewed in small groups of two or three people. The groups for these interviews were composed of people who had the same roles. We took notes and recorded the interviews for transcription. Table 2 shows the approximate length of interviews by respondent type.

Table 2. Approximate Length of Interviews by Respondent Type

Respondent type	Average length of interview
Child welfare administrator	120 minutes
Child welfare practitioner	120 minutes
Substance use treatment administrator	90 minutes
Substance use treatment practitioner	90 minutes
Other respondent types (such as law enforcement, judges)	60 minutes

After each site visit, we developed site-specific summaries based on the note-taking template. These summaries documented the data collected across all interviews at a single site. The research team that attended the site visit and the overall project lead reviewed and approved the summary. Throughout the project period, the research team convened on a regular basis and shared major emerging themes, challenges, and best practices. Project staff communicated key preliminary findings and updates with each other and with members of the federal research team throughout data collection. Details of the study participants by site can be found in Table 1.

Data Analysis and Synthesis

The quantitative data analysis established a statistically significant relationship between substance use prevalence and child welfare outcomes. Using a deductive explanatory approach, we coded the site-specific summaries using NVivo 10 software. The qualitative data analysis deconstructed the relationship, exploring how, why, and in what ways substance use affects child welfare outcomes and the relationships the research participants have with families affected by substance use. Common and divergent themes were identified. Common themes indicated that many of the challenges faced by participants working with these families are shared regardless of the geographical context. Divergent themes provided clues to particular areas that may need future study. The qualitative analysis examined the challenges, places of success, and the collaboration of the systems that serve families affected by substance use. After we identified the themes, we merged the quantitative and qualitative data to answer the research questions.

Limitations of Qualitative Research

Several important limitations of our study's design should be taken into consideration when interpreting results. First, the qualitative results are not based on a sample that is nationally representative. The sites we visited cover a range of community types and geographies. However, the data may not be generalizable to all communities in the country. Second, the timing of our data collection influences the results, which may not reflect current realities. The statistical analysis relied on data from 2011 through 2016. Interviews were conducted during the summer of 2017 and may not reflect substance use issues that have developed in the past year. For example, when we discussed our quantitative results during the interviews, some participants remarked that they believed the number of children in foster care was much higher and that substance use was even more prevalent than the data reflected.

ACKNOWLEDGMENTS

This research would not have been possible without the voices from the field. We thank everyone who participated in the study. Your perspectives and knowledge were invaluable. We also thank Mathematica Policy Research for their data collection efforts and John Hargrove and Emily Madden for their work supplying the data for the project.

REFERENCES

- Benjamini, Y., & Hochberg, Y. (1995). Controlling the false discovery rate: A practical and powerful approach to multiple testing. *Journal of the Royal Statistical Society Series B (Methodological)*, 57(1), 289-300.
- Bernacki, E., Yuspeh, L., Lavin, R., & Tao, X. (2012). Increases in the use and cost of opioids to treat acute and chronic pain in injured workers, 1999 to 2009. *Journal of Occupational and Environmental Medicine*, 54(2), 216–223.
- Creswell, J. W., & Plano Clark, V. L. (2007). *Designing and Conducting Mixed Methods Research*. Thousand Oaks, CA: Sage.
- Denzin & Lincoln, (2012). *Strategies of Qualitative Inquiry*. Thousand Oaks, CA: Sage.
- Johnson, R. B., Onwuegbuzie, A.J., Turner, L.A. (2007). Toward a definition of mixed methods research. *Journal of Mixed Methods Research*, 1(2), 112-133.
- Marshall, C., & Rossman, G. B. (2011). *Designing Qualitative Research* (5th ed.). Los Angeles, CA: Sage.
- Miles, B., Huberman, A., & Saldana, J. (2014). *Qualitative Data Analysis: A Methods Sourcebook* (3rd ed.). Thousand Oaks, CA: Sage.
- Morden, N. E., Munson, J. C., Colla, C. H., Skinner, J. S., Bynum, J. P. W., Zhou, W., & Meara, E. R. (2014). Prescription opioid use among disabled Medicare beneficiaries: Intensity, trends and regional variation. *Medical Care*, 52(9), 852–859.
- Padgett, D. K. (2008). *Qualitative Methods in Social Work Research* (2nd ed.). Los Angeles, CA: Sage.
- Reifler, L. M., Droz, D., Bailey, J. E., Schnoll, S. H., Fant, R., Dart, R. C., & Bartelson, B. B. (2012). Do Prescription Monitoring Programs Impact State Trends in Opioid Abuse/Misuse? | Pain Medicine | Oxford Academic. *Pain Medicine*, 13(3), 434–442. <https://doi.org/doi.org/10.1111/j.1526-4637.2012.01327.x>
- Rossen, L. M., Bastian, B., Khan, D., & Chong, Y. (2017). *Drug poisoning mortality: United States, 1999–2016*. Washington, DC: National Center for Health Statistics.

APPENDIX A

THE RELATIONSHIP BETWEEN SUBSTANCE USE AND FOSTER CARE

Discussion Guide for Child Welfare Administrators

Instructions for interviewer

The following semi structured discussion guide is designed to be tailored as appropriate to the professional perspective and knowledge of respondents. Each of the bolded discussion questions will be asked of the respondents, and possible probes for each will be used as needed to obtain additional information or clarification. Due to time constraints, researchers may prioritize and skip some questions.

Before beginning, interviewers will read the verbal consent script (see attachment) to provide information about the study and to ask consent questions for participation in the study and for audio-recording.

A. Work History/Experience

1. Can you please tell us about your position and roles or responsibility with [employer name]?

- How long have you worked in this position?
- Including current and earlier experience, how many years have you worked with agencies/organizations that serve the child welfare population?
- Can you describe any experience you have working with those affected by substance use?

B. Context

- 1. We're seeing [fill in key findings regarding foster care from data fact sheet specific to each site] in data for your county. Is that consistent with your experience? Could you discuss factors that might relate to what the data are showing?**
- 2. [If there is an increase in foster care caseloads in the site] We know that there are many aspects of the child welfare system that could cause an increase in the number of children in foster care. What do you believe has caused the increases in your state/county?**

Possible probes:

- a. Are there policy changes that may have occurred that may affect these numbers? If so, what type? At what level?
- b. Are there judicial or legal changes that may have occurred? If so, what type? At what level?
- c. Are there any data collection or data quality changes that may have occurred? If so, what type?
- d. Did other changes in the child welfare system's environment have an impact on the number of children in foster care?

- e. Was there a change in resources? If so, what resources changed and why? How would the change affect the number of children in foster care?
- f. Are there leadership changes that may have occurred that may impact these numbers? If so, what kind? At what level?
- g. *[If there are increases in foster care caseload]* Are there other factors that may have been responsible for these increases that we haven't mentioned?
 - In response to the increases, have you made any programmatic changes?
 - What programmatic/practice changes did you make? Supervisor/worker levels?
- h. Of those factors behind the increase in foster care caseload that you mentioned, what would you consider to be the most important or relevant?

3. To build on what we already discussed regarding what we're seeing with the data, can you tell us about the key issues your county's child welfare system is now facing.

Possible probes:

- a. What [other] aspects of your county's child welfare situation have changed in recent years?
- b. What changes in practice or policy has your agency made in response to [the issue raised]?
- c. What are some examples or types of presenting maltreatment types and other challenges for families struggling with substance use?
- d. Has there been a change in the number of reports of child maltreatment? Are more of these reports due to substance use?
- e. Have you seen an increase in the number of infants reported to child welfare who have been exposed to substances in utero? Or because of parent overdoses?
- f. Has the number of children in foster care changed over the past five years? If so, is the change due more to increased/decreased entries or to longer stays among children who enter foster care?
- g. Have changes in the challenges your agency is addressing in recent years led to new initiatives or emphases regarding working with families struggling with substance use?

4. Can you tell us about the current substance use issues in the county? In what ways is the current child welfare situation related to changing dynamics regarding substance use?

Possible probes:

- a. What are the most common types of substance use and use disorders in the county?
 - How have they changed over the past five years?
 - How does opioid use compare to the use of other substances among families that are reported to the child welfare system?
- b. How has substance use, especially opioid use and use disorder, affected the county?
 - Has opioid misuse and use disorder influenced the county differently than other types of substance use and use disorder?

- c. The challenges in coping with substance use can be substantial. What challenges do families struggling with substance use face that may be different from the challenges faced by other families in the child welfare system?
 - Do families struggling with substance use, especially opioid use and use disorder, face the same impairments and challenges in regard to child safety as those faced by other families engaged in the child welfare system? If so, why or why not?
 - How is this changing your practice in your agency? How is this changing resource allocation decisions?
- d. How have opioids affected the types/severity of maltreatment among those reported to the child welfare system with substance use–related risks? Are the reports more likely to be abuse reports or neglect reports?
- e. To what extent is the opioid epidemic bringing in the same general population of families that has typically been involved with child welfare services, or is this a new population that previously was not involved with child welfare services?

C. Child Welfare System Responses to Substance Use Disorders

We'd like to learn about how the child welfare system and its partners respond to families with co-occurring substance abuse and child maltreatment issues.

1. How does the local child welfare system typically respond to the needs of families struggling with substance use, especially opioid use disorder? How has this changed over time?

Possible probes:

- a. How are cases assessed for substance use–related risk?
 - At what point in an investigation or while a case is open is substance use among parents typically discovered?
 - Is screening for substance use issues routine, or does it occur primarily when the caseworker suspects substance use based either on the information in the initial maltreatment report on the child or factors observed during initial contacts with the family?
 - Are these current assessment practices/tools effective? What else is needed to help assess for substance use risk among families?
 - Are reports with substance use–related risks more likely to be substantiated? If so, why? How has this changed over time?
- b. Does your county use a differential response system in which a non-investigation alternative is used to respond to some child maltreatment reports? If so, to what extent are families with substance use–related risk diverted to the alternative or differential response?
 - If families are diverted, have you found the approach to be effective in meeting the needs of at-risk families and keeping children safe?
 - Is this approach different from the past approach to substance use–related cases? If so, how is it different? What led to the change?

- c. Please describe what typically happens when a caseworker finds out that there are substance use–related risks in a family.
- Are children typically removed and placed in foster care?
 - Are units or caseworkers specifically assigned to families struggling with substance use?
 - How did your agency select the particular interventions typically used with these families? Are the interventions evidence-based or evidence-informed?
- d. How does the child welfare agency respond to substance-exposed infants?
- Has the number of reports of substance-exposed infants in your county been rising or falling in the last 5 years?
 - How is the response similar to or different from other cases involving substance use?
 - Are safety plans put in place for substance exposed-infants who may remain at home? If so, how are the plans typically developed and used? Does your agency develop the plans? If not, which agency in your community has responsibility for doing so?
 - Do you believe that all infants who should be reported in fact are being reported?
 - What have you done to facilitate this process?
 - What have you found that has hindered the process?
- e. Are there certain services that are typically provided to parents/caretakers struggling with substance use? If so, what types of services? How are the services identified/determined?
- f. Does the availability of substance use treatment providers in a county influence how the child welfare agency responds to families with substance use–related risks?
- How is the availability of substance use treatment related to the number of reports of child maltreatment due to substance use–related risks?
- g. How has substance use, particularly opioid use, influenced the type of foster care placements for children? For instance, has substance use, particularly opioid use, influenced the availability or use of relative/kinship placements?
- h. To what extent is substance use, especially opioid use, concurrent with other health or mental health problems? What are the most common concurrent conditions?
- i. Do child welfare agencies require substance use–involved families to obtain substance use treatment? If so, how does that requirement influence treatment and outcomes?
- j. How does child welfare agency or court involvement or the potential for child welfare agency involvement influence parents’ motivations and ability to seek substance use treatment?
- k. What local or county policies or practices contribute to how substance use has influenced the child welfare system, especially the number of children in foster care?
- How have the following child welfare policies/practices contributed to how substance use has influenced the child welfare system, especially foster care caseloads:
 - Intake/screening of reports

- Investigations
- Alternative/differential response
- Response to substance-exposed newborns (e.g., requirement for medical providers to notify child protective services)
- Use of kinship care
- Other policies/practices
- How have the following contextual factors contributed to how substance use has influenced the child welfare system, especially foster care caseloads?
 - Local demographics (age, gender, race, tribal communities)
 - Socioeconomic conditions (income, poverty, unemployment)
 - Urban or rural status
 - Availability (or lack) of substance use treatment services
 - Availability of opioids (legal or illegal) and other substances
 - Other factors (uninsured, disability, occupational injuries, incarceration)
- Have the various factors remained stable, or have they changed over time?

2. What other agencies or organizations are involved in responding to substance use issues among parents involved with the child welfare system?

Possible probes:

- a. What agencies are the child welfare agency's key partners in responding to child welfare-involved families with substance use disorders?
 - What services do those agencies provide?
- b. How does the child welfare agency work with partners to get families treatment services?
 - How are referrals made between the child welfare agency and partner organizations?
 - How are partner services coordinated with child welfare services?
 - What feedback or information is communicated to the child welfare agency?
- c. What substance abuse treatment services are typically available to child welfare clients?
 - Are these inpatient or outpatient services?
 - Are the services family-friendly? Do they address family/parenting issues as part of treatment?
 - Are particular types of substance use treatment more/less appropriate for child welfare-involved families?
 - Is medically assisted treatment used with child welfare-involved parents? If so, how does it relate to the ability of families to reunify?
 - What is the capacity of available substance use treatment providers (number of beds or number of people who can be treated monthly)?

- Is the capacity sufficient to meet the need? Are there enough providers? Are there enough beds?
- Does capacity vary across the county (or counties)?
- Are child welfare-involved parents able to access substance abuse services?
 - Do parents involved in the child welfare system have priority status on waitlists?
- d. Please describe the local court system(s) that would respond to substance use or child welfare cases in your county.
 - What court handles child welfare cases in your county? Are there drug treatment courts and if so, do they deal with families involved in the child welfare system?
 - How do they work with child welfare cases involving substance use?
- e. In what ways, if any, have other “systems” (such as medical or mental health providers, schools, law enforcement, etc.) contributed to any increases in the number of child welfare reports or foster care entries? Or to your agency’s responses to recent child welfare challenges?
- f. Are there any cross-system or targeted efforts being implemented in your state/county that may have influenced the number of child welfare reports or foster care entries? Influenced how child welfare-involved families struggling with substance use are served?

D. Success and Challenges

1. How successful have child welfare responses been in assisting families struggling with substance use?

Possible probes:

- a. What strategies or aspects do you see as most successful in addressing the needs of these families? Why? What contributes to the success? How is success defined?
- b. What strategies have you found ineffective?
- c. How can the child welfare agency’s response be more successful?

2. In your opinion, what are the primary challenges to, or missing pieces in, your county’s response to families struggling with substance use?

Possible probes:

- a. What is one thing that gets in the way (a barrier or challenge) that you most wish you could address?
- b. What other changes would be most helpful to address these challenges?
- c. Does the child welfare agency have enough resources and the types of resources needed to respond to these families’ needs? If not, what resources are needed?
- d. How, if at all, do these barriers/challenges differ because of opioid use compared to other substance use?
 - How have these barriers/challenges changed over time?
 - How common are these barriers/challenges?

- Do other communities share the same barriers/challenges, or are the barriers/challenges unique to your community?
- 3. Is there anything else that we haven't discussed that you think would help us understand your county's experience with the child welfare system and substance use?**

E. Recommendations for Other Respondents

- 1. Whom would you recommend that we speak with who can offer their perspective on the relationship between child welfare and substance use in the county?**

Possible probes:

- a. These professionals might include administrators or practitioners in child welfare, substance use treatment, public health, law enforcement, or judicial/legal matters.
- b. For those you would recommend, would you be able to provide us with their contact information (email and telephone number)?

The closing remarks will include the following: thank you for participating, providing reassurance about confidentiality, reminding participants how the audio recording will be used, soliciting any questions, and providing contact information.

THE RELATIONSHIP BETWEEN SUBSTANCE USE AND FOSTER CARE

Discussion Guide for Child Welfare Practitioners

Instructions for interviewer

The following semi structured discussion guide is designed to be tailored as appropriate to the professional perspective and knowledge of respondents. Each of the bolded discussion questions will be asked of the respondents, and possible probes for each will be used as needed to obtain additional information or clarification. Due to time constraints, researchers may prioritize and skip some questions.

In a few sites, where there are several practitioners whom we would like to include in our study, we may conduct small group interviews instead of individual interviews. In those cases, we will use this discussion guide for the small group interviews but will prioritize the most relevant questions for discussion.

Before beginning, interviewers will read the verbal consent script (see attachment) to provide information about the study and to ask consent questions for participation in the study and for audio-recording.

A. Work History/Experience

- 1. [Ask only if this is an individual interview, but skip if this is a small discussion group for sake of time.] Can you please tell us about your position and role or responsibility with [employer name]?**

Possible probes:

- a. How long have you worked in this position?
- b. Including current and earlier experience, how many years have you worked with agencies/organizations that serve the child welfare population?

B. Context and Caseload

We're seeing [highlight key findings regarding foster care and substance use from data fact sheet specific to each site] in data for your county.

- 1. [If there is an increase in foster care caseloads in the site] We know that there are many aspects of a child welfare system that could cause an increase in the number of children in foster care.**

What do you believe has caused the increase in foster care caseloads in your county (counties)?

Possible probes:

- a. Are there child welfare policy or practice changes that may have affected these numbers? If so, what type? At what level?
- b. Are there leadership or management changes that may have affected these numbers? If so, what type? At what level?

- c. Was there a change in resources? If so, what resources changed and why? How did the change affect the numbers?
 - d. Are there judicial or legal changes that may have occurred? If so, what type? At what level?
 - e. Are there other factors?
 - f. Of those factors that you mentioned, what would you consider to be the most important?
- 2. We'd like to hear about your experience with child welfare cases to help put this information into context or understand how families may be struggling with substance use.**

Can you tell me about your child welfare caseload (without specifics that would identify any individuals)?

Possible probes:

- a. How big is your caseload?
- b. Is it specialized in any way (such as including specific types of cases)?
- c. What percentage of your caseload includes people struggling with substance use–related problems?
 - Has the percentage changed over time?
- d. How has substance use influenced your caseload size?
- e. What are the most common types of substance use and use disorders you see among clients in your caseload?
 - What are the primary drugs?
 - Is it legal or prescription medication, or it is illegal substance use?
 - Has that changed over time?
 - Difference in addiction? Difference in amount of addiction? Difference in types of parenting challenges that result?
 - How does opioid use compare to the use of other substances? Is there a substantive difference between families using opioids and families using meth and/or crack-cocaine?
- f. To what extent is substance use (*especially opioid use if mentioned by respondent*) concurrent with other health or mental health problems in the families you serve?

C. Child Welfare Practice

- 1. Can you tell us about your practice approach to working with families struggling with substance use?**

Possible probes:

- a. How are cases assessed for substance use–related risk once a report of child maltreatment has been made?

- When does assessment take place (during investigation or at a later point once case is open)?
 - Are families routinely assessed for substance use, or is this done only if it is part of the incoming allegation or if there is suspicion based on something you observe during your initial contacts with the family?
 - In your view, are the current assessment practices/tools effective?
- b. Please describe what typically happens when you learn about substance use–related risks in a family.
- Are families with substance use–related risk ever diverted to an alternative or differential response (if the child welfare agency uses such practices)?
 - Are children typically removed and placed in foster care?
 - Are there units or caseworkers specifically assigned to families struggling with substance use?
 - Is this approach different from the past approach to substance use–related cases? If so, how is it different? What led to the change?
 - What do you have to do differently when working with families with substance use challenges in comparison to other families without substance use challenges? Has this changed over time?
- c. What percentage of children in your caseload was substance-exposed in utero?
- Do these children typically become involved in the child welfare system as infants or later on? If later, how does the in utero exposure affect your work with the family?
 - How does the child welfare agency respond to substance-exposed infants? Are plans of safe care developed for these infants? By your agency or someone else? What do these plans typically include?
 - How do risk and safety assessments differ for substance-exposed infants versus for any other child?
- d. Are you seeing more families with intergenerational substance use problems?
- How does that affect your work with those families?
 - Has intergenerational substance use influenced the availability or use of relative/kinship placements?
- e. To what extent does your child welfare system make use of relative/kinship placements, either as foster homes or as diversions from foster care? Has this changed in recent years? If so, what led to the change?

D. Substance Use Treatment for Child Welfare–Involved Families

1. What substance use treatment resources do you use to assist families struggling with substance use?

Possible probes:

- a. What services are most important to helping families heal and reunify?
 - How do you select the particular interventions typically used with families struggling with substance use? Are the interventions evidence-based or evidence-informed?
 - b. What substance use treatment providers do you use with families in your caseload?
 - What services do they provide? Are these services inpatient or outpatient services? Are there family-friendly treatments (such as those that allow parents to stay connected with children)?
 - Do these substance use treatment programs address parenting issues as part of treatment?
 - c. Are these providers/organizations located nearby? Specifically, are substance abuse treatment facilities located in the county?
 - d. Is treatment widely available or scarce? Does availability vary across the county (counties)? Does that vary by type of treatment?
 - Are there waitlists for substance use treatment services?
 - If so, do any people receive priority status? If parents involved in the child welfare system have priority status, is this an effective way to get parents into treatment sooner?
 - How do waitlists or lack of access to immediate services influence parents' ability to meet child welfare case plan goals in a timely manner?
 - Does the availability of substance use treatment influence how you respond to families struggling with substance use–related risks?
 - e. What happens if treatment isn't readily available (for instance, in the case of waiting lists)? How does that change your decision making about safety and your work with the family?
 - f. Has any of your clients used medication-assisted treatment? For which drugs?
 - In your experience, are there benefits and challenges associated with medication-assisted treatment among the families you serve?
 - Have issues arisen in other systems (i.e., courts, substance use treatment providers) regarding the use of medication-assisted treatment? (For instance, do other portions of the system distrust or resist medication-assisted treatment?)
- 2. Can you tell me how families are engaged in a parent's substance use treatment, including how their participation in treatment relates to their child welfare involvement?**

Possible probes:

- a. What is the process for getting a family into treatment?
 - How is a treatment provider selected?
- b. Once a parent engages in a treatment program, is there ongoing interaction between the child welfare worker and the treatment provider?
- c. Does the involvement of the court (or potential for such involvement) seem to influence parents' motivations and ability to seek substance use treatment?

- d. For clients who enter treatment, typically how long are they actively in treatment?
 - How does the length of time for successful completion of treatment relate to timelines for child welfare decision making for (often an 18-month timeline for reunification)?
 - How does the type of treatment (such as medication-assisted treatment) relate to timeliness of child welfare permanency?
- e. What other supports for recovery are available in addition to treatment for families with substance use disorders?
 - For instance, sober housing options, 12-step programs, faith-based programs?

E. Other Partners

1. In what ways do you collaborate with other types of service providers or other systems when working with families struggling with substance use?

Possible probes:

- a. What services do they provide?
- b. What is the nature of the collaboration?
 - Referrals
 - Ongoing contact
 - Joint visits
 - Information exchange/means of exchange
 - Reinforcing the work together with the family
 - Serving families in parallel or collaboratively (provide example)

F. Success and Challenges

1. What strategies or aspects of your work do you see as most successful in addressing the needs of families struggling with substance use?

Possible probes:

- a. Why? What contributes to this success? How is success defined?
- b. What strategies have you found ineffective?
- c. How can the child welfare agency's response be more successful?

2. In your opinion, what are the primary challenges to, or missing pieces in, your work with families struggling with substance use?

Possible probes:

- a. What is one thing that gets in the way (a barrier or challenge) that you most wish you could address?
 - What suggestions would be most helpful to address these challenges?

- b. How do these barriers/challenges differ because of opioid use compared to other substance use?
 - How have these barriers/challenges changed over time?
 - How common are these barriers/challenges?
 - Do other communities share the same barriers/challenges, or are the barriers/challenges unique to your community?

3. What would be most helpful to you in working with these families?

Possible probes:

- a. What else is needed to help assess the risk of substance use among families?
- b. If you had a magic wand, aside from additional financial resources, what would you do to help meet the needs of parents and children affected by substance use and involved in the child welfare system?

G. Recommendations for Other Respondents

1. Do you regularly work with certain substance use treatment providers or other service providers in your county to support these families? If so, who are these providers?

Possible probes:

- a. Whom could you recommend that we speak with who can offer their perspective on providing substance use treatment or other services to child welfare-involved families?
- b. For those you would recommend, would you be able to provide us with their contact information (email and telephone number)?

2. Is there anyone else would you recommend that we speak with who can offer their professional perspective on the relationship between child welfare and substance use in the county?

Possible probes:

- a. These professionals might include law enforcement or judicial/legal officials.
- b. For those you would recommend, would you be able to provide us with their contact information (email and telephone number)?

The closing remarks will include the following: thank you for participating, providing reassurance about confidentiality, reminding participants how the audio recording will be used, soliciting any questions, and providing contact information.

THE RELATIONSHIP BETWEEN SUBSTANCE USE AND FOSTER CARE

Discussion Guide for Other Administrators and Practitioners

Instructions for interviewer

The following semi structured discussion guide is designed to be tailored as appropriate to the professional perspective and knowledge of respondents. Sections or specific questions may be adapted or skipped based on the background and knowledge of the respondent. In particular, additional discussion questions for practitioner are noted where appropriate. Due to time constraints, researchers may prioritize and skip some questions.

Before beginning, interviewers will read the verbal consent script (see attachment) to provide information about the study and to ask consent questions for participation in the study and for audio-recording.

A. Work History/Experience

- 1. Can you please tell us about your position and role or responsibility with [employer name]?**

Possible probes:

- a. How long have you worked in this position?
- b. Including current and earlier experience, how many years have you worked with these types of agencies/organizations?
- c. What has been your experience in working with child welfare systems and/or families?
 - How does your current position/agency interact/collaborate with child welfare systems/families?

B. Context

- 1. We're seeing [describe key findings regarding foster care and substance use from data fact sheet specific to each site] in data for your county. Is that consistent with your experience?**

Possible probes:

- a. In your experience, what are the most common types of substance use and use disorders in the county?
 - How has it changed over the past five years?
 - How does opioid use compare to the use of other substances?
 - If opioid use is the primary problem, are individuals using primarily prescription opioids or heroin and other illegal forms of these drugs?
- b. How has substance use, especially opioid use and use disorder, affected the county?
 - How has opioid use and use disorder influenced the county differently than other types of substance use and use disorder?

- c. Are there differences in various parts of the county, that is, between more urban and more rural communities? Are there differences by other factors in the county such as:
- Demographics or socioeconomic factors (income, poverty, unemployment)?
 - Availability (or lack) of substance use treatment services?
 - Availability of opioids (legal or illegal) and other substances?
 - Other factors (uninsured, disability, occupational injuries, incarceration)?

C. Other Service Providers

[To be asked of other service providers and adapted to specific types of services (such as public health, mental health, or other services).]

1. *[For practitioners]* Please describe your agency/personal caseload.

Possible probes:

- a. How many individuals/families are in your agency/personal caseload?
- b. How frequently do you work with clients who are involved with child welfare?
- c. How frequently do you work with clients struggling with substance use? Has this changed over time?

2. Please describe the services provided by your agency/program.

Possible probes:

- a. What services does your agency/program provide?
 - *[For practitioners]* What services do you provide to clients?
 - What services are most relevant for child welfare–involved families struggling with substance use?
 - In what ways do your services address the needs of parents with substance use disorders?
 - Are these treatments family-friendly treatments (such as those that allow parents to stay connected with children)? Do these services include a parenting component?
 - Has the nature of the services changed over time?
- b. How do individuals access/receive your services?
 - Do people voluntarily seek treatment? Are people referred for services? Do other agencies or the courts mandate services?
 - Do the means by which people seek treatment (voluntary or otherwise) affect their engagement in services? Does it affect their service outcomes?
- c. *[For practitioners]* Regarding the need for services, do families engaged in the child welfare system face struggles that are similar to or different from the struggles faced by other families you serve?
 - Are these struggles different for those battling opioid use versus other substances?

- How have the struggles changed over time?

3. How has demand for your services and your ability to meet clients' needs been affected by recent changes in substance use patterns in your county (e.g., increases in opioid use)?

Possible probes:

- Have the changing patterns of drug use translated into demand for different service types and amounts?
- What is the capacity for these services in the county?
- What is the capacity of your own agency/program?
 - Is the capacity of your program sufficient to meet the need? Are there enough spots available in your program?
 - If demand has increased, have you been able to increase service capacity to meet the need? Why or why not?
- Are there waitlists for the services provided by your agency/program?
 - Do certain individuals receive priority status on waitlists? If parents involved in the child welfare system have priority status on waitlists, is this an effective way to get parents services sooner?
- What is the percentage of participants successfully complete your programs?
 - For instance, how frequently do clients successfully complete services?
- How have these services been affected by the needs of families struggling with substance use, especially opioid use and use disorder? How have service providers responded?
 - How have the services or service providers changed over time?
- What local policies/practices or county factors may contribute to how recent substance use, particularly opioid use, have influenced these services?
- How are your services financed (e.g., child welfare agency purchases the service, Medicaid pays, other public funds, fees, etc.)?
 - Are families required to pay a portion?
 - Are families denied access to services based on their inability to pay?

4. In what ways does your agency/program interact with the local child welfare agency?

Possible probes:

- How do you partner/work with the child welfare agency to meet families' needs?
 - How are referrals made? How often does the child welfare agency refer clients to you?
 - How are services coordinated?
 - What feedback or information is shared?
 - [*For practitioners*] Do you communicate to child welfare regularly on participant's progress in your program? How is that done?

- b. *[For practitioners]* How does a client's involvement with child welfare influence your work with a parent?
- c. *[For practitioners]* Does a client's participation or success (or lack of success) in your program typically influence his or her child welfare case? In what ways?

5. What other agencies or organizations do you work with that are involved in responding to substance use issues among child welfare system-involved parents?

Possible probes:

- a. Who are your key partners in responding to child welfare-involved families with substance use disorders (law enforcement, medical or mental health providers, schools, etc.)?
 - How do you collaborate with those partners on behalf of individual families?
 - How are referrals made with partner organizations?
 - What feedback/data or information is shared?

D. Law Enforcement

[To be asked of law enforcement professionals and adapted as needed.]

1. Please describe the roles law enforcement agencies in your county play in responding to situations in which children may be endangered by parents' substance misuse.

Possible probes:

- a. How do law enforcement agencies respond? How are they similar or different from each other in their response?
- b. How frequently do law enforcement personnel encounter children when conducting law enforcement activities related to drug offenses?
 - Has this changed over time?
- c. How does your agency respond when coming across such children?
 - Do officers frequently make child protective services reports? Play a role in CPS investigations? Take temporary custody of children under some circumstances?
 - Have these responses changed over time?
- d. In what other ways do you [or your staff] interact directly or indirectly with families struggling with substance use or engaged in the child welfare system?
 - What types of cases seen by local law enforcement are related to substance use, especially opioid use? How has this changed over time?
 - To what extent do these cases involve child welfare issues (child is harmed or at risk of harm)?
 - How frequently do you work with child welfare-involved families? How has this changed over time?

2. How has local law enforcement been affected by and responded to families struggling with substance use, especially opioid use and use disorder?

Possible probe:

- a. Has substance use or use disorder led to any changes in the number of reports/calls to law enforcement?
 - If so, how has the number changed over time?
 - If there has been an increase in substance use or use disorder, does local law enforcement have the resources (staff, funding, etc.) to respond to an increase in reports related to substance use?
 - Do law enforcement officers carry and administer Naloxone to treat overdoses? Why or why not?

3. How has local law enforcement worked with child welfare agencies to address the needs of families struggling with substance use?

Possible probes:

- a. Do you think there been any change in the number of reports to child welfare made by law enforcement?
 - To what extent is the change attributable to substance use, especially opioid use?
 - How has the number changed over time?
- b. Is there a drug endangered children coalition in your county?
- c. Has local law enforcement received any specialized training to respond to substance abuse cases? To cases involving child maltreatment?
 - How has the training affected local law enforcement practices?

4. Has local law enforcement coordinated with other agencies or service systems to focus on identifying children at risk of maltreatment due to substance use, especially opioid use? If so, please describe.

Possible probes:

- a. Has such coordination affected the number of child welfare reports?
- b. Do you think the local law enforcement system been affected by and responded to substance use and use disorder?
 - For example, has substance use or use disorder led to jail crowding issues?
- c. What local policies/practices or community factors may contribute to how law enforcement responds to cases involving substance use, particularly opioid use, and child welfare?

E. Court Professionals

[To be asked of court professionals and adapted as needed.]

1. Please describe the local court system(s) that would respond to drug related offenses and child welfare cases in the county.

Possible probes:

- a. What are the various courts/court systems that would be relevant for the affected families?
- b. In what ways do different court systems work differently with substance use versus child welfare cases?

2. Please tell me about the operations of the courts that hear child family/dependency cases. What are those courts called in this jurisdiction?

Possible probes:

- a. How are these courts structured? Do specialized judges or a rotation of judges from other courts staff the courts that hear child welfare cases?
- b. Do these courts serve all families involved in the child welfare system (or just those in foster care)?
- c. How does the family/dependency court influence access to substance use treatment for parents who need it?
- d. Are there particular court practices that may shorten or lengthen the time children spend in foster care?
- e. How does the family/dependency court influence families' ability to achieve success with substance use treatment?
- f. How does the family court influence families' ability to achieve reunification?

3. Does the local county have a family drug treatment court?

Possible probes:

- a. If so, tell me about how the family drug treatment court works.
- b. Are family drug treatment courts available to all child welfare involved—families with substance use problems, or are the courts limited to certain jurisdictions or populations?
- c. How does families' involvement in family drug treatment court differ from that of involvement in the traditional court system? How do family drug treatment courts relate to other courts (family court, criminal court)?
- d. How does the family drug treatment court influence access to substance use treatment or access to child welfare services?
- e. How does the family drug treatment court influence the length of time a family may be engaged in foster care/child welfare?
- f. How does the family drug treatment court influence families' ability to achieve success with substance use treatment?
- g. How does the family drug treatment court influence families' ability to achieve reunification?

4. How has the local court system (criminal court, family drug treatment court, family courts) been affected by and responded to families struggling with substance use, especially opioid use and use disorder?

Possible probes:

- a. Has there been a change in the number of cases seen by the court system (criminal court, family drug court, family courts) that involve substance use or use disorder–related issues? How has the number changed over time?
 - b. What types of cases have been seen by the court system (criminal court, family drug treatment court, family courts) related to substance use, especially opioid use?
 - To what extent do these cases involve child welfare issues (child is harmed or at risk of harm)?
 - How has this changed over time?
 - c. Have court professionals (judges, lawyers) received any specialized training to respond to substance abuse cases? To cases involving child maltreatment?
 - How has the training affected legal practices/procedures?
 - d. What local policies/practices or county factors may contribute to how the courts work with cases involving substance use, particularly opioid use?
- 5. How has the court system interacted or coordinated with the child welfare agency regarding cases of children from families struggling with substance use?**
- 6. Has the court system (criminal court, family drug treatment court, family courts) coordinated with other agencies or service systems to focus on identifying and handling cases of children at risk of maltreatment due to substance use, especially opioid use?**

Possible probes:

- a. How has this coordination affected the number of child welfare reports?
 - b. How has this coordination affected the number of children in foster care?
- 7. [For judges] How do you take success or failure in substance abuse treatment into account in decision making about child welfare issues?**

F. Success and Challenges

1. What aspects of your agency/organization’s response have been successful in assisting families struggling with substance use?

Possible probes:

- a. What strategies or aspects do you see as most successful in addressing the needs of these families? Why? What contributes to this success? How is success defined?
 - b. What strategies have you found ineffective?
 - c. How can the child welfare agency’s response be more successful?
- 2. In your opinion, what are the primary challenges to, or missing pieces in, your county’s response to families struggling with substance use?**

Possible probes:

- a. What is one thing that gets in the way (a barrier or challenge) that you most wish you could address?
 - b. What services or supports are missing or in short supply in your county?
 - c. What suggestions would be most helpful to address these challenges?
 - d. Does your agency/program/court system have enough resources and the types of resources needed to respond to families struggling with substance use? If not, what resources are needed?
 - e. How do these barriers/challenges differ because of opioid use versus other substance use?
 - How have these barriers/challenges changed over time?
 - How common are these barriers/challenges?
 - Do other communities share the same barriers/challenges, or are the barriers/challenges unique to your community?
 - f. If you had a magic wand, aside from additional financial resources, what would you do to help meet the needs of parents and children affected by substance use?
- 3. Is there anything else that we haven't discussed that you think would help us understand your county/region's experience with these issues?**

G. Recommendations for Other Respondents

- 1. Whom would you recommend that we speak with who can offer additional perspectives on the relationship between child welfare and substance use in the county?**
 - a. These professionals might include administrators or practitioners in child welfare, substance use treatment, public health, law enforcement, or judicial/legal matters.
 - b. For those you would recommend, would you be able to provide us with their contact information (email and telephone number)?

The closing remarks will include the following: thank you for participating, providing reassurance about confidentiality, reminding participants how the audio recording will be used, soliciting any questions, and providing contact information.

THE RELATIONSHIP BETWEEN SUBSTANCE USE AND FOSTER CARE

Discussion Guide for Substance Use Treatment Administrators

Instructions for interviewer

The following semi structured discussion guide is designed to be tailored as appropriate to the professional perspective and knowledge of respondents. Each of the bolded discussion questions will be asked of the respondents, and possible probes for each will be used as needed to obtain additional information or clarification. Due to time constraints, researchers may prioritize and skip some questions.

Before beginning, interviewers will read the verbal consent script (see attachment) to provide information about the study and to ask consent questions for participation in the study and for audio-recording.

A. Work History/Experience

- 1. Can you please tell us about your position and role or responsibility with [employer name]?**

Possible probes:

- How long have you worked in this position?
- Including current and earlier experience, how many years have you worked with agencies/organizations that serve those struggling with substance use?
 - How long have you worked with families in the substance abuse field that are also involved in the child welfare system?

B. Context

- 1. We're seeing [fill in key findings regarding substance from data fact sheet specific to each site] in your data. Is that consistent with your experience? Please tell me about the size and scope of the substance abuse problem in this county.**

Possible probes:

- a. What are the most common types of substance use and use disorders in the county?
 - How has it changed over the past five years?
 - How does opioid use compare to the use of other substances in terms of impact on individual and family needs?
 - If opioid use is the primary problem, are individuals using primarily prescription opioids or heroin and other illegal forms of these drugs?
 - Is working with families struggling with opioid addictions qualitatively different than other drug addictions? How so?
- b. To what extent do the clients you see in your programs have other concurrent health or mental health problems?

- What are the most common concurrent conditions?
- c. How has substance use, especially opioid use and use disorder, affected the county?
 - How has opioid misuse and use disorder influenced the county differently than other types of substance use and use disorder?
- d. What are the demographics among clients of substance abuse treatment programs in the county (e.g., age, gender, race, tribal communities)?
 - Is this different from the populations your programs have served in the past?
 - How is this affecting how you deliver services?
- e. Are there differences in substance use in your county by different contextual factors:
 - Geography (urban, rural)? How come?
 - Socioeconomic factors (income, poverty, unemployment)? How come?
 - Availability (or lack) of substance use treatment services? How come?
 - Availability of opioids (legal or illegal) and other substances? How come?
 - Other factors (uninsured, disability, occupational injuries, incarceration)? How come?

C. Substance Use Treatment

1. Please describe the substance use treatment services available in your county/region (and, if relevant, those provided by your agency/program).

Possible probes:

- a. Please describe substance use treatment services in your county.
 - What substance use treatment facilities are located in the county currently? Has this changed over the past ten years? Five years?
 - What services does your agency/program provide? Describe them.
 - Are these services inpatient or outpatient services?
 - Are there family-friendly treatment services (such as those that allow parents to stay connected with children)?
 - How has the nature of the services changed over time?
 - What other recovery supports are available in conjunction with treatment or as aftercare? For instance, 12-step programs, sober housing options, faith based programs, and/or peer support?
- b. What is the capacity of available substance use treatment providers (number of beds or number of people who can be treated monthly) in your county? What is the capacity of your agency/program?
 - Is the capacity sufficient to meet the need? Are there enough providers? Are there enough beds?

c. Are there waitlists for substance use treatment services in your county? For your agency/program?

If yes,

- Is this for certain treatment modalities?
- Do certain individuals have priority status on waitlists?
- If parents involved in the child welfare system receive priority status on waitlists, is this an effective way to get parents into treatment sooner?

d. How has the increase in opioid use (if mentioned by respondent) influenced substance use treatment services in the county?

e. What local policies or practices may contribute to how recent substance use, particularly opioid use, has influenced substance use treatment providers in the county?

f. Has the media attention on the opioid epidemic impacted your service delivery system?

g. What county factors may contribute to how recent substance use, particularly opioid use, has influenced substance use treatment providers in the county?

- How do local demographics, socioeconomic conditions, urban status, or other factors influence substance use treatment providers in the county?
- How, if at all, have these factors changed over time?

2. Please describe the work of your agency, particularly in addressing parental substance use and its effects on families and children.

Possible probes:

a. How have substance use treatment providers been affected by and responded to the needs of families struggling with substance use, especially opioid use and use disorder?

- How does opioid use affect substance use treatment providers compared to the use of other substances?
- How has this changed over time?

b. How do individuals end up in treatment services?

- Do people voluntarily seek treatment? Are people referred for services? Do other agencies or the courts mandate treatment?
- Do the means by which people seek treatment (voluntarily or otherwise) affect their engagement in treatment? Does it affect their treatment outcomes or likelihood of relapse?

c. How successful are the available substance abuse treatment providers in addressing the opioid and other substance use problems of families in the county?

- For instance, how frequently do clients successfully complete treatment?

D. Interaction with Child Welfare Agencies

1. In what ways does your substance use treatment agency/program interact with the local child welfare agency?

Possible probes:

- a. What substance abuse treatment services are typically available to child welfare clients?
 - Are these unique or different from other types of substance abuse treatment services?
 - Are they inpatient or outpatient services?
 - Are these services family-friendly? Do they address family/parenting issues as part of treatment?
 - Have you found that particular types of substance use treatment more/less appropriate for child welfare–involved families? Does the child welfare agency or the family/dependency court influence treatment decisions?
 - Is medically assisted treatment used with child welfare–involved parents? If so, how does it relate to the ability of families to reunify?
- b. How do families engaged in the child welfare system get referred to or come to the attention of substance use treatment providers?
 - Is this approach similar to how others in the general population get connected to treatment?
 - Is there often a mandate from child welfare agencies or other legal authorities for treatment?
 - If so, how does the mandate influence treatment and outcomes?
 - If there are waiting lists, do families with child welfare involvement receive priority for treatment?
- c. Do families involved in the child welfare system face struggles that are similar to or different from the struggles faced by those in the general population regarding treatment and recovery from substance use?
 - Are these struggles different for those battling opioid use versus use of other substances?
 - How have these struggles changed over time?
- d. How does child welfare agency involvement or the potential for child welfare agency involvement influence parents' motivation and ability to seek substance use treatment?
- e. How does parents' success in completing treatment generally correspond with decisions in the child welfare system?
 - How likely is it that a client who completes treatment will regain custody of a child in foster care? Conversely, when parents fail to complete treatment, to what extent does that failure have implications for child welfare decision making?
- f. How does child welfare-involved parents' health insurance coverage (or lack thereof) relate to parents' ability to access substance use treatment?

- What funds are used to pay for substance use treatment services for parents who are involved with the child welfare system? Does the child welfare agency pay for these services? How often is Medicaid or other public funding used to support these services?
- g. Can you describe your current relationship with the local child welfare agency, and has it changed in recent years?

E. Other Partners

1. What other agencies or organizations are involved in responding to substance use issues among parents involved with the child welfare system?

Possible probes:

- a. Who are the substance abuse provider's key partners in responding to child welfare-involved families with substance use disorders (for example, law enforcement, medical or mental health providers, schools, etc.)?
 - What services do these agencies provide?
- b. How do the leaders of the various human and public health service systems work together to serve substance using families?
- c. Are there specific collaborative efforts at the systems level? What do those look like? What is the impetus behind these efforts? Is one agency the leader behind the effort?
- d. How is data shared between the agencies?
- e. Do you have data sharing agreements? What gets in the way of sharing data?
- f. Who pays for substance use treatment? Has the increase in the use of opioids in your county impacted the county's ability to pay for treatment?
- g. How does the substance abuse agency/program work with partners to get families the services they need?
 - How are referrals made with partner organizations?
 - How are partners' services coordinated?
 - What feedback or information is shared?
- h. Please describe the local court system(s) that would respond to substance use or child welfare cases in the county.
 - What court handles child welfare cases in your county?
 - Are there drug treatment courts and if so, do they deal with families involved in the child welfare system?
 - How do they work with child welfare cases that involve substance use?
- i. Are there any cross-system or targeted efforts being implemented in your state/county that focus on families struggling with substance use?

F. Success and Challenges

1. What aspects of the county's response have been successful with families struggling with substance use?

Possible probes:

- a. What strategies or aspects do you see as most successful in addressing the needs of these families? Why? What contributes to this success? How is success defined?
- b. What strategies have you found ineffective?
- c. How can the child welfare agency response be more successful?

2. In your opinion, what are the primary challenges to, or missing pieces in, your county's response to families struggling with substance use?

Possible probes:

- a. What is one thing that gets in the way (a barrier or challenge) that you most wish you could address?
- b. What suggestions would be most helpful to address these challenges?
- c. Does your substance use treatment program have enough resources and the types of resources needed to respond to these families' needs? If not, what resources are needed?
- d. How do these barriers/challenges differ because of opioid use compared to other substance use?
 - How have these barriers/challenges changed over time?
 - How common are these barriers/challenges?
 - Do other places share the same barriers/challenges, or are the barriers/challenges unique to your county?

3. Is there anything else that we haven't discussed that you think would help us understand your county's experience with these issues?

G. Recommendations for Other Respondents

1. Whom would you recommend that we speak with who can offer their perspective on the relationship between child welfare and substance use in the county?

Possible probes:

- a. These professionals might include administrators or practitioners in substance use treatment, public health, law enforcement, or judicial/legal matters.
- b. For those you would recommend, would you be able to provide us with their contact information (email and telephone number)?

The closing remarks will include the following: thank you for participating, providing reassurance about confidentiality, reminding participants how the audio recording will be used, soliciting any questions, and providing contact information.

THE RELATIONSHIP BETWEEN SUBSTANCE USE AND FOSTER CARE

Discussion Guide for Substance Use Treatment Practitioners

Instructions for interviewer

The following semistructured discussion guide is designed to be tailored as appropriate to the professional perspective and knowledge of respondents. Each of the bolded discussion questions will be asked of the respondents, and possible probes for each will be used as needed to obtain additional information or clarification. Due to time constraints, researchers may prioritize and skip some questions.

In a few sites, where there are several practitioners whom we would like to include in our study, we may conduct small group interviews instead of individual interviews. In those cases, we will use this discussion guide for the small group interviews but will prioritize the most relevant questions for discussion.

Before beginning, interviewers will read the verbal consent script (see attachment) to provide information about the study and to ask consent questions for participation in the study and for audio-recording.

A. Work History/Experience

- 1. [Ask only in the case of an individual interview, but skip if this is a small discussion group for sake of time.] Can you please tell us about your position and role or responsibility with [employer name]?**

Possible probes:

- How long have you worked in this position?
- Including current and earlier experience, how many years have you worked with agencies/organizations that provide substance use treatment services?
- How many years have you had experience working with families who are involved with the child welfare system?

B. Substance Abuse Treatment Services and Caseload

We're seeing [highlight key findings regarding substance use from data fact sheet specific to each site] in data for your county.

- 1. To help us put this information in context and to better understand the data we see, we would like to hear about your experience in providing substance use treatment services to those involved with the child welfare system.**

Please describe the substance use treatment services available in your county, as well as those provided by your agency/program.

Possible probes:

- a. What substance use treatment and services does your agency/program provide?
- b. What is your role in providing these services?

- c. Are the services inpatient or outpatient services?
- d. Are the treatments family-friendly treatments (such as those that encourage parents to stay connected with children)?
- e. Do the substance use treatment programs address parenting issues as part of treatment?
- f. How has the nature of the services that your agency provides changed over time?
- g. What is the capacity of your substance use treatment program (number of beds or number of people who can be treated monthly)?
 - Is the capacity sufficient to meet the need?
- h. Are there waitlists for substance use treatment services in agency/program?
 - Do certain individuals have priority status on waitlists? If parents involved in the child welfare system have priority status on waitlists, do you feel that this helps families get into treatment more quickly?
- i. In your opinion, are the available substance abuse treatment services provided by your agency/program effective in addressing the opioid and other substance use problems of families in the county?

2. Tell us about your caseload for substance use treatment services.

Possible probes:

- a. What portion of your caseload comprises (1) parents and (2) child welfare-involved parents?
- b. [If the caseload includes more than child welfare clients] Do child welfare clients differ in any way from other clients?
 - Does court involvement affect motivation for treatment?
 - Do you spend time preparing reports for family/dependency and/or criminal court?

C. Substance Use Treatment for Child Welfare–Involved Families

1. We'd like to know more details about your clients who are child welfare-involved families with respect to their experiences with substance abuse treatment.

Possible probes:

Process of Referral:

- a. If you know, how do families engaged in the child welfare system get referred to or come to the attention of substance use treatment providers?
- b. Is this approach the same as or different from how others in the general population get connected to treatment?
- c. Do people voluntarily seek treatment? Are people referred for services? Do other agencies or the courts mandate treatment?
- d. Is there often a mandate from child welfare agencies or other legal authorities for treatment? If so, how does that influence treatment access, outcomes, and the likelihood of relapse?

Services:

- a. What substance abuse treatment services are typically available to child welfare clients?
 - Are these services inpatient or outpatient services?
 - Are these services family-friendly services?
 - Do they address family/parenting issues as part of treatment?
 - Are particular types of substance use treatment modalities preferred for child welfare families by the courts or by the child welfare agency?
 - Is medically assisted treatment used with child welfare-involved parents? Is this type of treatment sanctioned by the child welfare agency? By the dependency court?
 - What other recovery supports are available in conjunction with treatment or as aftercare? For instance, 12-step programs, sober housing options, faith based programs, or peer support?
 - Are there any kinds of treatment modalities that are not recommended by the child welfare agency and/or dependency courts for child welfare involved families?
- b. Does the involvement of the court (or potential for such involvement) seem to influence parents' motivations and ability to seek substance use treatment?
- c. Do families engaged in the child welfare system face similar or different struggles compared to families in the general population regarding participating in treatment and in recovery from substance use?
 - How have these struggles changed over time?
- d. For clients who enter treatment, typically how long are they actively in treatment, that is, attending frequent treatment sessions prior to any long term aftercare component?
- e. In your experience, approximately what proportion of clients in your program completes treatment? Is this proportion the same or different for child welfare-involved parents?
 - How does child welfare agency involvement or the potential for child welfare agency involvement influence parents' motivations and ability to seek substance use treatment?
- f. How does parents' success in treatment generally correspond with decisions in the child welfare system?
 - How likely is it that a client who completes treatment will regain custody of a child in foster care? Conversely, when parents fail to complete treatment, to what extent does that failure have implications for child welfare decision making?

Opioid Use and Treatment:

- a. Anecdotally we have heard from other jurisdictions that opioid use and misuse is qualitatively different than other drugs. Other child welfare systems have anecdotally found that they are facing different kinds of challenges with parental use of opioids. We are interested in finding out about your experience.
 - How are the struggles different for those battling opioid use compared to other substances? Describe them.

Cost of Treatment:

- a. How does child welfare-involved parents' health insurance coverage (or lack thereof) relate to parents' ability to access substance use treatment?
- b. If parents do not have health insurance, how is the cost of substance use treatment covered?

D. Interaction with Child Welfare Agencies and Other Partners

1. In what ways do you interact with the local child welfare agency?

Possible probes:

- a. Please describe how your program works with the child welfare system?
 - Once a parent engages in a treatment program, describe the ongoing interaction between you and the parent's child welfare worker?
- b. Can you describe your current relationship with the local child welfare agency? Has it changed since you have worked in this position? Since you have been in the substance use treatment field?

2. What other agencies or organizations are involved in responding to substance use issues among parents involved with the child welfare system?

Possible probes:

- a. Does your program actively work with other service providers who are working with the same families? I'm thinking of such agencies that address behavioral health? Domestic violence issues? Housing? Education? Employment and nutritional Services?
 - What role do these partners play, or what services do they provide?
- b. When there are multiple agencies working with a family does someone coordinate the work? Who?
- c. How do you work with partners to get families the services they need?
- d. How are referrals made to or from partner organizations?
- e. How are partner services coordinated?
- f. What feedback or information is shared?
- g. How do you work with the local court system(s) for child welfare-involved families that you serve?
 - Have you attended family/dependency court with a family?
 - Do you prepare reports for the child welfare worker and/or the court?
- h. Do you share data with the child welfare worker?
 - For instance data regarding urine drops, meeting attendance?
 - If so, how does that occur?
 - If not, why not?

- i. Do you attend community training with child welfare workers? Other community professionals?
- j. What challenges do you encounter in working with the child welfare system on behalf of your treatment clients? Have those challenges changed over time?
- k. What are the benefits or positive aspects of working with the child welfare system?

E. Success and Challenges

1. What strategies or aspects of your work do you see as most successful in addressing the needs of child welfare-involved families?

Possible probes:

- a. Why? What contributes to this success? How is success defined?
- b. What strategies have you found ineffective?
- c. What might the child welfare agency do to help you succeed?

2. In your opinion, what are the primary challenges to, or missing pieces in, your work with families struggling with substance use?

Possible probes:

- a. What is one thing that gets in the way (a barrier or challenge) that you most wish you could address?
- b. What would be most helpful to address these challenges?
- c. How do these barriers/challenges differ because of opioid use compared to other substance use?
 - How have these barriers/challenges changed over time?
 - How common are these barriers/challenges?
 - Do other communities share the same barriers/challenges, or are the barriers/challenges unique to your county?

3. What would be most helpful to you in working with these families?

Possible probes:

- a. If you had a magic wand, aside from additional financial resources, what would you do to help meet the needs of parents and children affected by substance use and involved in the child welfare system?

F. Recommendations for Other Respondents

1. Whom would you recommend that we speak with who can offer their professional perspective on your county's relationship between the child welfare system and substance use?

Possible probes:

- a. These professionals might include administrators or practitioners in public health, law enforcement, or judicial/legal matters.
- b. For those you recommend, would you be able to provide us with their contact information (email and telephone number)?

The closing remarks will include the following: thank you for participating, providing reassurance about confidentiality, reminding participants how the audio recording will be used, soliciting any questions, and providing contact information.