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Understanding Behavioral Health and Treatment Engagement with Former Users of Prenatal Substances: A Strengths-Focused Mixed Methods Inquiry

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UNDERSTANDING BEHAVIORAL HEALTH AND TREATMENT ENGAGEMENT WITH FORMER USERS OF PRENATAL SUBSTANCES: A STRENGTHS-FOCUSED MIXED METHODS INQUIRY

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ABSTRACT

Accessible services for users of prenatal substances are lacking, and treatment engagement is poor with services that are available. Furthermore, legal consequences are often punitive, which ultimately damages the well-being of mother and child. Milagro and FOCUS are two New Mexico programs that provide comprehensive, coordinated care, including medication-assisted treatment, to former users of prenatal substances during pregnancy (in the Milagro Program) and for three years post-birth (in the FOCUS Program). This mixed methods study explored the lived experiences of women from this complex, high-risk population, using a high-engagement sample of women who utilized services at both Milagro and FOCUS. Twenty-four former opioid users ages 25 to 42, with children ages 3 months to 35 months, were interviewed about their experiences of substance use, treatment services, and motherhood. To further characterize this sample, the study measured adverse childhood experiences, socioeconomic status, social support, and participants' therapeutic alliances with their early intervention specialists in the

FOCUS program. Significant themes emerged from both qualitative and quantitative data highlighting considerable hardships but also the substantial resiliency of these women, especially as it related to their commitments to their children. Most had been surprised by their pregnancy, and half had tried and failed to obtain substance use treatment due to lack of services or accessibility, even before engaging with the Milagro program. All participants expressed desire to maintain sobriety for the sake of their children. Most reported at least one childhood trauma as well as current psychosocial stressors, and yet all women also reported some kind of positive growth or resiliency factor(s). All participants reported having positive interpersonal support from the Milagro and FOCUS programs. Such findings advance an alternative narrative to understanding this population than those motivating the punitive legal measures mandated in 24 states. This study suggests that comprehensive, coordinated care from pregnancy through toddlerhood that fosters strong therapeutic alliances between providers and patients, can effectively engage women in this population and help sustain both sobriety and well-being. Suggestions for future research, such as exploring the potentially critical role of therapeutic relationships in the engagement process for this substance-using population, are offered.

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Introduction

Prenatal substance use impacts over 4% of US pregnancies (National Institute on Drug Abuse (NIDA), 1995), potentially resulting in impaired prenatal and postnatal child development, adverse birth outcomes, loss of parental custody, and adverse maternal health outcomes (Davis, Desrocher, & Moore, 2011; Suchman, Pajulo, DeCoste, & Mayes, 2006; Berg, Lynch, & Coles, 2008). Primary and secondary prevention strategies have been demonstrated to efficaciously prevent or reduce substance use in pregnancy. However, among women who use substances, pregnancy is associated with increased rates of discontinuation of medication-assisted substance use disorder treatment (Wilder, Lewis, & Winhusen, 2015), poor retention in substance use treatment in general (Haller, Knisely, Elswick, Dawson, & Schnoll, 1997), and a smaller likelihood of receiving any needed substance use treatment (Terplan, McNamara, & Chisolm, 2012). Furthermore, retention in substance use treatment is a significant predictor of successful treatment outcomes for pregnant substance users, and birth outcomes in particular (Jones, Svikis, & Tran, 2002; Ordean & Kahan, 2011).

Empirically Supported Treatments for Opioid Use Disorders Pre and Post Birth

Although opioid use disorder (OUD) was not an intended focus of the study, all women who elected to participate in this study were former opioid users. This incidental sampling outcome reflects a national trend: between 2009 and 2012, rates of identification at delivery of prenatal opiate use increased by four times, and rates of identification at delivery of neonatal abstinence syndrome (NAS) increased by three times (Patrick et al., 2015). Empirically-supported treatments for OUD are thus the focus

of this section.

A recent review summarized research from 75 studies on evidence-based treatments for women with OUD who were pregnant or parenting, and for their children (Klaman et al., 2017). This review concluded that medication-assisted treatment (MAT) during pregnancy and postpartum, within the context of comprehensive treatment, is the current clinical standard for treating women with OUD while pregnant or parenting. This standard of treatment has been found to prevent withdrawal and thus relapse or treatment dropout, though further research to develop evidence-based criteria or consensus statements is needed (Klaman et al., 2017). Specifically, comprehensive care should also include obstetrical care, medical care, case management, life skills, and counseling, as needed (Patrick et al., 2015). Treatment for OUD with methadone or buprenorphine additionally decreases risk of low-birth-weight, intrauterine growth restriction, and placental changes (Binder & Vavrinkova, 2008). While increases in MAT may be needed during pregnancy and are not associated with increased severity of neonatal abstinence syndrome (NAS), switching medication while pregnant is not advised at it can cause relapse. NAS is a common component of MAT and is manageable but may be less severe in response to prenatal buprenorphine versus methadone exposure (Klaman et al., 2017).

Psychosocial and behavioral interventions are utilized to treat substance use disorders across substances and populations (Brandon, 2014). Three learning theories are the foundation of all behavioral treatments for substance use disorders, including those for pregnant women: behaviorist learning theories, cognitive learning theories, and social learning theory (Jones & Kaltenbach, 2013). Some evidence-based treatments for prenatal substance use that use these theories in their approaches include: motivational

interviewing and motivational enhancement therapy, cognitive-behavioral therapies, contingency management, and the community reinforcement approach. In terms of a comprehensive treatment model, counseling would be only one aspect. The comprehensive approach to substance use treatment proceeds from the assumption that for a program to be effective it must address all components of a patient's life that may be negatively impacted by substance use including physical survival, physical health, psychological health, relationship health, social functioning, economic independence, and child-centered service (Jones & Kaltenbach, 2013). Given the increased risk for poor parenting that is seen in populations of women who struggle with addiction while pregnant (Barnard & McKegany, 2004; Suchman & Luthar, 2000), some comprehensive treatments also have as a primary focus to improve parenting skills.

Several reviews of comprehensive substance use treatment programs for pregnant and parenting women focus on integrated programs, or those that include on-site pregnancy and parenting- or child-related services with addiction treatment (Milligan et al., 2011; Niccols et al., 2010, Niccols et al., 2012; Niccols et al., 2012b), which will be described in further detail in a later section. Integrated treatment has been shown to have comparative advantages over non-integrated programs for both mom and baby. Women in integrated programs may spend more days in treatment (Milligan et al, 2011), have slightly greater improvements in parenting skills (Niccols et al., 2012b), and have slightly greater improvements in mental health (Niccols et al., 2010), versus women in non-integrated treatment. In terms of child outcomes, integrated care is associated with slightly greater improvements in emotional and behavioral functioning than that of infants whose mothers are in non-integrated treatments (Niccols et al., 2012).

Improvements in child development from pre to post treatment may also be greater for infants of women in integrated programs compared to those not in treatment, in terms of development and most growth parameters (Niccols et al., 2012). Comprehensive, integrated treatments are thus highlighted in this paper rather than those providing uncoordinated care or only substance use treatment.

Importance of Engaging Substance Users in Treatment During Pregnancy

Pregnancy is a time that uniquely offers the opportunity to reduce substance use and to reduce other unhealthy behaviors, as many women are motivated to do so as a result of impending motherhood (Hankin, McCaul, & Heussner, 2000). For example, pregnancy may be associated with increased utilization of methadone and residential treatment services during pregnancy, compared with time in treatment before pregnancy (Wolfe, Santos, Delucchi, & Gleghorn, 2007). Even small increases in the number of therapy sessions completed while pregnant (e.g., behavioral reinforcement of abstinence combined with brief motivational therapy, offered through a prenatal clinic) may improve both maternal and infant outcomes, including reduced drug use, increased birthweight, and increased likelihood of delivering a drug-free infant (Jones et al., 2002).

Pregnant women using substances are nevertheless more likely to receive inadequate prenatal care than pregnant nonusers, and both prenatal substance use and lack of prenatal care are associated with perinatal morbidity and mortality (Roberts & Pies, 2011; Terplan et al., 2012). Additionally, despite significant health advantages for both mother and baby to engage with medication-assisted treatment (MAT), pregnancy is associated with high rates of discontinuation of MAT, at estimates of up to 33% (Wilder et al., 2015). Thus, at a time during which mothers may significantly impact the long-

term health of their children, pregnant substance users and are at risk of poor engagement and with both prenatal care and medication-assisted treatment. Continuing this trend, the early postpartum period is a time of even higher risk for drop-outs from substance use treatments than the prenatal period, with estimates between 22-56% (Wilder et al., 2015).

Medication-assisted substance use treatment, as well as prenatal care and other medical treatment, may significantly reduce the risk of adverse birth outcomes for pregnant substance users. Increased adequacy of prenatal care has been found to reduce the risk of prematurity, low birth weight, and infants being born small for their gestational age (SGA), for births affected by prenatal exposure to injection drug use (IDU) (El-Mohandes et al., 2003). Specifically, in IDU-exposed infants, as the adequacy of PNC improved, SGA risk gradually declined; changes in PNC level were unrelated to SGA for mothers with no IDU (El-Mohandes et al., 2003). Furthermore, prenatal care and other healthy maternal behaviors may have a greater effect on birth outcomes for pregnant substance users versus women who do not use while pregnant, including infant birth weight, weeks of gestation, one and five Apgar scores, whether the infant was transferred to another hospital after delivery, and whether the infant was rehospitalized (Faden, Hanna, & Graubard, 1997). This study also found that although pregnant substance users were less likely to get prenatal care and take vitamins than pregnant nonusers, these behaviors had the greatest positive effects on pregnancy outcomes for those using multiple prenatal substance, indicating that positive health behaviors may buffer against negative birth outcomes related to prenatal substance use (Faden et al., 1997). Nevertheless, pregnant substance users utilize less prenatal care than do pregnant non-users (Faden et al., 1997). Thus, pregnant substance users are at elevated risk of poor

engagement and retention with the very services that may support optimal birth outcomes.

Some studies have explored potential reasons for pregnant substance users choosing not to engage of prenatal care. A comparative study of patterns of prenatal care among mothers who used methamphetamine prenatally in the United States (US) and New Zealand explored associations among prenatal substance use, child protective services (CPS) referral, and inadequate prenatal care (Wu et al., 2013). Inadequate prenatal care was found to be associated with CPS referral in the US but not New Zealand, even after accounting for demographic characteristics and prenatal substance use. US moms with a previous CPS referral were 7.15 times more likely to receive inadequate prenatal care than unreferred moms, while CPS referral was unrelated to prenatal care treatment in New Zealand. Authors hypothesized that this disparity could have related to different reporting mandates between the two countries. In New Zealand CPS referrals for prenatal substance use are only made when other adverse environmental conditions are present, while referrals only for prenatal substance use can be made in the US. Another study interviewed low-income women using substances and found that decisions around utilization of prenatal care centered on: concern for the health of their babies, social support, extrinsic barriers such as transportation, and fear of being reported to CPS (Roberts & Pies, 2011). Another study interviewed racially/ethnically diverse low-income women about their thoughts on screening for substance use in prenatal care (Roberts & Nuru-Jeter, 2010). Participants reported that they expected psychological, social, and legal consequences to be associated with being identified, such as feeling like a failure as a mother, being judged by providers, and being reported to CPS. They did not

expect providers to mitigate any of these anticipated possibilities, and attempted to protect themselves, by: avoiding and emotionally disengaging from prenatal care, attempting to cease using substances that are detectable in urine screens prior to their prenatal care visits, and consulting with their social networks on how to access prenatal care without being identified as using substances. It appears that US policy regarding mandated reporting may decrease use of prenatal services for women who may need it most.

Legal Consequences of Prenatal Substance Use. Before reviewing programmatic and individual patient factors that predict treatment engagement in this population, a brief summary of legal issues that may impact the availability and delivery of their services is warranted. Currently 24 states and the District of Columbia view substance use during pregnancy to be child abuse and three may use it as grounds for civil commitment. Twenty-three states and the District of Columbia mandate health care professionals to report suspected prenatal drug use, and seven states require them to test for prenatal substance exposure if they have reason to suspect it (Guttmacher Institute, 2017). Women struggling with addiction during pregnancy frequently endure judgmental treatment not only by the legal system but also by health care professionals. Such realities often deter women from seeking treatment for their issues with substance use (Jones & Kaltenbach, 2013). Punitive legal measures convey a conceptualization of substance use disorder as a moral failing or lack of self-discipline rather than what has been demonstrated by SUD treatment research, that substance use disorder is a life-threatening and significantly impairing illness. These legal measures do not account for the fact that the majority of women who struggle with addiction while pregnant had substance use

issues that preceded the pregnancy.

Although the 1970s saw a surge in research-based specialized comprehensive treatment for pregnant women with SUD, in the late 1980s the cocaine epidemic in the country fueled a media focus on what was termed the "crack baby phenomenon," elevating prejudice and fear against these women (Jones & Kaltenbach, 2013). Thus began harsh legal consequences for prenatal substance use, which continue to this day, based on erroneous beliefs that such punitive measures can automatically cease the behaviors associated with this illness, and that substance-using mothers are unfit mothers. Much research suggests, however, that women who struggle with addictions can provide adequate parenting, particularly in the context of adequate supports and services (Jones & Kaltenbach, 2013). Unsurprisingly, such legal measures result in poorer outcomes for both family health and societal cost. Women fearing prosecution for prenatal substance use are more likely to have an abortion or to forego both SUD treatment and prenatal care if they choose to remain pregnant, motivating the United States General Accounting Office to conclude that fear of prosecution and loss of custody act as a significant "barrier to treatment" for pregnant women struggling with addiction (Scott, 2006, p. 213). If women do engage with prenatal healthcare they are less likely to confide in their physicians about their drug use, which could potentially lead to poor health outcomes and economic costs associated with drug-exposed pregnancies (Scott, 2006). Thus, coercive legal sanctions could lead to more premature deliveries as a result of lack of prenatal care. Furthermore, incarceration frequently separates children from their primary and often sole caretaker, thus forcing them into the foster care system. Because women's prisons, particularly within the federal system, are often located far from the women's

homes, making it difficult for women to maintain relationships with their children, incarceration often results in parental rights being terminated. As a result, often the babies most in need of familial care are born into adverse circumstances. Arguments against coercive fetal abuse prosecutions have also asserted that as long as adequate drug treatment centers are not available that will treat pregnant women, such coercive actions are not justified (Kowalski, 1998). Given the significant economic costs of incarceration and prosecution, and the documented cost effectiveness of programs that result in lower intensive care costs (e.g., NICU stays) (Svikis et al., 1997), more drug-free infants, and less need for foster care (McCollum, 2005), a treatment model is more likely to be cost effective than punitive measures (Scott, 2006).

Unique Treatment Needs of Users of Prenatal Substances

As stated previously, comprehensive, integrated treatment has been shown to be effective and targets not only substance use, but also the contextual factors that increase risk for substance use in the first place, such as mental health issues and psychosocial support, and important life domains that can be negatively impacted by substance use, such as parenting. A comprehensive, integrated treatment approach is the most likely to lead to positive outcomes for maternal and child health, mother-infant attachment, and child safety (Saia et al., 2016; SAMHSA, 2016). Substance use during pregnancy occurs in the context of highly complex social, individual, and environmental factors, including a likely history of childhood trauma, poor nutrition, severe stress, violence in multiple forms, insufficient housing, exposure to environmental toxins and diseases, and depression, which each can affect postnatal development (Robins & Mills, 1993). Women who struggle with addiction while pregnant represent a high-risk group with an

array of mental and physical health treatment needs. They are more likely to have a history of abuse, including physical and sexual abuse in childhood (Carlson, Shafer, & Duffee, 2010), and especially violent trauma (Thompson & Kingree, 1998), including from physical intimate partner abuse (Velez et al., 2006). Pregnant and postpartum women who use substances are likely to have symptoms of psychiatric distress, especially PTSD, and thus should ideally receive thorough psychiatric exams and be referred to appropriate mental health treatments as part of their substance use treatment (Linden, Torchalla, & Krausz, 2013). Other variables strongly associated with prenatal substance use include: income levels at or below US $10,000, education below the 12th grade; being unmarried, unemployed, and of minority status (for all substances except for tobacco), which are themselves predictors of poor health independent of substance use (Braveman & Gottlieb, 2014). Women who happen to get pregnant while struggling with an addiction are thus more likely to have both elevated need for mental health and instrumental support.

In addition to gender-specific treatment needs that span multiple socioecological levels of their lived experiences, women who abuse substances may have difficulty providing a nurturing and stable home environment for their children (Barnard & McKeganey, 2004). Maternal addiction has been linked with lower involvement and interest in their children's activities (Suchman & Luthar, 2000); in the context of cohabitation with partners and having fewer children, maternal addiction may also increase the risk of overprotective parenting styles (Suchman & Luthar, 2000). Interventions to improve parenting skills, provided in the context of substance abuse treatment, have been shown to improve not only maternal parenting ability but also

maternal substance use and mental health (Barnard & McKeganey, 2004; Camp & Finkelstein, 1997). Other treatments have explicitly targeted reflective functioning, or mothers' capacity to understand their infants' behavior in the context of the infants' mental states and developmental status, as part of residential substance abuse treatment. Results indicated that this treatment structure not only improved mothers' reflective functioning and child developmental scores, but also helped mothers sustain abstinence (Pajulo et al., 2008). These findings suggest that interventions targeting parenting may be of particular significance for families impacted by prenatal substance use.

Mental health treatment needs of users of prenatal substances. The risk factors outlined above suggest that prenatal substance users represent a vulnerable group facing many difficulties and disadvantages. Indeed, a survey studying pregnant and postpartum teenage girls entering substance abuse treatments reported high mental health treatment needs within their sample; co-occurring mental health disorders impacted more than half of participants (Coleman-Cowger, 2012). Additionally, over half of the sample had been severely victimized in the past year, had involvement with the criminal justice system at the time of enrollment, and qualified for a diagnosis of substance dependence. Despite the mental health treatment needs and overwhelming stressors faced by most participants, African American and Hispanic girls received far less mental health treatment than White participants (Coleman-Cowger, 2012). For mothers with substance abuse histories, comorbid mental health issues, such as depression and anxiety, may increase the risk for their children to have internalizing problems, with even greater risk among children whose mothers have severe mental illness (Hser et al., 2015). Others have also found high incidence of both psychiatric disorders and substance use among

pregnant women currently receiving prenatal care; those who screened positively for either were also more likely to have received inadequate prenatal care previously (Kelly, Zatzik, & Anders, 2001). Because mental health issues may influence continued use during pregnancy and utilization of prenatal services, and compromise parenting ability, integrating mental health services into substance abuse treatment may likely improve intervention outcomes for current and users of prenatal substances and their children.

Program and Systemic Factors Associated with Engagement

Programs that provide coordinated, comprehensive, family-centered care are better at engaging pregnant and parenting substance using women into treatment – and provide more effective treatment – than are programs that do not incorporate these factors (Finkelstein, 1994). Nevertheless, such comprehensive, coordinated, and tailored treatment services are disturbingly lacking for pregnant substance users (Finkelstein, 1994). Coordinating and accessing all of these services may still be too burdensome, particularly for the individuals most at risk for using substances while pregnant, who already face many other difficulties.

Program factors that have been found to significantly predict increased engagement and/or retention with services include: provision of long-term housing, pregnancy-specific interventions, incentives, matching of services to individual clients (such as vocational training), and enhanced treatment that includes transportation, outreach, and child-care services (Brigham, Winhusen, Lewis, & Kropp, 2010; Hser, Polinsky, Maglione, & Anglin, 1999; Linden et al., 2013; Marsh, D'Aunno, & Smith, 2000). Sadly, most of these treatment features are not the norm for services available to most pregnant substance users. In terms of quality and appropriateness of treatment

offered to pregnant addicts, very few have been developed specifically for women and particularly for pregnant women (Finkelstein, 1994). Male-based recovery models focus mainly on the individual rather than on a pregnant individual within the context of a family and environment. In a survey of five U.S. cities' availability of treatment programs to pregnant women, 80% did accept pregnant women but many didn't accept women on Medicaid nor provide childcare assistance (Breibart, Chavkin, & Wise, 1994). Additionally, staff trained for providing prenatal care or substance abuse treatment often lack knowledge and training regarding issues of pregnancy or addiction.

Several studies provide insight into the programmatic factors that may influence the likelihood of pregnant substance users starting and staying in treatment, such as the provision of social services or incentives. For example, incentives in the $25-$30 range in one study were shown to significantly increase attendance and retention, including more consecutive and overall weeks of attendance compared to treatment with no financial incentives (Brigham et al., 2010). Another study of indigent crack-cocaine users found that providing pregnancy-specific interventions that included parenting classes, pregnancy and nutrition classes, and videos on pregnancy and substance abuse, significantly decreased dropouts and increased rates of completion, in comparison to substance abuse treatment only (Weisdorf, Parran, Graham, & Snyder, 1999). Another study asked clients in community-based drug treatment programs to identify which among the following categories of services were important for them to receive alongside their substance use treatment: medical, HIV-related, counseling, vocational, practical skills, housing, transportation, legal, social, cultural, and family (Hser, et al., 1999). Results indicated that the matching of co-occurring problems with appropriate services as

determined by this client survey – particularly vocational training, child care, transportation, and housing – improved treatment outcomes, including reduced substance use, increased treatment retention, improved client occupational and interpersonal functioning, and increased client satisfaction (Hser et al., 1999). The fact that client-identified treatment enhancements improved outcomes suggest that clients themselves may be a critical source for identifying appropriate treatment plans, especially for pregnant substance users. A similar study (Marsh et al., 2000) found that a substance use treatment for pregnant substance users – which was enhanced with provisions for transportation, outreach, and child-care services - was more effective at decreasing substance use and increasing use of other social services like parenting classes, than treatment as usual (TAU) without these enhancements. Consistent with these findings, another study of mothers in a vulnerable neighborhood in British Columbia who had been impacted by prenatal substance use found that limitations on their lengths of stay in supportive housing was a significant barrier to their accessing services and care earlier in pregnancy, even though all were covered by national healthcare (Linden et al., 2013). Despite the evidence for improved outcomes as a result of services matched to clients' needs for this population, such a feature in prenatal substance use treatment is rare (Smith & Marsh, 2002).

Integrated, multidisciplinary treatment may also improve birth outcomes. For example, in a multidisciplinary clinic with consistent providers and amenities tailored to the needs of pregnant women with substance use problem, offering an array of services integrated into the prenatal visit, the same number of appointments were scheduled for both substance abusers and controls, and while substance abusers did miss more

appointments, they had neonates that were no smaller than those of controls. Amenities and program structure in this clinic were designed to encourage attendance, such as the provision of a more private waiting area, meals, transportation, and importantly, collocation of services in one physical location with minimal waiting. Authors attributed the finding of comparable birth outcomes between substance users and nonusers to the comprehensive care structure, which mitigated the disparity in quality of prenatal care between substance abusers and non-users, by encouraging women to attend an adequate number of prenatal care appointments (Funai, White, Lee, Allen, & Kuczynski, 2003).

Other studies have demonstrated a positive impact of integrated care on birth and child development outcomes. For example, a review by Milligan and colleagues (2011b) found that pregnant women with substance abuse issues receiving integrated treatment had infants with higher birth weights, fewer birth complications, larger head circumferences, and fewer positive infant toxicology screens, than women with substance abuse issues not in treatment. This review also found that women in integrated programs attended more prenatal care visits than those in non-integrated programs. Another review explored the impact of integrated programs on child outcomes from intake to post-test, and whether integrated programs are more effective than non-integrated programs in their impact on child outcomes (Niccols et al., 2012). Authors reported that infants of women in integrated programs showed improvements in developmental test scores, and emotional and behavioral functioning, from pre to post test. Most developmental scores and most growth parameters (length, weight, and head circumference) were higher for infants of women in integrated programs than for women not in treatment. Integrated programs were also associated with greater increases in child emotional and behavioral

functioning over non-integrated programs.

Individual Client Predictors of Engagement

Several client mental health and sociodemographic factors may help identify those pregnant substance users who are most at risk for poor engagement and/or retention. For example, addiction and mental illness during pregnancy are both associated with low utilization of prenatal care, obstetrical complications, and other psychosocial difficulties (Mallouh, 1996). Additional correlates of poor attendance and high dropout may include returning to chaotic home environments after treatment ending and having unmet physical and health needs (Mallouh, 1996). One study compared child protective services- (CPS) involved and non-CPS-involved pregnant women on treatment retention. Although CPS-involved women stayed in treatment longer, they were still more likely to be discharged unsatisfactorily, and were more likely to be treatment-mandated (Hohman, Shillington, & Baxter, 2003). Authors speculated that the substance use treatment offered to pregnant women in this study might not have been best suited for treatment-mandated clients, as they may have been more geared towards women who were ready to initiate behavior change than towards those beginning to contemplate it. They additionally introduced the possibility that CPS requirements create undue burdens that threaten women's ability to successfully complete treatment (Hohman, Shillington, & Baxter, 2003). For substance use in general, across clients from all backgrounds and not specifically pregnant women, the following factors predict increased risk of dropout: younger age, female gender, fewer years of education, no history of gainful employment, non-White race, co-occurring problems at intake, heroin as the primary drug of choice, and high severity of drug dependence (Amaro et al., 2007; Choi & Ryan, 2006).

Together the set of program and client predictors suggests potential pathways by which risk factors might reduce engagement with services, and thus potential targets for improving services. Specifically, treatments may be improved in the degree to which they provide comprehensive and coordinated care that addresses individual client needs. Additionally, knowledge of individual risk factors for poor engagement may possibly increase timely identification of these individuals, who may be offered additional incentives for treatment, or other treatment modifications that might increase engagement.

Advancing an Alternate Understanding of Addiction During Pregnancy

If current legal measures in 23 states rest on assumptions that are unsupported by treatment research and principles of economic responsibility, how might such misjudgments be corrected? Even within provider populations, the attributions for substance use even in the context of a substance use disorder center on individual failings of the patients (Benoit et al., 2014). Experimental induction of taking others' perspectives has been shown to decrease internal attributions for negative behaviors (Hooper et al., 2015) and to decrease bias against stigmatized groups (Shih et al., 2013). Perhaps a useful starting point could be learning more about the lived experiences of women in this population, building an understanding of the context to guide more external attributions for these behaviors that can in turn guide more effective policy.

Qualitative Inquiry as a Tool for Understanding and Treating Marginalized Populations

Qualitative research is a critical place to start in order to understand how best serve and advocate for a disadvantaged population (Reyes Cruz & Sonn, 2011). It may

help clarify which services would work best for them and to truly explicate the barriers to accessing needed services; clients may provide critical data to help identify their own needs to inform appropriate treatment plans such that treatment outcomes may be improved (Hser et al., 1999). Additionally, an important first step in reducing health disparities is to understand the lived experiences of individuals from a particular disadvantaged group (Lillie-Blanton & LaViest, 2013). By providing the opportunity for pregnant substance users to tell their stories about their substance use histories as they relate to motherhood and treatment services utilization, insight may be gained into how best to serve their treatment needs.

Qualitative research with pregnant substance users specifically has shed some light on mothers' lived experiences around substance use, motherhood, and their involvement with substance abuse treatment and prenatal care. Some provided support for past qualitative research, while others provided new insights uniquely accessible through narrative inquiry. One study interviewed 27 pregnant and postpartum women currently accessing substance use harm reduction services in Vancouver, Canada; mothers reported pervasive adversity and trauma from childhood through adulthood across multiple contexts, including intimate partner violence, gender-based psychological violence by the healthcare system, and transgenerational trauma (Torchalla, Linden, Strehlau, Neilson, & Krausz, 2015). These results highlighted the need to focus on the socioecological context rather than primarily on individual client factors when working with this population.

Research into processes around engaging with substance use treatment offer potential insight into increasing treatment effectiveness. One study of mothers accessing

opioid treatment programs indicated that fear of CPS involvement, losing their children, self-judgment, and judgment by health professionals as being a "bad mother" reduced their engagement with services. Women who reported that staff were non-judgmental and supportive of their roles as mothers, however, reported increased confidence in their mothering abilities and hope for their futures (Harvey, Schmied, Nicholls, & Dahlen, 2015). An analysis of the life history interviews of 34 women in residential treatment programs for pregnant and parenting women found that many pregnant substance addicts feared that seeking help would result in punitive actions from service providers; such as the loss of their children, or repercussions for seeking help from their partners, especially in regard to domestic violence (Jessup, Humphreys, Brindis, & Lee, 2003). Furthermore, pursuing substance use treatment may necessitate time away from an infant or other children who need care, as many programs do not provide child care. These and other practical issues such as a lack of transportation, insurance, or money to pay for treatment, may reduce the likelihood of seeking or obtaining services. Additionally, the initial step in treatment often involves detoxification, which may incite fear in both the treatment providers and mothers of precipitating fetal withdrawal (Jessup et al., 2003). Another study conducted in-depth interviews with recently-pregnant women who had used substances during their pregnancies; they reported that women encountered significant barriers to treatment, including a lack of suitable treatment options less than 100 miles away from them, and intentional avoidance of detection by criminal justice authorities by avoiding treatment (Stone, 2015). In qualitative interviews that attempted to characterize the relationship between 12 doulas and adolescent mothers, the doulas' degree of contact and availability was seen by mothers as a marker of relationship quality with their

providers (Humphries & Korfmacher, 2012), suggesting the importance of the client-provider relationship for any prenatal treatment.

A meta-analysis of qualitative studies explored the process of engagement with integrated programs for women with substance use issues and their children (Sword et al., 2009). Emerging themes for factors that facilitated recovery included developing a sense of self-identity, developing personal agency, giving and receiving social support, engaging with program staff, sharing with others about their challenges, feelings, and past experiences; recognizing their past patterns of destructive behavior, and goal setting. Results also indicated that children sustained women's motivation towards recovery (Sword et al., 2009). Another study conducted focus groups with women accessing integrated early childhood and parenting services in opioid treatment clinics, and found a similar importance of a trusting relationship between patients and providers, as well as supporting previous research about the importance of a multidisciplinary treatment model and continuity of care (Harvey, Schmied, Nicholls, & Dahlen, 2012).

Other studies explored in depth the process of recovering from substance use and particularly how it relates to motherhood. One study interviewed twenty-four pregnant and postpartum women currently in substance use treatment (Radcliffe, 2011). Mothers in this study reported that discovery of being pregnant, or the birth of their babies, spurred engagement or re-engagement with drug treatment services and inspired them to change their lives. Impending motherhood was also associated in their narratives with a sense of becoming "normal" and stable in order to be an adequate parent, in the process relying on the support of professional services and personal relationships (Radcliffe, 2011, p. 987). Mothers also showed attempts in their narrative construction to build an

identity of being a good mother by disavowing their former identities as drug users (Radcliffe, 2011). Another study of parents on opiate replacement therapy reported that MAT was integrated into their self-identity in relation to their roles as parents; it was framed either as a way to do what was best for their babies, or as a potential barrier to adequate parenting, as a result of negative societal views of substance use (Chandler et al., 2012). Such research highlights the importance of women's identities as mothers in their process of engaging with substance use treatment.

Resilience in Disadvantaged Populations

The concept of resilience in the field of psychology refers to the presence of optimal health and mental health outcomes in the context of environmental risk (Rutter, 1987). Resilience can refer to multiple levels of protective factors in the socio-ecological model of health (Zimmernan & Woolf, 2014), including individual protective factors or assets that reside within the individual, or external resources such as social support at the level of family, peers, community, and institutions (Fergus & Zimmerman, 2006). This study aimed to shed light on both individual assets and social support resources of women who had successfully maintained engagement with treatment services for SUD from pregnancy through post birth, including treatment program aspects that most effectively supported health and engagement.

Current Study

To date, no study has explored the lived experience of former users of prenatal substances (FUPS) who utilized SUD treatment services from pre to post birth, utilizing both quantitative and qualitative measures of research-supported predictors for treatment engagement. Factors that have been demonstrated to significantly predict or influence

treatment engagement for FUPS, were measured through standardized assessments, as well as through the gathering of women's individual narratives regarding substance use, motherhood, and past and current provider relationships. Such an endeavor provides useful information – in particular for the women being served by the Milagro and FOCUS programs (Family Options: Caring, Understanding, Solution) - about factors that support engagement, and expands on existing knowledge of potential mechanisms by which these factors may exert influence on the health behaviors and other critical life factors of pregnant substance users. This study uniquely provided former users of prenatal substances with the chance to discuss their engagement with treatment and speak from their own perspectives. In addition to the obvious discrepancies between most treatments available to pregnant substance users and those that have been shown to most effectively increase engagement and retention, additional factors and mechanisms may be at play in the accessing of needed services for pregnant substance users; factors which may come to light when these women are provided with a supportive, semi-structured forum in which to share their stories.

In addition to the exploratory intent of the qualitative interview, several variables were measured to address a few specific hypotheses. We hypothesized that socioeconomic status would be negatively correlated with emotional and instrumental support, meaning in life, and therapeutic alliance, and positively associated with depression and history of ACEs. We also predicted that current level of depression would be positively related to history of ACEs, and negatively related to therapeutic alliance, emotional and instrumental support, and meaning in life. We hypothesized that therapeutic alliance would be significantly positively related to emotional and

instrumental support. Finally, we also hypothesized that ACEs would be negatively related to emotional and instrumental support, meaning and purpose, and therapeutic alliance.

Methods

Sample, Participant Selection, and Recruitment

Milagro Outpatient Clinic is the first program in New Mexico created to serve the needs of pregnant women with substance abuse or addiction issues; it enrolls pregnant woman with a history of or current substance abuse issues and serves around 100-200 pregnant mothers per year. Services include prenatal care, medication assisted substance use treatment through provision of buprenorphine or methadone, case management, and outpatient counseling. After delivery, mothers in Milagro are referred to the FOCUS program, which provides the following comprehensive services: family medical and child medical services, opiate-replacement therapy, home-based early intervention services, including developmental support, occupational therapy, physical therapy, speech therapy, and parent counseling focused on mother's parenting skills; and social work services to facilitate mothers' connection with community supports. FOCUS has current enrollments of about 200-300 at any given time and serves over 300 families per year, most of whom include a mother who is opioid dependent and receiving medication-assisted treatment. FOCUS medical appointments occur at the following University of New Mexico Hospital outpatient clinics: one day per week at the North Valley Clinic and one day per week at the Southeast Heights Center for Family and Community Health.

This study recruited women meeting the following criteria: 1) prior utilization of services in the Milagro program and current enrollment in medical and early intervention

services in the FOCUS Clinic, 2) current engagement with medication assisted substance abuse treatment, 3) with a child also in the FOCUS program between the ages of 3 and 35 months, and 4) over the age of 18. Restriction of recruitment to those with children three months and older was done to ensure that woman had been in the FOCUS clinic for a sufficient amount of time to provide some detail about their experiences of treatment in that clinic. Twenty-four women were recruited in order to gather enough qualitative data to reach average saturation points (Guest, Bust, & Johnson, 2008), times two; to provide the option of analyzing two separate subsets of the data in the case that two categorically different groups emerged through the iterative qualitative data analysis process.

Recruitment occurred over nine total days at the FOCUS clinic in May and June 2016. At the beginning of each clinic day, case managers in the FO CUS clinic informed the student investigator about mothers scheduled for medical appointments that day whose children were in the appropriate age range for the study. The case managers then briefly informed these mothers that a research study was taking place and offered to introduce these mothers to the student investigator, who would follow up with detailed study recruitment information and a screening if indicated. The case managers, who had been working with FOCUS families for up to roughly three years, additionally identified patients who should not have been recruited for reasons other than eligibility and did not offer to introduce the student investigator to these individuals. They included mothers who experienced acute mental illness involving psychosis, and mothers for whom participation in the study, which included a probing interview about motherhood and addiction, was not clinically indicated. For example, if a mother had recently relapsed, case managers did not advise the student investigator to approach this mother about the

study. Among mothers of children within the appropriate age range for the study, about four to five per clinic day, about one to two per day of recruitment were not introduced to the student investigator by case managers for these reasons. Additionally, one woman who was informed briefly that there was a research study recruiting women in FOCUS and was offered the opportunity to hear more, declined interest and thus was not introduced to the study investigator or recruited. One mother, after hearing details about the study from the study investigator, declined to participate. All mothers who agreed to meet the student investigator and expressed interest in the study after learning study details, were determined to be eligible for the study after being screened. Five mothers signed up and scheduled appointments for the study but were unavailable for the study or not home on the dates of their appointments, and did not respond to follow-up calls. Of the 30 participants introduced to the student researcher, 29 (97%) agreed to participate and 24 (80%) ultimately participated. Because of the initial screening efforts of the FOCUS clinic staff, women informed about the study represent about 75% of the potential participants seen in the FOCUS clinics on recruitment days, and those who participated represent about 83% of those initially screened.

As shown in Table 1, mothers ranged in age from 21.3 to 36.9 years, averaging 30.7 years, with children ages 3 to 35 months, averaging 1.5 years.

Table 1

Sample Characteristics

	Mean (SD)	Range	
Mom: Age, years	30.7 (4.3)	21.3 – 36.9	
Child: Age, years	1.5 (.8)	.3 – 2.9	
		Frequency	Percent
Mom education (highest level completed)	Less than 7th grade	1	4.2
	Junior high/middle school (9th grade)	3	12.5
	Partial high school (10th or 11th grade)	7	29.2
	High school graduate	4	20.8
	Partial college (at least one year)	9	33.3
	College education	0	0
	Graduate degree	0	0
Child race/ethnicity	Hispanic	15	62.5
	White	7	29.2
	African American	2	8.3
	Native American/American Indian	3	12.5
	Mean (SD)	Range	
Yearly household income including federal aid ($)	27,357(23,597)	0-90,000	
Mom personal income ($)	5,179(6548)	0-21,600	

Note: Racial and ethnic categories were not treated as mutually exclusive. Thus, percentages add up to more than 100 total.

Screening and Consent

Screening occurred at the FOCUS Clinic. After a mother expressed interest in the study, the investigator briefly informed her about the study and assessed interest; if the mother was interested, a brief screen was performed to assess eligibility. If the mother was eligible she was invited to schedule a study session either at the FOCUS Clinic or in her home. All participants who enrolled in the study elected to have the study sessions in their homes. The investigator arranged a time of mutual convenience to go to the mother's home and conduct the interview and administer the questionnaires. At the beginning of the study session at a later date, the investigator read the consent form with the participant and discussed it in detail before obtaining consent. Participants were assured that all questions and parts of the study were completely voluntary and that they could stop the study session or interview at any time. Additionally, they were assured that participation in the study would not impact their care in the FOCUS clinic, and that study data were confidential and would not be shared with clinic staff except in aggregate form (i.e., de-identified) and only with those who were investigators on the study.

Assessments and Measures

Data included both standardized questionnaires and a qualitative interview (see Appendix A). The content areas for questions included in this interview are each justified by past research suggesting possible reasons for the difficulties of pregnant substance users engaging with and staying in treatment, as enumerated previously.

Qualitative Interview. The qualitative interview was drafted in consultation with Drs. Hsi and Maclean, medical and administrative directors, respectively, of the FOCUS clinic, who have extensive experience with this specific population and the treatment

teams; Dr. Erickson, the student investigator's graduate advisor, a pediatric psychology researcher with specialty in maternal parenting with medically fragile children; Mija Serrano, an early intervention specialist in the Milagro and FOCUS Program, and nursing researcher Dr. Wayland, an expert in qualitative research methods with vulnerable women, such as victims of interpersonal abuse. The interview went through multiple drafts incorporating feedback from all of these individuals and was piloted with an early intervention specialist in the Milagro and FOCUS programs. Particular care was given to both the ordering and wording of questions, in order to facilitate self-disclosure about sensitive topics and to highlight particular components of women's identities. For example, the interview began with a lighthearted question about the mothers' favorite aspects of their children at their current ages. This functioned both to emphasize the interview's focus on women's narratives of motherhood, and to allow for some initial rapport building with the interviewer. Additionally, although women's narratives around addiction were a focus in the interview, this was the last main topic addressed, and the first question about substance use elicited their reasons for sobriety, rather than a description of their former struggles. This question was also worded with the intention of framing the participants' responses as strengths; it began with the statement that quitting substances is extremely difficult, and then asked about their motivations for quitting. Reflections, or statements intended to mirror content of the speaker's preceding speech (Miller & Rollnick, 2013), were also used between questions to demonstrate interviewer empathy and to reinforce mothers' reflection on their strengths. As enumerated previously, all study procedures were completed in the homes of participants by their choice. Interviews ranged in length from 17 to 95 minutes, with an average of 49

minutes.

Adverse Childhood Experiences (ACE) Survey. As described previously, women who use substances prenatally are more likely than pregnant non-users to have experienced abuse as a child (Carlson et al., 2010). The Adverse Childhood Experiences Survey (ACES) is a standardized and reliable measure of adverse childhood experiences which has been found to predict a plethora of health and mental health outcomes into adulthood (Edwards, Holden, Felitti, & Anda, 2003). A newer version allows for quantification of trauma severity and frequency, in order to differentiate among individuals who have experienced equivalent childhood traumas, but to different degrees (LaNoue, Graeber, Helitzer, & Fawcett, 2013). It asks whether individuals have experienced each of the following in their childhoods: exposure to violent environments, physical abuse, sexual abuse, emotional neglect, emotional abuse, and physical neglect. In addition to these binary measures, the questionnaire elicits a classification of the frequency as being one of five different levels ranging from "It happened once or twice" to "It happened often, for many years." Each trauma was also coded by participants as being one of four different levels of severity, from "not that severe" to "very severe." Greater frequency and severity of adverse experiences are denoted by higher numbers, within a range of 1-5 or 1-4, respectively. These numbers are then multiplied together to create a composite severity by frequency score from 0 to 20 (LaNoue et al., 2013). For example, a score of 0 for an adverse childhood event would indicate that the individual did not experience the event; a score of 20 would indicate that s/he experienced the event in childhood and reported that it was the highest level of severity and frequency (i.e., from multiplying one by five by four). Similarly, someone who indicated that their

trauma had a severity level of 2 ("somewhat severe") and a frequency level of 4 ("It happened on and off, for many year") would get a score of 8 (i.e., from multiplying one by two by four). Average Cronbach's alpha for this composite variable was found to be .81 (LaNoue et al., 2013) in a previous study that assessed ACEs in middle-aged adults who indicated they had experienced childhood adversity. To date no other published studies have utilized this composite measure

Sociodemographic and environmental risk data. Demographic data collected included variables previously identified as being risk or protective factors for prenatal substance use, as well as additional variables that predict health outcomes in general, including self-reported: income, years of education, date of birth (to obtain age), and race and ethnicity.

Years of education and income, two well-documented social determinants of health (Braveman & Gottlieb, 2014), were each standardized and then averaged together to create the following composite SES variables in which income and education were given equal weight: overall education score (including the participant's education, that of her childhood caregivers, and that of her child's father if he was a significant part of her life) and household income, overall education and the participant's personal income, participant education and household income; and participant education and income. Education was measured using the Barratt Simplified Measure of Social Status (BSMSS), a measure of social status that quantifies educational attainment (Barratt, 2006). This measure was modified to include questions about annual household and personal income.

Coping and mental health. Maternal mental health was assessed using a brief depression inventory. The Edinburgh Depression Rating Scale (EDPS) is one of the most

widely used screening tools for postnatal depressive symptoms; it has ten questions and has been validated for identifying postpartum depression (Chaudron et al., 2010). The link between maternal depression and adverse functioning and development of offspring is well-documented (Goodman & Gotlib, 1999).

Maternal coping was assessed using an open-ended question in the qualitative interview and a standardized measure of perceived meaning and purpose in life. Specifically, women were asked how they had been managing since the birth of their most recent child (see Appendix A, question 1). The NIH Toolbox Meaning and Purpose measure, a psychometrically validated measure of perceived life meaning (Salsman, 2013), was used to assess the extent to which participants felt that their lives reflected their goals and purposes beyond affect and physical well-being.

Participants' substance use history and health goals. Participants were provided with the opportunity to discuss their experiences with substance use and sobriety in an open-ended format during the qualitative interview (see Appendix A, questions 29-35). Specifically, they were asked about their former reasons for using, their reasons for quitting, what helped them with sobriety, their current personal health goals, factors they believed would help with those goals, anticipated barriers to continued sobriety, and anything else they wanted to share about their story of getting sober. Standardized measures of previous substance use were intentionally not used for several reasons. We hoped to facilitate participant comfort with the qualitative interview by emphasizing that details of their past substance use were not of interest. We also wanted to avoid gathering any sensitive information about participants that could potentially be harmful if confidentiality were compromised, and that was not necessary to develop an

understanding of the function that substances had previously played in the lives of participants.

Views Towards Pregnancy and Motherhood. Pregnancy may be an optimal time for improving healthy behaviors in women, as they may be motivated to do so for the sake of their future children (Hankin et al., 2000). However, individual variability in women's views towards their pregnancy, and towards motherhood in general, may be one factor that helps explain some of the variability in health behaviors that impact prenatal development, such as utilization of prenatal care and other medical services both pre- and postnatally. Thus, mothers were asked about their experiences with the most recent pregnancy and birth, what it meant to them be a mother, their hopes for their children's lives in the future, and their goals for their most recent child for the next year (See Appendix A, questions, 5; 15-17). The interview included questions about participants' children, both to establish rapport early in the interviews and to gather information about the nature of the mothers' relationship with their children (see Appendix A, questions 2-3).

Social support. Mothers were given an open-ended question about how the father of their child felt about the new child, as a way to sensitively gather information about the nature of her relationship with him (see Appendix A, question 4). Participants were also given standardized, reliable, valid measures of emotional and instrumental support from the NIH Toolbox (Cyranowski et al., 2013).

Past and present experiences with medical providers. The success of intervention programs for pregnant women, as well as their engagement with these services, may depend in part on the strength of the relationship between client and

provider (Humphries & Korfmacher, 2012). One possible barrier to treatment for pregnant women may also include distrust of providers and fear of repercussions, such as losing child custody (Jessup et al., 2003). Thus, open-ended questions were administered to elicit clients' impressions of and experiences with providers at both Milagro and FOCUS to date at the time of assessment, as well as their past experiences with prenatal care providers and how those compared with Milagro (See Appendix A, questions 6-14; 18-28). Specifically, participants were asked for their overall impressions of the two clinics, and about their experiences with the following staff and providers at both clinics: front desk staff, providers who did their intake, doctors, residents, and nurses. Participants were also asked about their experiences with providers at Milagro who gave them substance use counseling and medication-assisted treatment, and about their experiences with the FOCUS staff who did their appointment scheduling. Finally, participants were also asked to provide their reasons for going to the FOCUS clinic and not somewhere else, as well as any thoughts about how FOCUS services could be any better.

Participants completed the client component of the Working Alliance Inventory – Short Form (WAI – SF) to rate their perceived level of therapeutic alliance with their Early Intervention (EI) Specialist in FOCUS. EI Specialists provide regular home visits to FOCUS mothers from their child's birth through the end of their child's third year, including case management, developmental assessment, and coordination of care with all other FOCUS providers, among other comprehensive services for mother and child. The Working Alliance Inventory was used, a 12-item valid and reliable measure of therapeutic alliance, which includes questions about three factors that affect the degree of

success in counseling: bond between patient and provider, degree of agreement on goals for counseling, and degree of agreement on tasks towards counseling goals (Horvath & Greenberg, 1989).

Analyses

Qualitative Data

The overall approach for analyses was exploratory and aimed to understand not only the process of engaging with services pre birth and post birth, but also to learn about the lived experiences of women in the FOCUS Program in their own words. The utilization of a qualitative analysis approach allowed for the building of new knowledge based on an assumption of innate strengths and resilience of this population of interest. Extraction of themes across narratives was guided by this belief that by providing an open, nonjudgmental forum for these women to share about their experiences and struggles, that their narratives would provide insight into their individual assets and external resources both within and outside the treatment programs, that allowed for such positive growth from pregnancy through post birth. Thus, special attention was paid to identifying patterns of individual resiliency factors of the participants as well as to programmatic factors that participants stated were most beneficial to them.

Interview data were analyzed using Thematic Content Analysis (Braun & Clarke, 2006; Burnard, Gill, Stewart, Treasure, & Chadwick, 2008) implemented by four independent coders. Through an iterative and data-driven approach, themes were extracted and categories were collaboratively derived in order to establish a coding system for the entire data set. This framework was implemented using the following steps. Step 1: Coders independently coded three transcripts using an open

approach, and attempt to create succinct descriptive labels for each separate utterance in the transcript. Step 2: Coders independently derived major themes and categories that emerged from the data, eliminating redundancies and grouping related categories together as much as possible. Step 3: Coders met to come to a satisfactory level of agreement on coding categories, further reducing redundancies and grouping related content together into shared codes. Step 4: Coders met to assess inter-rater agreement and to further refine coding categories. Step 5: Collaboratively finalized coding system. Step 7: Coded remaining transcripts, meeting weekly to resolve discrepancies. Each tape was coded by two or three people; a few of the tapes coded last were coded by only two coders, as reliability between coders increased over time. We used a majority vote (two out of three) to determine codes when disagreements occurred, consulting with a third coder for disagreements on codes for interviews that were only coded by two people. Codes for each question were then sorted into "categories" that could be used across all questions, in order to allow for questions to be answered about the entire sample. Coders included three doctoral students in Clinical Psychology, and a research assistant with a B.A. in Psychology. The primary investigator and one of the other doctoral students had primary research and clinical interests in substance use treatment with marginalized populations. The third doctoral student had particular interest and experience with research involving medically fragile young children and parent-child interactions. The fourth coder had been accepted to a Masters program in Forensic Psychology which she began after coding was completed.

Analysis of this qualitative data provided rich insight into the process of engaging with treatment for pregnant substance users, such as provider relationships. Clients may

be the most valuable source of information when tailoring treatments to suit individual client needs (Hser et al., 1999). Increased understanding of the life difficulties that precede and co-occur with prenatal substance use may offer ideas for making Milagro, FOCUS, and similar programs even more comprehensive and effective.

Quantitative Data

Frequency distributions for categorical items, skewness, and normality were examined for all quantitative measures. Exploratory correlations were conducted between all variables (SES, depression, ACEs, WAI, Emotional and Instrumental Support, and Meaning and Purpose). We hypothesized that socioeconomic status would be negatively correlated with emotional and instrumental support, meaning in life, and therapeutic alliance, and positively associated with depression and history of ACEs. We also predicted that current level of depression would be positively related to history of ACEs, and negatively related to therapeutic alliance, emotional and instrumental support, and meaning in life. We hypothesized that therapeutic alliance would be significantly positively related to emotional and instrumental support. Finally, we also hypothesized that ACEs would be negatively related to emotional and instrumental support, meaning and purpose, and therapeutic alliance.

Assessing relationships between qualitative and quantitative data. In addition to testing hypothesized interrelationships between quantitative variables, several quantitative variables were created from interview responses, and exploratory correlations assessed their relationships with all variables of interest. Variables from the qualitative interviews included an index of resiliency, which was the total number of questions for each participant to which they provided at least one statement indicating

personal strength, positive growth, or effective coping with adversity. Because not every participant answered every question (e.g., some participants did not have any other children so the question about their relationship with their other kids and their experiences with previous prenatal care were not applicable), a second index of resiliency was calculated, which was the percentage of questions answered that included at least one statement demonstrating resiliency. Indices of emotional support by Milagro and FOCUS were similarly calculated. Bonferroni corrections were used for all correlations to reduce the chance of Type II errors.

Results

Qualitative Data

As described previously, codes were independently generated and then finalized collaboratively between all four coders. A computer software developer who assisted with this study wrote a program to generate sums for the total number of participants who had made utterances sorted into each different code, for each separate question. A detailed table for each question is included to show these individual codes for each question and how many total participants were coded as having each (see Appendices B through AK).

On many occasions over the course of the semi-structured interviews, participants provided detailed narratives about motherhood or substance use that were not in response to interview questions, for example, in between interview questions as the conversation flowed naturally. Thus, additional "questions" were created in order to code answers to these content areas together, including "Other comments about child," "Other comments about substance use," "SUD treatment outside Milagro/FOCUS," and "Process of finding

Milagro."

Note about interpreting qualitative data: questions in the interview were intentionally open-ended, in order to elicit responses that would reflect participants' unique perspectives and lived experiences more so than preconceived ideas of the primary researcher or coders. As such, participants had great latitude with which to answer the questions and variability was expected. A participant answer that did not include content seen in another participant's answer did not necessarily indicate that these two participants did not share that experience, but only that one did not mention it, and may not have experienced it. For example, if in describing the reaction of their children's father to finding out she was pregnant, eight mothers indicated that the father reacted with surprise, this does not indicate that the other 16 fathers were *not* surprised, only that 16 participants did not report this (either because it didn't happen, *or* because it was not a part of the narrative they wished to share in response to that question).

Analyses by Individual Question. For each question in the interview, as well as the additional groupings created for utterances that were of interest but not in response to any interview questions (e.g., substance use treatment outside of FOCUS/Milagro; other comments about substance use; other comments about their kids), all coding categories that were endorsed during coding for at least 25% of participants who answered that question, and that were not coded as "neutral" statements, are listed below. Additionally, any codes that were endorsed for less than 25% of participants, but were of great interest to the study aims, are provided below.

Questions pertaining to mom's stress and coping. *Question 1***.** (See Appendix B for table with all codes): "How have you been managing since the baby was born?"

Twenty participants (83%) reported having difficulties, such as financial struggles, inadequate housing, and/or health issues in the family. Nevertheless, 18 (75%) indicated that they had adjusted and were coping well (17, 71%), and/or that they were optimistic for the future (2, 8%). Twelve (50%) reported that they had support from family, and six (25%) indicated that they received support from the Milagro and/or FOCUS programs. Seven (29%) made positive statements about their kids in their responses to this question.

Questions pertaining to substance use and health behaviors. *Question 31***.** (See Appendix AH table for all codes): "Before you found out you were pregnant with [child currently in FOCUS] (or, "before you began trying to get sober [if mom tried to get sober before finding out she was pregnant]") what were your main reasons for using at the time?" Eighteen participants (75%) endorsed emotional reasons for using, such as stress (8, 33%), curiosity or impulsivity (2, 8%), boredom (3, 13%), a desire to feel good or have fun (4, 17%), loneliness (1, 4%), avoiding other negative emotions (9, 38%), and/or dealing with the pain of not being able to see her kids (1, 4%). Sixteen (67%) reported details demonstrating the power of addiction to take over one's life, such as intense physical dependency (12, 50%), an intense self-perpetuating negative spiral (7, 29%), and/or having had a longstanding habit of multiple years that may have begun in childhood (6, 25%). Eight (33%) identified their environment as a critical factor in their initial use, including social factors (6, 25%) and/or that substances were readily available to them (5, 21%). Six (25%) reported that they initially used substances to manage chronic pain, and four (17%) indicated in their response to this question that their use started with a prescription from a medical doctor. Although the question asked about reasons *for* using, eleven participants (46%) described negative consequences of their use

in response to this question without any prompting, and seven (29%) reported that they had tried to get sober before beginning Milagro.

Question 29. (See Appendix AF table for all codes): "It's clear that you've made some really impressive changes. Many people find it very hard to do what you've done. What were your reasons for making these changes?" Nineteen (79% of) participants reported that motherhood was a primary motivator for their sobriety, such as not wanting to lose or be separated from their kids (4, 17%), not wanting to hurt the baby during the pregnancy (7, 29%), and wanting to be a good mother or be there for their child (11, 46%). In fact, three (13%) indicated that their child was the *only* reason for their sobriety and that they did not believe they would have ever gotten sober had it not been for getting pregnant. Eleven (46%) described negative consequences they had experienced as a motivating factor, such as being tired of the lifestyle. Given the wording of this question, it makes sense that nine participants (38%) made statements demonstrating personal strengths or resilience. Seven (29%) reported that they quit for themselves, one participant (4%) indicated that her spirituality inspired her to quit, one (4%) reported having a lack of desire or urges to use now that she was sober, one (4%) expressed gratitude that she had gotten pregnant as it motivated her sobriety, and one mom (4%) described turning her whole life around after discovering that she was pregnant, including moving to a different town and cutting ties with all of her social networks. Additionally, four participants (17%) expressed positive attitudes towards sobriety, such as stating that they wanted to get sober so that they did not die (1, 4%), wishing that they had sought treatment to get sober sooner than they did (1, 4%), stating that they wanted to be sober in order to be a better romantic partner (1, 4%), and stating that sobriety helped them

better take care of their family responsibilities (1, 4%). Two participants (8%) indicated that sobriety allowed them to pursue their educational goals and one (4%) expressed happiness about being sober.

*Question 30***.** (See Appendix AG table for all codes): "How were you able to make such difficult changes? What helped you do that?" Fourteen participants (58%) stated that instrumental support of Milagro and FOCUS helped them quit, and seven (29%) reported that emotional support of the programs helped. Six participants (25%) cited personal strength and willpower as a factor that helped them succeed. Five (21%) reported that they noticed positive growth in themselves, such as thinking that substance use was no longer consistent with their identity. Four participants (17%) expressed negative attitudes towards using because of their commitment to motherhood, such as not wanting to lose or be separated from their kids (3, 13%) or to cause their baby to go through withdrawal (1, 4%). Ten (42%) stated that wanting to be a good mom was a point of focus that helped them get sober. Eleven (46%) reported that they felt supported in their sobriety by their families, and six (25%) stated that they found medication-assisted treatment helpful.

*Other comments about substance use***.** (See Appendix AI table for all codes): Eighteen participants (75% of all participants) made comments about substance use that were not in response to any interview questions. Of those 18, seven participants (39% of people who made other comments about substance use not in response to interview questions) described processes of positive self-transformation, such as positive feelings about their sobriety (e.g., pride; happiness) (4, 22%), feeling that they had come a long way from who they were (5, 28%), stating that getting sober increased their self-worth (2, 11%), and/or expressing a desire to help others get clean (1, 6%). Five participants (28%)

described negative consequences they had experienced from previous use, and five (28%) expressed current personal negative attitudes about substance use. Five (28%) expressed a desire to get off medication-assisted treatment, while five participants (28%), with some overlap with the previous code, indicated that they found medication-assisted treatment helpful, including one (4%) who had tried to obtain suboxone before entering Milagro. Three participants (17%) described having negative self-views either as a result of their use or as a catalyst for their use. Five participants (28%) described negative consequences of use, including the significant financial cost (3, 17%), regret over actions they committed while they were using (1, 6%), and other negative life consequences from their use (3, 17%). Five participants (28%) expressed negative attitudes towards using, including expressing a desire for alternative ways to manage chronic pain that did not involve opiate use (1, 4%), general negative attitudes about substances (3, 17%), the belief that giving in to addiction is giving up on life (1, 4%), and a mom stating she was glad that she never progressed from pain medication to heroin (1, 4%).

Question 32. (See Appendix AJ table for all codes): "What are your personal goals for staying healthy, now that [child currently in FOCUS] is here?" Eleven participants (46%) articulated commitment to their roles as mothers, such as having as a goal being a good mom (8, 33%), providing stability for their kids (3, 13%), and teaching their kids healthy habits (3, 13%). Ten mothers (42%) expressed intention to get more exercise, nine (38%) indicated that they wanted to lose weight, and eight (33%) indicated that they intended to improve their diets, and six (25%) stated that managing their overall health was an important goal for them. Seven mothers (29%) identified maintaining sobriety as a primary health goal, and one (4%) expressed an intention to stay away from

networks of people who would threaten her sobriety. Five mothers (21%) reported having mental health goals. Four participants (17%) expressed a desire to discontinue their use of medication-assisted treatment.

Question 33. (See Appendix AI table for all codes): "What do you believe will help you with those goals?" Fifteen participants (63%) identified personal resiliency factors as critical pieces of their future success, such as their own commitment (9, 38%), their intention to use new coping strategies (2, 8%), their belief that using substances is not who they are anymore (3, 13%), statements of confidence in their ability to stay sober (2, 8%), intentions to stay busy with personal goals (4, 17%), descriptions of their concrete ideas and plans for behavior change (2, 8%), and an intention to rely on their religious community or spirituality for strength (1, 4%). Six participants (25%) identified the FOCUS program as a support in their continued positive growth, and four (17%) stated that they found specifically *emotional* support from FOCUS staff helpful in supporting their continued sobriety, for a total of nine participants predicting that the FOCUS program would be a significant part of their future success in reaching their goals.

*Question 34***.** (See Appendix AK table for all codes) "What if anything could make it hard for you to maintain your sobriety?" Thirteen participants (54%) identified social networks as a potential future trigger while also expressing intent to avoid those particular people. Although this question asked about potential barriers to success, nine participants (38%) described personal resiliency factors regarding their sobriety, such as a statement of commitment to stay sober (3, 13%), optimism in their ability to stay sober (3, 13%), a lack of interest or desire to ever use again (3, 13%), a plan to rely on their

social supports (3, 13%), and/or that they did not see anything getting in the way of their sobriety at all (1, 4%).

Questions pertaining to motherhood. *Question 5.* (See Appendix F for table with all codes): "Tell me about your experiences with your [most recent] pregnancy and birth, anything you'd be willing to share." Fifteen mothers (63%) reported having health concerns for themselves, including pregnancy difficulties or complications (15, 63%), and/or having had a previous high-risk pregnancy (1, 4%). Fifteen (63%) reported having birth complications or difficulties, while 12 (50%) reported having child illnesses or health complications after the birth. Eleven participants (46%) reported having a positive pregnancy experience, and 8 (33%) reported having a positive experience giving birth. Ten participants (42%) reported that they felt supported by the Milagro and/or FOCUS programs. Five (21%) reported having felt judged by providers during medical services related to their birth. Seven (29%) reported that at the time of their pregnancy they were ambivalent about the pregnancy and/or impending motherhood.

*Question 2***.** (See Appendix C for table with all codes): "What is your favorite thing about your child at this age?" Seventeen out of 24 participants (71%) reported positive thoughts or feelings about being a mother, either with an indication of parental benefits such as enjoyment of their child (17, 71%), and/or that their family was bonding with the baby (4, 17%). Twenty out of 24 mothers (83%) indicated having positive opinions either about their children's personality or unique strengths (17, 71%), and/or how they were growing and developing (15, 63%). Six mothers (25%) made negative statements about their child's personality or behavior.

*Question 3***.** (See Appendix D for table with all codes): "Tell me about your relationship with your other children." Sixteen out of 24 participants (67%) reported having other children and answered this question. Eleven out of these 16 (69%) reported positive aspects of being a mother, including having good relationships with their other children (10, 63%), and/or having pride about her accomplishments as a mom (1, 6%). Five mothers (31%) made positive statements about their other kids. However, eight (50%) reported having difficulties as a mother, including living apart from their other child(ren) (7, 44%), and/or having a new or tenuous relationship with their other child(ren) (4, 25%). And six mothers (38%) made negative statements about their kids in response to this question. Although this question asked specifically about their relationships with their other kids, seven mothers (44%) reported that they felt supported by the rest of their family in childcare duties, including their other kids helping with childcare.

Other Comments About Child. (see Appendix G for table with all codes): Thirteen mothers made comments about their kids that were not in response to any interview questions. Of those 13, nine (69%) made positive comments about their kids' personality (7, 54%) and/or development (7, 54%). Five mothers (38%) made generally positive comments about being a mom or experiencing parental benefits such as enjoyment, and one mother (8%) reported that having a child brought the whole family closer together. Four mothers (31%) made negative statements about their child's personality or behavior.

*Question 15***.** (see Appendix S table for all codes): Question 15: "What does it mean to you to be a mother, especially to [child currently in FOCUS program]?" Fifteen mothers (63%) reported positively about motherhood, indicating that they derived

personal benefits and/or felt a strong bond with their child (13, 54%), and nine (38%) made *very* positive comments about motherhood, including stating that motherhood gave them a sense of purpose, accomplishment, or meaning (9, 38%) and/or that motherhood was a blessing for them (1, 4%). Fourteen mothers (58%) expressed commitment towards being a good mom, and four (17%) made positive statements about their children's personality or development. Only four (17%) made negative comments about motherhood, such as feeling that it is overwhelming and hard work (3, 13%) and/or inconvenient (1, 4%). Nine mothers (38%) made statements suggesting positive growth in the realm of motherhood, such as five (21%) who stated that being a mother motivated them to get sober, and four (17%) who stated that motherhood turned their entire lives around or changed them dramatically for the better.

Question 16. (see Appendix T table for all codes): "What do you hope for your child's life to look like?" Fourteen moms (58%) expressed intention to support their children in continued healthy development such as meeting developmental milestones within the appropriate time frames. Thirteen moms (54%) indicated that they wanted their child to be happy. Twelve (50%) expressed hopes related to their child's education, and 12 (50%) made generic positive statements about their hopes for their child (e.g., "have a good life"). Seven mothers (29%) stated that they wanted their child to have a better life than she or the child's father had had, including making better decisions, and six mothers (25%) specifically stated that they hoped their children would not ever use substances. Six mothers (25%) expressed commitment towards their roles as mothers, including wanting to be a reliable, trustworthy, and/or stable mom (4, 17%), and two (8%) wanted to support their children in whatever they wanted to do when they grew up.

*Question 17***.** (see Appendix U table for all codes): "What are your goals for motherhood and [child currently in FOCUS] just for the next year?" Fourteen mothers (58%) expressed hope that their children would progress developmentally and/or learn new skills, and seven (29%) expressed interest in enrolling their children in activities or programs such as daycare or Head Start. Six mothers (25%) expressed desire to improve their child's physical health. Nine mothers (38%) expressed commitment towards their roles as mothers, including being a good mom (5, 21%), improving family stability such as by getting stable housing or keeping the whole family living together (3, 13%), setting a positive example for their kids, such as through pursuing an education (3, 13%), and having positive family relationships as a goal (1, 4%).

Questions pertaining to the child's father. *Question 4*. (See Appendix E for table with all codes): "How does the father feel about having a new son/daughter? How did he react when you found out you were pregnant?" Twenty-one participants (88%) provided substantive answers to this question. Out of 21, nineteen (90%) reported having some support as a mother from the father of their child, such as by indicating that the father had a positive relationship with the child (9, 43%) and/or that he had positive emotions about fathering the child (15, 71%). Nine out of 21 (43%) indicated that their partner helped with the tasks of motherhood, including helping with childcare, providing support during the pregnancy (8, 38%), or making significant changes in his life as soon as he found out about the pregnancy (in order to be ready for fatherhood) (1, 5%). Eight out of 21 (38%) reported negatively about this connection, such as having ambivalence about her relationship with the father (4, 19%), difficulties in the couple relationship (5, 24%), and/or that the father was using substances at some point (1, 5%). Eight mothers (38% of

21 respondents) indicated that the pregnancy was unexpected to the child's father and/or to her.

Questions about Milagro. *Finding Milagro*. (See Appendix Q for table with all the codes): Five participants provided descriptions of their initial contact with Milagro, outside of responses to any interview questions. Of those, two (40%) reported getting referrals from another provider and two (40%) indicated that they had been referred by a friend or acquaintance. Two (40%) reported that they did not confide in others about their substance use for fear of being judged. Three (60%) made general positive comments about Milagro. Two participants (40%) reported that they had tried to quit before entering Milagro in their descriptions of getting connected with Milagro.

*Question 6***.** (See Appendix H for table with all the codes): "I am going to ask you about your experiences with each of the different kinds of providers at Milagro. Before I do that, please tell me about your experiences with the Milagro program overall." Twenty participants (83%) made positive general comments about Milagro, such as saying they were glad there was a program like this (10, 42%), stating that the program gave them hope (1, 4%), and/or that they were worried about their time with the FOCUS program ending (2, 8%), as they had grown accustomed to having significant support from Milagro and then FOCUS. Eleven (46%) made very positive comments about Milagro, including those who indicated that the program exceeded their expectations (8, 33%) and those who recommended the program to others (3, 13%). Eighteen participants (75%) reported that they experienced emotional or interpersonal support at Milagro, including not feeling judged by Milagro providers (7, 29%), and/or having a positive relationship with a specific provider at Milagro (5, 21%), and five (21%) indicated that they received

instrumental support from the program. Only seven out of 24 participants (29%) made any negative statements about Milagro or suggestions for improvement in response to this question.

*Question 7***.** (See Appendix I for table with all the codes): "What was it like for you to check in at the front desk at Milagro?" Twenty-three participants provided a substantive response to this question. Of those 23, twenty (87%) reported having positive interpersonal experiences with the Milagro front desk, and ten (43%) made positive general comments about Milagro in response to this question. Six participants (26%) indicated that they found the front desk staff competent or efficient in their jobs. Four participants (17%) made general negative comments about the Milgaro front desk staff, such as stating that they had a long wait time (3, 13%), and three (13%) stated that they had negative interpersonal experiences with the front desk staff, such as feeling judged (1, 4%).

Question 8. (See Appendix J for table with all codes): "Tell me about your experiences at your very first appointment at Milagro, when you completed the intake. This included taking your temperature, weighing you, etc." Twenty-three participants completed an intake at Milagro and provided an answer to this question. Of those 23, sixteen participants (70%) reported having positive interpersonal experiences at their Milagro intake, such as not feeling judged (1, 4%) and/or liking a particular provider (2, 9%). Seven participants (30%) made generally positive statements about the intake. Only one participant (4%) made a negative comment about the Milagro intake, stating that she had a negative interpersonal experience.

Question 9. (See Appendix K for table with all codes): "What were your experiences like with the Milagro medical doctors? Nineteen participants (79%) reported having positive interpersonal experiences with Milagro doctors, such as liking a particular doctor(s) (9, 38%), not feeling judged (1, 4%), thinking that Milagro doctors were better interpersonally than previous ones with whom they had worked (1, 4%) and/or feeling that the Milagro medical doctors improved their attitudes towards doctors overall (1, 4%). One participant (4%) reported that she felt her doctor went above and beyond her or his duties. Three participants (13%) made general negative comments about Milagro medical doctors.

*Question 10***.** (See Appendix L for table with all codes): "Tell me about your experiences with Milagro medical residents." Twenty participants provided substantive responses to this question. Of those 20, twelve participants (60%) made general positive comments about medical residents, and seven (35%) reported having positive interpersonal experiences with the residents, such as liking particular resident(s) (9, 45%), not feeling judged by residents (1, 5%), and thinking that the residents improved their attitudes towards doctors overall (1, 5%). Five participants (25%) expressed positive thoughts about Milagro residents' competence or professionalism. Only two (10%) reported having negative interpersonal interactions with Milagro residents, and two (10%) made negative general comments about them.

Question 11. **(**See Appendix M table for all codes): "Tell me about your experiences with the Milagro substance use counselors." Six out of 24 participants received substance use counseling at Milagro. Of those, four (67%) reported having positive interpersonal interactions with their counselors, and three (50%) made general

positive comments about their substance use counseling at Milagro. Two participants (33%) reported having had negative interpersonal interactions with their substance use counselors: three (50%) reported negative logistical issues with their counselors, including having to switch counselors because of counselor turnover (2, 33%), and one reported not getting counseling because her assigned counselor left Milagro (1, 17%).

Question 12. (See Appendix N table for all codes): "Tell me about your experiences with Milagro medical nurses." Out of 21 participants who provided substantive answers to this question, eighteen (86%) endorsed positive interpersonal interactions with Milagro nurses, and nine (43%) made positive general comments about them. No participants made any negative comments about Milagro nurses.

Question 13. (See Appendix O table for all codes): "If you got maintenance treatment at Milagro, what was that like for you?" Out of 20 participants who got medication-assisted treatment at Milagro (versus in another program such as ASAP), ten (50%) made positive general comments about Milagro maintenance treatment (MAT), such as by stating that Milagro MAT was better than other available treatment options (2, 10%), or stating that they were glad there was a program like this (1, 5%). Nine participants (45%) reported having positive interpersonal interactions with MAT providers, and eight (40%) indicated that these providers showed particularly high levels of competency and/or professionalism. Four participants (20%) indicated that MAT helped them stay sober, and three (15%) made general positive comments about MAT, such as indicating that it provided benefits other than helping to stay sober. Only one participant (5%) made negative comments about Milagro medication-assisted treatment in response to this question, indicating that it was inconvenient and that they had a

negative interpersonal interaction.

Questions about FOCUS. *Question 18.* **(**See Appendix V table for all codes): "How does FOCUS fit into those motherhood goals for the next year? [Motherhood goals that mother articulated in response to Question 17.]" Twelve participants (50%) reported that FOCUS provided them with instrumental support, such as guidance in parenting skills or support in their personal goals (i.e., education). Fifteen (63%) indicated that FOCUS was helping their child along in healthy development and developmental milestones, such as through connecting them with resources outside FOCUS (e.g., a hearing specialist) (9, 38%). Thirteen (54%) reported that FOCUS provided emotional support for them [the mothers]. Eight participants (33%) made general positive comments about FOCUS, such as saying they were glad there is a program like this (3, 13%) and/or expressing worry about their time with the program ending (2, 8%).

Question 20. **(**See Appendix W table for all codes): [follow up to Question 19: "Do you get early intervention and perinatal services at FOCUS?" (All participants indicated "yes.")] "Why do you go to FOCUS for these services and not somewhere else?" Of 23 participants who provided a substantive answer to this question, nineteen participants (83%) reported that they feel emotionally supported and/or connected at FOCUS, seven (30%) made positive statements about specific FOCUS providers, and eight (35%) reported that a primary reason for going to FOCUS was because of its affiliation with Milagro and their positive experiences with the providers in that program. Twelve participants (52%) remarked on the convenience of FOCUS services. For example, many appreciated the co-location of medical care for themselves and their children so that they could go to the doctor's office and complete appointments for both

in the same day. Many also remarked that the home visits were very convenient for not requiring any travel on their part, and that they really appreciated getting regular in-home support. Fifteen (65%) made general positive comments about the services offered at FOCUS and the quality of those services, while seven (30%) indicated that FOCUS was the only place they knew of that offered the services it does all in one place. Only one participant (4%) made any negative comments about FOCUS in response to this question. Four people (17%) indicated that getting medication-assisted treatment at FOCUS was a primary reason for seeking treatment there.

Question 22. **(**See Appendix Y table for all codes): "I am going to ask the same questions I asked about Milagro, about your experiences with each of the different kinds of providers at FOCUS. Before I do that, what are your general comments about your experiences at FOCUS overall?" Seventeen participants (71%) made statements indicating that they felt supported emotionally by FOCUS, such as having known the clinic providers for a while and feeling particularly comfortable or close with them (6, 25%), and/or having a particular liking for a specific providers(s) (6, 25%). Sixteen (67%) made generally positive statements about FOCUS, such as worrying about their time with the program ending (2, 8%). Three (13%) made highly positive statements about FOCUS, such as effusive praise (1, 4%) and/or traveling far out of their way to go to FOCUS because they would not go anywhere else (1, 4%). Three (13%) indicated that the program helps them stay sober. Only four people (17%) made general negative comments about FOCUS and one participant (4%) expressed dissatisfaction with the professionalism/competency of one provider on a particular visit.

Question 23. **(**See Appendix Z table for all codes): "What is it like for you when

you check in at the front desk at FOCUS?" Thirteen participants (54%) reported positively about interpersonal interactions with the FOCUS front desk, twelve (50%) made general positive comments about the front desk, including liking the amenities in the waiting room such as coffee and children's toys (2, 8%), five (21%) praised the competency and efficiency of the front desk staff, and four (17%) made general negative comments them.

Question 24. (See Appendix AA table for all codes): "Have you had any interactions with the person who does the appointment scheduling at FOCUS? If so, what have those interactions been like for you?" Nine participants (38%) made general positive comments about the person who did her scheduling, and seven (29%) reported positively about interacting with her. Most participants (15, 63%) made neutral statements about the scheduling person, such as stating that they did not remember having any interactions with her.

Question 25. (See Appendix AB table for all codes): "Tell me about your very first appointment at FOCUS, so the intake you completed after [child] was born. They would have done things like weigh you and take your temperature." Eight participants either could not remember their intake or did not do an intake at Milagro. Of the remaining 16 participants, seven (38%) made positive comments about the interpersonal aspects of the intake, and seven (38%) made general positive comments about the intake. Four participants (25%) stated that they found the appointment convenient and/or efficient.

Question 26. (See Appendix AC table for all codes): "Tell me about your experiences with medical doctors at FOCUS." Twenty-two participants (92%) praised the

interpersonal skills of FOCUS doctors, and fourteen (58%) expressed positive views about specific FOCUS doctor(s). Twelve participants (50%) made general positive comments about FOCUS doctors, and seven (29%) expressed positive opinions about the quality of care they provide. Two participants (8%) made general negative comments about FOCUS doctors, two participants (8%) made negative comments about the professionalism or competency of FOCUS doctors, and one participant (4%) made a negative comment about a specific FOCUS doctor.

Question 27. (See Appendix AD table for all codes): "Tell me about your experiences with medical residents at FOCUS." Twelve participants (50%) reported positively on the interpersonal skills of FOCUS residents. Thirteen (54%) made general positive comments about them. Only four participants (17%) made negative comments about FOCUS residents, including having an overall negative experience (3, 13%) or experiencing confusion about so many different providers (1, 4%).

Question 28. (See Appendix AE table for all codes): "What have your experiences been like with FOCUS nurses?" Fifteen participants (63%) commented positively on the interpersonal strengths of the FOCUS nurses. Six (25%) made general positive comments about them, and five (21%) made neutral comments.

Question 21. **(**see Appendix X table for all codes): What could FOCUS do to improve their services, if anything?" Out of 23 participants who provided an answer to this question, seventeen (74%) responded to this question with general positive comments about FOCUS, including 15 (65%) who stated that they could not think of anything to be improved, either as a first part of their answer or as the only response they made to this question. Only 14 (61%) provided feedback about how FOCUS could improve. Seven

(30%) reported having experienced long wait times, and three (13%) expressed displeasure at not being able to schedule last-minute appointments. Other negative comments cited by one individual each (4%), included: FOCUS not providing help with finding employment, not providing childcare, being in a small office space, and inconsistency with providers that patients saw across different visits.

Questions and utterances about care outside Milagro and FOCUS. *SUD treatment outside Milagro.* (See Appendix P table for all codes): Five participants described prior SUD treatment they received before Milagro, but not in response to any interview questions. Of those, two (40%) reported that they felt judged at other programs, two (40%) reported that they had tried to get sober before beginning treatment at Milagro, and two (40%) reported that other programs were helpful with their sobriety.

Question 14. (See Appendix R table for all codes): "If you have ever had prenatal care outside Milagro, please share about your experiences with those services." Sixteen participants endorsed prior use of prenatal services outside Milagro. Of those, seven (44%) made general negative comments about those experiences, three (19%) indicated that they had been unpleasant interpersonally, and three (19%) reported having negative impressions of the quality of their previous prenatal care. Seven mothers (44%) made general positive comments about Milagro, six (38%) indicated that they found Milagro better interpersonally, six (25%) stated that they thought it was better overall, and five (31%) indicated that they found the quality of services to be better at Milagro. Seven participants (44%) made positive statements about their previous prenatal care providers. Four participants (25%) reported having negative interpersonal impressions of previous prenatal care providers.

Analyses Across All Questions and Common Coding Categories. In an attempt to uncover trends for most individuals in the sample, codes generated across all questions and all participants were categorized into higher order themes, including the following: difficulties, resiliency, attitudes towards substance use and sobriety, mothers' attitudes towards their children and motherhood, emotional support from Milagro and FOCUS, and attitudes towards medication-assisted treatment. The resiliency framework described earlier, and the intention to identify both individual strengths of participants and external factors that contributed to participants' successes and treatment engagement, guided the creation of these higher order themes. For example, all utterances across all questions that: denoted participants stating that they relied on internal strengths to pursue sobriety, that they were coping well in the midst of personal difficulty, statements of intention to pursue or maintain positive changes in themselves, statements indicating positive growth over time; and any other individual assets, were grouped into the higher order category of "Resiliency." Any statements across all questions indicating that participants had benefitted emotionally from or enjoyed their relationships with providers in the treatment programs were grouped into the higher order categories of "Support, Milagro, Emotional," or "Support, Emotional, FOCUS." Higher order categories were also used to calculate the number of participants who reported the following at any point in their interviews: an unexpected pregnancy, efforts to quit substances before entering the Milagro program, incarceration of the participant or her baby's father, the illegal procurement of suboxone before treatment, chronic pain, and prescription of pain meds as a catalyst for addiction. For example, each utterance across any question that included the mom stating that she did not expect the pregnancy was grouped into the higher order

category of "Surprise Pregnancy." A computer programmer who assisted with this study then wrote a program for calculating the total number of participants who had made at least one statement in their entire interview that was given a code that was later grouped into each of these higher order categories. For example, in response to Question 1 ("How have you been coping since your (youngest) child was born?"), many women made statements indicating that they were coping or adjusting well and thus these statements were coded as "adjustment/coping well." This code, "adjustment/coping well" was then grouped into the higher order category of "Resiliency." Many women also made statements in response to Question 34 ("What could potentially make it difficult for you to continue staying sober?") indicating that they were confident in their ability to stay sober, and these utterances were coded as "confidence in ability to stay sober." This code was then grouped into the higher order category of "Resiliency." All women who made either one of these responses, or any of the other 47 codes given across the 40 questions that were grouped into the higher order category of "Resiliency" could then be included in the total number of women who had made statements showing resiliency. See Appendix AL for a detailed table showing all codes across all questions, organized according to how they were grouped into these higher order categories.

Stress and Coping. Results indicated that all 24 participants reported difficulties or hardships at some point in each of their interviews, such as the three mothers in the sample (13%) who had a history of incarceration at some point previously, and the four families (17%) in which the child's father was currently or previously incarcerated. Additionally, two thirds of participants described former or current health problems with their child currently in FOCUS, such as prolonged hospital stays after birth, withdrawal

from methadone after birth, or developmental delays. Fifteen mothers (63%) reported pregnancy difficulties or complications such as prolonged medical ordered bed-rest. Despite all participants reporting significant stressors, each of them also described personal resiliency factors at some point in their interviews such as indications of positive growth since the time they were using, or recognition of their personal strengths.

Substance use and treatment. All women expressed positive views towards sobriety and/or negative views towards use, and all identified motherhood as a primary motivator for sobriety, as mentioned previously. Six women (25%) reported that chronic pain was their initial reason for using opiates, including four (17%) who first obtained opiates through physician prescription. Most (19, 79%) endorsed negative emotions as reasons for use, such as sadness over being separated from their children.

Several noteworthy trends emerged regarding treatment-seeking behaviors and perceived substance use treatment accessibility. For example, 6 participants (25%) reported hiding their use from others, including family and medical providers, fearing judgment and legal repercussions. Six (25%) reported feelings of shame around their use, including four who stated that this shame made the process of seeking support from medical providers emotionally difficult for them, and one of the participants who obtained suboxone illegally prior to connecting with Milagro. Thus, perceived societal stigma and feared judgment prevented some women from seeking medical treatment for their addictions. For those who did seek treatment prior to engaging with Milagro, some reported that acceptable options were hard to find. Four women (17%) reported that they had tried to obtain prescribed medication-assisted treatment prior to Milagro and had had difficulty doing so, and three (13%) reported having had difficulty finding substance use

treatment in general either before or during pregnancy.

Motherhood. Most participants (15, 63%) reported in their interviews that their pregnancies were unexpected, including one participant who was on birth control, and another two who were told by their doctors that they could not have children. All participants expressed a desire to be sober for the sake of their child and positive views about motherhood at some points in their interviews. Most (22, 92%) said something positive about their kids' personalities or development. Only half said anything negative in their entire interviews about their kids, and ten (42%) made very positive statements about motherhood. Most mothers (21, 88%) expressed their commitment to their roles as mothers, such as articulating behavioral goals for themselves to support their children's health or happiness.

Supports. All participants endorsed interpersonal support from both Milagro and FOCUS at some point in each of their interviews. Seventeen participants (71%) described some sort of support from their families, and fourteen (58%) stated that they felt supported specifically in their sobriety by family. Most of the participants who provided information about their child's father (19 out of 21, 90%) reported that they felt supported in their roles as mothers by these men.

Medication-assisted treatment. Higher order categories across all questions and codes were also used to characterize participant trends regarding attitudes towards medication-assisted treatment. All participants were former opioid users and all endorsed past and/or current utilization of medication-assisted treatment for opioid use, either through Milagro and/or FOCUS (21, 88%), or outside these programs (3, 13%). Nineteen participants (79%) expressed positive attitudes towards medication-assisted treatment,

such as by indicating that it helped them to stay sober or provided other benefits (e.g., helping manage the day to day tasks of being a mother), and four (17%) reported obtaining suboxone illegally prior to engaging with Milagro. However, four participants (17%) expressed negative attitudes towards medication-assisted treatment, such as believing that it is another kind of addiction and thus they could not view themselves as "sober" while on it. Three participants (13%) endorsed shame over using medication-assisted treatment, citing societal stigma towards this treatment, or reporting that they hid their use of this treatment from loved ones for fear of being judged. Nine (38%) expressed a desire to discontinue their use of it eventually.

Quantitative Data

To further characterize this sample, standardized measured were used to assess participants': 1) adverse childhood experiences (using a modified version of the Adverse Childhood Experiences (ACE) questionnaire), 2) socioeconomic status (SES) (using a modified version of the Barratt Simplified Measure of Social Status (BSMSS)), 3) depression level (using the Edinburgh Postnatal Depression Scale (EPDS)), 4) self-reported levels of meaning and purpose in life, (as measured by the NIH Toolbox Meaning & Purpose questionnaire), their self-reported levels of 5) emotional and 6) instrumental report, (as measured by the NIH Toolbox Emotional Support SF and the NIH Toolbox Instrumental Support SF, respectively), and 7) therapeutic alliances with their FOCUS Early Intervention specialists (using the patient component of the Working Alliance Inventory – Short Form (WAI-SF)). Descriptive statistics for each measure indexing each of the aforementioned variables are below in Table 2, except for SES, which was reported previously in Table 1, Sample Characteristics.

Table 2

Descriptive Statistics for Quantitative Variables

	Mean(SD)	Range	Possible Range
ACE Total number	1.8(1.8)	0-5	0-6
ACE Total frequency by severity (all subtypes)	16.5(20.3)	0-54	0-120
ACE Witnessing Violence	4.0(6.5)	0-20	0-20
ACE Physical Abuse	2.0(3.8)	0-12	0-20
ACE Sexual Abuse	2.0(3.0)	0-12	0-20
ACE Emotional Neglect	4.1(7.0)	0-20	0-20
ACE Emotional Abuse	3.9(6.6)	0-20	0-20
ACE Physical Neglect	.5(1.8)	0-8	0-20
EDPS	7.7(4.5)	0-15	0-30
NIH Meaning & Purpose	36.5(5.2)	15-40	0-40
NIH Emotional Support	35.4(6.3)	16-40	0-40
NIH Instrumental Support	30.7(9.6)	10-40	0-40
WAI Total	80.8(4.1)	69-84	0-84
WAI Task	26.6(1.9)	22-28	0-28
WAI Bond	27.2(1.5)	23-28	0-28
WAI Goal	27.0(1.5)	22-28	0-28

Participants reported an average number of 1.8 adverse childhood experiences (ACEs) out of a possible six. Sixteen out of 24 participants reported having experienced at least one ACE. In their childhoods, a total of ten participants witnessed violence (41.7%), six experienced physical abuse (25%), eleven experienced sexual abuse (45.8%), seven experienced emotional abuse (33.3%), and two experienced physical neglect (8.3%) (see Table 3 below). In the third column of Table 3 are percentages of total women in a comparison sample, of 9,367 female adult health plan members who received an evaluation at an outpatient medical center in San Diego, who reported having experienced each different ACE (Dong, Anda, Dube, Giles, & Felitti, 2003). Women in the present study had prevalence rates that were three times higher for having witnessed violence in their childhood homes,1.8 times higher for childhood sexual abuse, 1.7 times higher for childhood emotional neglect, and 2.5 times higher for childhood emotional abuse, than those in the study by Dong and colleagues (2003). Childhood physical abuse rates were 8% lower in the current study, and childhood physical neglect was 10% lower, than in the comparison sample.

Table 3

Frequency of ACEs by Individual Type

	Total	Percent	Percent in comparison sample
Witnessing Violence	10	41.7	13.7
Physical Abuse	6	25.0	27.0
Sexual Abuse	11	45.8	24.7
Emotional Neglect	7	29.2	16.7
Emotional Abuse	8	33.3	13.1
Physical Neglect	2	8.3	9.2

In Table 4 below, ACE impact ratings are provided for all participants who endorsed at least one ACE. For each ACE endorsed, participants were asked to provide a rating of the impact that it had on their life before they were 18, and the impact on their life at the time of completing the questionnaire. Possible ACE impact ratings included the following: Very negative, Mostly negative, Neither negative or positive, Mostly positive, and Very positive. These options corresponded to values of -2, -1, 0, 1, and 2, respectively. Average ratings for childhood impact ranged from -1.5 for physical neglect, to -.71 for physical abuse. Average ratings for impact in adulthood ranged from -.57 for emotional neglect, to .4 for witnessing violence between caregivers. A "change" score was calculated for endorsed ACEs, by subtracting child impact from adult impact. Average change in impact across participants ranged from .2 for sexual abuse to 1.5 for physical neglect. Thus, in this sample, childhood physical neglect was reported to have the most negative impact in childhood, and childhood emotional neglect had the most negative impact in adulthood. The biggest and most positive change in impact from childhood to adulthood was seen for the two participants who experienced physical neglect in childhood (average change of 1.5), while sexual abuse had the smallest average change (.2). To date no other published studies have used the version of the ACE created by LaNoue et al. (2011) that includes severity, frequency, and impact ratings. Thus, there is no sample with which to compare the present findings of average impact ratings and changes.

Table 4

Average ACE Impact Ratings

	Mean (SD)	*SD*	*N*
Violence between parents			
Child Impact	-1.2	0.79	10
Adult Impact	0.4	0.84	
Impact Change	0.8	0.79	
Physical abuse			
Child Impact	-0.71	0.95	7
Adult Impact	-0.43	1.27	
Impact Change	0.29	0.76	
Sexual abuse			
Child Impact	-1.2	0.79	9
Adult Impact	-1	0.82	
Impact Change	0.2	0.42	
Emotional neglect			
Child Impact	-1	1	7
Adult Impact	-0.57	0.79	
Impact Change	0.43	0.79	
Emotional abuse			
Child Impact	-1.13	0.83	8
Adult Impact	-0.25	0.89	
Impact Change	0.88	1.13	
Physical Neglect			
Child Impact	-1.5	0.71	2
Adult Impact	0	0	
Impact Change	1.5	0.71	
Total Change	1.56	1.41	16

Participants' self-reports on the Edinburgh Postnatal Depression Scale ranged from 0 to 15 (on a scale with a highest possible value of 30), from low depression to possible clinically significant depression, with an average of 7.7, which is in the "low" range for that scale. Four out of 24 participants (16.7%) scored at or above the clinical cutoff of 13. In a systematic review examining outcomes from the use of this scale as a screening tool in primary care, prevalence rates of scores at or above the cutoff in control groups (women who did not receive screening or treatment for depression) ranged from 8.7% to 22.1% (O'Connor et al., 2016). The present sample's prevalence of postnatal depression thus is within the range of comparable outpatient samples.

Descriptive data for NIH Emotional Support Instrumental Support, and Meaning and Purpose measures are listed below in Table 5. Participants on average got 35.3 out of 40 possible points on the NIH Emotional Support measure. In a study comparing the social support of 41 adult oxytocin users with 41 matched controls, the average score across all study participants on this measure was 27.5 (Kovacs & Keri, 2015), Participants averaged 30.7 (on a 40-point scale) in Instrumental Support, in comparison to participants in the aforementioned study, who averaged 28.2. Participants in the present study averaged 36.5 out of 40 on Meaning and Purpose in their lives. To date no published studies have utilized this scale as a measure of meaning, so no comparison data are available. In sum, the average participant in our study perceived herself as having high levels of emotional support and a relatively meaningful life, with moderately high levels of support in their day-to-day tasks such as cooking, cleaning, and transportation.

Table 5

NIH Toolbox Measures

	Study sample	Comparison study samples	
	Mean (SD)	Oxytocin users	Matched controls
Meaning and Purpose	36.5 (5.2)	NA	NA
Emotional Support	35.4 (6.3)	28.8 (10.6)	26.1 (12.4)
Instrumental Support	30.7 (9.6)	27.9 (15.5)	28.4 (14.9)

Reported in Table 6 below are average ratings given on the Working Alliance Inventory, which included 12 questions in which clients rated their level of therapeutic alliance with their Early Intervention Specialist in FOCUS on a 7-point Likert scale ranging from 1 (*never*) to 7 (*always*). Values provided are the averages across the 4 questions for each subscale (Tasks, Bond, and Goal), and averages across all 12 questions (Composite). Participants had an average therapeutic alliance score of about 6.75 out of a possible 7 points on a Likert scale for the Working Alliance Inventory composite score, 6.6 for the Task component, 6.8 for Bond, and 6.8 for Goals. Comparison values are provided for a sample of 53 outpatients receiving cognitive-behavioral therapy for depression, mid-treatment (Preschl, Maercker, & Wagner, 2011). Average ratings are 18% higher, 24% higher, 15% higher, and 18% higher in this sample than in the comparison sample, in Tasks, Bond, Goals, and Composite, respectively.

Table 6

Working Alliance Inventory Scores

	Average Rating out of 7		Total Scores
	Study sample	Comparison study sample	Mean (SD)
Tasks	6.6	5.6	26.6 (1.9)
Bond	6.8	5.5	27.2 (1.5)
Goals	6.8	5.9	27.0 (1.5)
Composite	6.7	5.7	80.8 (4.1)

Correlations were performed to assess hypothesized relationships between variables of interest, with Bonferroni corrections performed to adjust for the total number of comparisons for each set (18). After adjusting for comparisons, with a *p*-level of .0028, no hypothesized relationships were significant except for one. However, given the intentionally exploratory nature of this study, all correlations that were significant at the .05 level and below were included in order to show trends in this sample, even if they were not significant at the adjusted alpha level that accounted for comparisons. SES was not found to significantly relate to social support, perceived life meaning, therapeutic alliance, depression, or ACEs, except that ACE Emotional Neglect total severity by frequency score was significantly negatively related to the SES composite variable that combined the BSMSS overall score with participants' personal yearly income ($r(24) = -.699$, $p < .005$). (As stated previously, the BSMSS overall score represents a composite of education level for the participant, her childhood caregiver(s), and her child's father if that father was significantly involved in her life). Contrary to hypotheses, depression was unrelated to history of ACEs, therapeutic alliance, social support, or perceived meaning in life; therapeutic alliance was unrelated to social support; and ACEs were unrelated to social support, perceived life meaning, or therapeutic alliance.

All relationships significant at the .05 level and below were included in the following tables, though none were significant at the appropriately adjusted significance level, as described previously (except for the correlation between Emotional Neglect and Family Education Participant Income Composite). Table 7 reports correlation values between indices of socioeconomic status and measures of emotional support (as measured by the NIH Emotional Support scale), instrumental support (as measured by the

NIH Instrumental Support Scale), perceived meaning in one's life (NIH Meaning and Purpose scale), and depression (as measured by the Edinburgh Postnatal Depression Scale). Table 8 reports correlations between indices of socioeconomic status and total scores on the Adverse Childhood Experiences measure, and scores on this measure's subscales. As described previously, socioeconomic status (SES) composite variables were calculated by averaging standardized scores for each component. For example, the "Family Education and Income" composite was calculated by averaging the standardized scores on the Barratt Simplified Measure of Social Status Education subscale with the standardized score for household income. Table 9 reports correlations between ACE subscales and depression (as measured by the Edinburgh Postnatal Depression Scale), and scores on the NIH Instrumental Support measure.

Several indices of socioeconomic status were positively correlated with emotional support, including the family education and participant income composite ($r(24) = .410$, $p < .05$). Conversely, several indices of socioeconomic status were found to be negatively correlated with perceived meaning and purpose in life, including the participant education and household income composite ($r(24) = -.462$, $p < .05$). The family education composite was found to correlate negatively with depression ($r(24) = -.405$, $p < .05$).

Table 7

Correlations: SES and Support and Depression

SES Variable	Emotional Support	Meaning and Purpose	Depression
Family Education Composite	.451*		-.405*
Participant Education		-.476* 24	
Participant's Father's Education		.542*	-.531*
Participant's Spouse/Partner's Education	.459*		
Family Education and Participant Income Composite	.410*		
Participant Education and Household Income Composite		-.462*	
Participant Education and Income Composite		-.501*	
Household Income		-.471*	

Note: Sample size ranged from 19 to 24.
Note: all are Spearman's Correlations

*. Correlation is significant at the .05 level (2-tailed).
**. Correlation is significant at the .01 level (2-tailed).

Socioeconomic status was found to correlate negatively with an index of the number, frequency, and severity of adverse childhood experiences, and with multiple individual kinds of adverse childhood experiences. Specifically, the overall score on the Adverse Childhood Experiences Survey (ACES) was found to correlate negatively with the family education and participant income composite ($r(24) = -.426$, $p < .05$), as did the ACES score for witnessing domestic violence in childhood ($r(24) = -.443$, $p < .05$), and childhood emotional neglect ($r(24) = -.699$, $p < .05$). Both emotional and physical neglect in childhood were found to correlate negatively with the family education and income composite (($r(24) = -.572$, $p < .01$); ($r(24) = -.417$, $p < .01$), respectively). Similarly, study participants' fathers' education level was found to correlate negatively with childhood physical abuse ($r(19) = -.556$, $p < .01$)

Table 8

Correlations Between SES and Adverse ACEs

SES Variable	ACE Total	Witnessing Domestic Violence	Physical Abuse	Emotional Neglect	Physical Neglect
Family Education Composite	-.408*			-.614**	
Participant Education				-.487*	-.432*
Participant's Father's Education			-.556*		
Family Education and Income Composite				-.572**	-.417*
Family Education and Participant Income Composite	-.426*	-.443*		-.699**	
Participant Education and Household Income Composite					-.415*
Participant Education and Income Composite				-.561**	-.423*
Household Income					-.415*

Note: Sample size ranged from 19 to 24.
Note: all are Spearman's Correlations.

*. Correlation is significant at the .05 level (2-tailed).
**. Correlation is significant at the .01 level (2-tailed).

Adverse childhood experiences were found to be positively associated with current depression levels and negatively related to current instrumental support. Specifically, current depression was positively correlated with childhood emotional and physical neglect (($r(24) = .425$, $p < .01$); ($r(24) = .437$, $p < .01$), respectively). Current instrumental support was negatively related to childhood emotional and physical neglect (($r(24) = -.459$, $p < .01$); ($r(24) = -.439$, $p < .01$)), respectively.

Table 9

Correlations: Adverse Childhood Experiences and Depression and Support

	Emotional Neglect	Physical Neglect
Depression	.425*	.437*
Instrumental Support	-.459*	-.439*

Note: All are Spearman's Correlations.

*. Correlation is significant at the .05 level (2-tailed).
**. Correlation is significant at the .01 level (2-tailed).

Additional correlations were performed to explore relationships between quantitative measures and interview content. A composite resiliency "score" was calculated using the total number of utterances each person had throughout their interviews that were coded as something later categorized as "Resiliency," which ranged from 1 to 8. However, as there was some variability in the number of questions answered by each participant, an additional value was calculated for each participant for the average number of "Resiliency" statements per question, with a range of .03 to .23. Exploratory correlations were performed to assess any potential relationships between both these indices of resiliency, and: ACEs, therapeutic alliance, emotional/instrumental support, meaning and purpose, income; and education, with Bonferroni corrections performed to adjust for the total number of correlations for each set (18). After making these corrections, using a *p*-level of .0028, no relationships were significant. Changes in ACE impact scores were also correlated with variables of interest, as another way to explore whether "resiliency" was related to SES, therapeutic alliance, emotional/instrumental support, or meaning. Again, at a *p*-level of .0028 to account for the 18 comparisons being made, no relationships were significant.

A composite variable was also calculated for each participant for the total number of utterances they made that were given codes later categorized as "Milagro emotional support" and "FOCUS emotional support," and values were also calculated for each participant for the average number of these kinds of utterances per question. The number of separate statements about Milagro emotional support in each interview ranged from 1 to 8, and for FOCUS from 1 to 9. Again, exploratory correlations were performed to assess any potential significant relationships between this interview variable and

quantitative variables of interest, including depression, therapeutic alliance, emotional and instrumental support, meaning and purpose, ACEs, and SES. After adjusting for the number of comparisons, no relationships were significant at a *p*-level of .0028. However, as a separate analysis, participants' average number of references to FOCUS emotional support per question was significantly related to participants' average number of resilient statements per question ($r(24) = .509$, $p < .05$). Average Milagro emotional support per question was unrelated to resiliency.

Discussion

The present study aimed to provide an in-depth exploration of the lived experiences of former users of prenatal substances who had engaged with comprehensive substance use treatment from pregnancy through post birth. This was done through utilization of a qualitative interview that was developed in collaboration with practitioners with expertise with this particular community sample, and that asked open-ended questions about women's experiences with substance use, motherhood, and treatment programs. Participants also completed standardized measures of adverse childhood experiences, emotional support, instrumental support, meaning and purpose in their lives, and therapeutic alliance with their early intervention specialists at the FOCUS clinic. Results across both interview and measure data suggest that this study's participants possessed great personal strengths in the context of significant hardships, had positive attitudes towards sobriety and motherhood, and benefitted greatly from their involvement in comprehensive, coordinated care. These women's stories also provide clues about the context in which substance use can co-occur with pregnancy, namely, physical dependency followed by an unexpected pregnancy, as well as social and

environmental factors that could make substance use particularly reinforcing as a short-term coping strategy.

Stress and Coping

Historical risk factors. The study sample consisted of racially and ethnically diverse low-income mothers with a higher than average incidence of adverse childhood experiences. The average personal income of the sample ($5,179) was well below the federal poverty level for a one-person household ($13,860), and the average household income ($27,357) was well below the cutoff for Medicaid eligibility for a house hold of three ($32,402) or 4 ($39,040) (healthcare.gov). Almost half (11, 46% had less than a high school-level education and only a third had completed any college education at all; no participants had completed a four-year college degree. More than half of all participants (63%) were Hispanic, and 21% identified as African American or Native American. Thus, participants in this sample were disadvantaged in terms of these well-documented social determinants of health (LaVeist & Isaac, 2012), including race, ethnicity, income, and education.

Participants in this sample also had higher than average incidence of several types of adverse childhood experiences, which have been repeatedly tied to many negative health and mental health outcomes into adulthood (Felitti et al., 1998; Korotana, Dobson, Pusch, & Josephson, 2016). Specifically, this sample reported higher than average incidence of: witnessing violence between caregivers, sexual abuse, emotional neglect, and emotional abuse. Of particular relevance to this sample, ACEs have been shown to significantly predict increased prescription drug use in adulthood (Anda, Brown, Felitti, Dube, & Giles, 2008) early initiation of substance use, problematic substance use,

addiction, and parenteral use (intravenous, subcutaneous or intramuscular substance use) (Dube et al., 2003). Authors of the latter study reported that in their sample of 8,613 adults, ACEs appeared to account for one half to two thirds of serious issues with substance use in adulthood. The present study's findings are consistent with prior research documenting a high incidence of trauma history in users of prenatal substances (Linden et al., 2013).

Degree and severity of emotional neglect as a child was significantly negatively related to participants' overall education score, a composite of participants' education levels, that of their childhood caregiver(s), and that of their romantic partner if they were in a serious relationship, and their personal income. This finding is consistent with past research emphasizing the far-reaching negative correlates of adverse childhood experiences (Korotani et al., 2016). Women in this example who experienced emotional neglect in childhood were less likely to have since acquired protective resources through higher education or that of their families. This correlational finding points to several areas for future research. For example, education level could be a protective factor against the potential for emotionally neglecting one's children. Maternal education level has been shown to relate negatively to both child abuse and neglect (Charak & Koot, 2014). Research exploring the mechanisms by which ACEs predict poor behavioral health and mental health outcomes in adulthood are lacking. If the present study's correlational finding were replicated in other samples, perhaps education and income could be assessed as mediating factors between ACEs and adult health outcomes.

Environmental risk. Participants in this sample represent a high-risk subset of former substance users, in terms of socioeconomic status and history of adverse

childhood experiences. Almost all participate were living below the poverty level, and most had experienced at least one adverse childhood experience. Trends in correlational findings were consistent with past research emphasizing the far-reaching negative correlates of adverse childhood experiences (Edwards et al., 2003). Emotional and physical neglect as a child was significantly related to participants' current depression levels and negatively predicted current instrumental support. Thus, women in this example who experienced either type of neglect as children were more likely to experience symptoms of depression and less likely to have instrumental support from other people decades later.

All mothers in the sample reported some significant stressors that had occurred at some point from pregnancy through the date of their interview, such as financial difficulties, inadequate housing, or interpersonal stressors. For example, most mothers (88%) in the sample reported difficulties or complications in pregnancy or during the birth, half reported dealing with child illnesses after birth such as withdrawal symptoms, and seven families (29%) were affected by incarceration of the baby's mother or father. These factors take on particular significance in the context of the aforementioned significant historical risk factors. The following quote from one participant in response to the interview question "How have you been managing since the baby was born?" typifies the chaotic life circumstances described by many participants in the study.

> "…my kids really is [sic] what keeps me going, keeps me getting out of bed. Um, there's been ups and down you know, as life goes, you know stress here…we had a move. We just moved in here [four months previously]. We had a fall-out with our um last landlord. And um, she gave us like a day to move. It was horrible. But

> um, we got here and it's just, baby always comes foist. So it's like, if you still see there's boxes and stuff and it's just like, I'll get to them and go through them when I can. You know? So it's just as long as my kids are happy and … that's usually just what my day consists of is just constantly attending to my kids." (Coded as: difficulties/hardships, adjustment/coping well; child/motherhood is priority).

Trends in correlational findings highlight the potential protective role socioeconomic status may have played in these participants' experiences of adverse childhood events, depression, and support. Higher socioeconomic status, as indexed by participants' individual and family income and education, predicted lower self-reported ratings of adverse childhood experiences, lower depression scores and greater emotional support. Conversely, socioeconomic status was negatively associated with participants' perceived meaning and purpose in their lives. Considered in conjunction with the fact that the average yearly household income in this sample was less than $28,000, such findings may suggest that higher income and education, in the context of significant psychosocial stressors, can cast these difficult life circumstances in a more negative light than for those with lower levels of income or education.

Coping and Mental Health

Participants showed average depression levels that were comparable to similar clinical samples of other women, reported relatively high average levels of perceived life meaning, and all showed some degree of personal strength and/or positive growth, particularly in relation to their roles as mothers. Such findings are notable in the context of higher than average incidence of ACEs, low education levels, low average income,

being a parent to [a] young child(ren), and recent struggles with addiction. They suggest the presence of notable personal strengths. The following interview excerpt comes from an interview response to the question "what does it mean to you to be a mom?" Her story illustrates how many of these women pursued significant positive self-change for the sake of their children, even in the context of heavy stressors,

> "Um, to be a mother is like…really my kids like have … changed my life. If you would've known me like, my dad got murdered when I was 14. And after that I pretty much like ran the streets. And that's when I started doing drugs and everything like. Since then like, I- I had lived on my own since I was like 14. I … would just go with friends here and there …. And like so, it's literally like changed my life completely around. …And I never thought that I would even like to be any way different. But I do, and, it's, it's just like completely changed me into like a whole different person. And that's what I love about it." [coded as: motherhood turned whole life around; motherhood motivated sobriety]

Substance Use, SUD Treatment, and Behavioral Health

All participants in this sample expressed positive attitudes towards their own sobriety, primarily for sake of their children, and all named negative consequences of their past substance use. For example, the following excerpt from an interview describes the self-perpetuating and all-consuming cycle of use and dysfunction that was reported by 29% of participants.

> "…at first it was a fun thing that we did with all of our friends. And then it turned into like this thing that totally like consumed your entire life. Um and it did that for a long time you know although I didn't want to use it sometimes. It was

just a cycle. Like I just couldn't get clean because it was too uncomfortable and too hard. And then you start doing these things to continue using .... Like stealing from your family and stuff like that so you start using to like mask those feelings of disappointing and hurting people. … so it's just kind of like a cycle of terrible things…and then after a while you just get tired of it…You just get tired of…hurting yourself and hurting other people. And it's just a really hard thing to maintain. You know I used to tell people that…I think my boyfriend said to me one time like "why do you keep doing it?" And I said "cuz it's easy." But it's actually really hard like making the money to get high and then you work all day to make that money and you finally get enough money to get high and it's like five seconds of pleasure and then you fall asleep or you're just numb you know and it's really like there's no pos- well, there's a small positive but then negatives completely outweigh it and it's just a terrible thing." [Coded as: fun/pleasure, social/environment, negative cycle/consuming, avoid negative emotions, tired of it/wanted to change it; general negative attitudes about substance use.]

Past reasons for use. Most participants (75%) indicated that their reasons for using centered on pursuit of positive emotions and/or avoidance of negative emotions, such as to counteract sadness over separation from their kids, or to manage stress, boredom, or loneliness. Half of participants described intense physical dependency as a substantial causal factor in their problematic substance use, and a quarter of the sample reported that they initially used opioids to manage chronic pain, four (17%) through a prescription from their medical doctor. The following excerpt is one participant's explanation of her former reasons for using and the intensity of physical dependency.

"I was addicted.…and just…the only thing that would make me be able to get through the day and take care of the two kids without withdrawing…Was to get more…. I think um, stress made it harder to stay sober. Um, stress from losing everything. Stress from trying to figure out what I'm gonna…how I'm going to get it. Like, it was one thing after the next." [coded as: using to function, addiction; stress]

Others described their use of opioids to manage chronic pain.

"I had…four deteriorated discs. And I have lumbar issues. So, um, when I was like…20, 21. I was super young, and I started noticing when I would clean and I would bend down to … grab something off the floor, I would literally have to like stop and stay down, bent down, because I couldn't come back up cuz it hurt so bad…. So, um with all that I had to get on pain medicine. And you know, no doctor ever tells you: "Oh you're gonna get addicted in a year or so." … Just "here's your pain medicine, here, deal with your pain." My doctor prescribed it and then my doctor's the one that upped my prescription and was making sure I had it every single day and I like realized that like, I have fibromyalgia. And I have carpal tunnel in my hand. I have um, a lot of different stuff. Like I said I have my migraine headaches…And so, those things [prescription medications] I took daily and I had no idea that, you know. I [didn't] think it was going to do anything to me. I just thought it was gonna help. Like, you know it's a medication that a doctor prescribed..." [coded as: used to cope with physical pain, started with prescription, didn't know prescription pain meds were addictive,]

And others described their attempts to manage emotional pain with substances.

> "The main [reason] that I … was using at that time was I was lonely. I was really lonely. And I felt really like worthless on the inside, like I didn't feel like I deserved to be around anybody who was trying to like bring their life up. So, for me, drugs were like a way of coping and … almost like dumbing myself down so I didn't have to take any responsibility for my life. It was almost a way of me like being a victim. And like making it okay almost. Like "well I'm a drug addict so it's okay that I'm not going to school." Or you know it was my excuse for everything that I didn't want to do and for giving up and stuff." [coded as: deal with negative emotions, negative self-views]

For many women in this study, opioid use served a palliative function for unmet emotional or physical needs.

Reasons for quitting. All mothers identified motherhood as a primary motivator for sobriety, such as not wanting to lose or be separated from their kids, not wanting to cause harm to their babies during pregnancy, and believing that sobriety was important for being a good mother. In fact, three mothers stated that they did not believe that they would have gotten sober if they had not gotten pregnant, and that the baby had effectively saved their lives. Two of these women described anticipating that they would die eventually and not caring, until their pregnancy. Similarly, a quarter of participants endorsed negative self-views at some point in their interviews. Such comments highlight the importance of addressing concurrent mental health treatment needs in this population (Coleman-Cowger, 2012), as with any other patients struggling with substance abuse. The following excerpt from one participant's interview illustrates how co-occurring

mental health issues can influence substance use, as well as how impending motherhood can motivate healthy behaviors when one's own well-being is not sufficient motivation.

> "I was just like giving up like all hope. I was like: "I'm a sad, lonely, depressed, like miserable person." Like the only escape I had from those feelings and unpleasant thoughts is [sic] sticking a needle in my arm and you know what I mean I'm going to do that til I die. Like I had stopped coming around to anybody and everybody cuz I you know I figured okay you know, drugs are self-destructive so let it be that. You know what I mean? Just let it destroy me. … Um, but then when you know I got pregnant. It was just um, it was just a miracle I guess because she really like, I was like a zombie…I really felt like I was dead. Like I really did I just…thought I was dead already. I had like resigned myself to the fact that I was going to die on the street probably, you know from an overdose or something horrible happening to me. …but then when my stomach started getting bigger. And you know everyone around me was getting excited like the doctor's like "look at your ultrasound." Like "you wanna hear your baby's heartbeat?" you know he would be like "oh, can I touch your stomach? Her growing in me I guess kind of like brought me back to life. It's like she gave us both like a rebirth almost. [coded as: negative self-views, avoiding negative emotions, social isolation, giving up on life/parasuicidal behavior; pregnancy motivated sobriety]

Helpful factors and barriers. Most participants (58%) identified FOCUS and/or Milagro as critical parts of their success in getting and/or staying sober. Most participants

(63%) also identified personal resiliency factors that would help them be successful in their future goals (including maintaining sobriety), such as their own commitment or using new coping strategies they had learned. While more than half (54%) identified social networks as a potential trigger that could make continued sobriety difficult, all of these same people expressed continued intention to avoid problematic people. One participant had even moved to a different town with her partner when she found out that she was pregnant, in order to effectively sever ties with all of their social networks. These actions reflect her strong commitment to the well-being of her unborn child, as well as the significant role of her partner in facilitating these changes.

> "…he [baby's father] feels basically that he [the baby] pretty much saved us. Cuz we were doing really bad…Like we didn't…have nothing…we were at the time living at my friend's house. But it was …just a big drug house, basically. And um, like right the day we found out I was pregnant we… walked into UNM Hospital and told them that I was pregnant and I was strung out on heroin. That way like I could get on suboxone and not like have to do more heroin. And like from then on like we never went back there… well we went back there one time to get our belongings. And then we pretty much, we left. Yeah, and …it was hard… we went to his auntie's house at first. And then… we went like to hotels after that. Cuz we didn't want to come back to [redacted] County basically, because I know like everybody here. And it's … basically like poison. But like, we … just keep to ourselves. … nobody knows where we live…. Nobody comes by our house, nothing…And like we've ran into people like at Walmart and stuff but we don't, we don't even talk to them. So. We pretty much it's just like us like we just hang

out with each other and that's it." [coded as: hardships unrelated to couple relationship, baby motivated dad's sobriety, dad turned whole life around when discovered pregnancy, life changes to get/stay sober]

Treatment seeking and access. A troubling trend emerged for a portion of participants who reported shame about their use and/or not feeling comfortable confiding in anyone about their struggles with addiction. A quarter reported that for a while they told no one about their addiction, fearing judgment or legal consequences, and a quarter reported feelings of shame related to their use, which was a barrier to them seeking treatment.

"… during I think the first half of my pregnancy…I didn't take any… opiates or anything. I … took it upon myself to…buy it off the street… the subutex. Um, I did a lot of research and I figured out that's what they [medical providers] were gonna have me do. But I didn't want to tell the doctor. You know I was there at the doctor's office and I wanted just to say it. You know I just wanted to let them know that I needed help. And I didn't at first. … I thought they were gonna judge me. I thought they were gonna… you know, think I was a bad person. … I wanted to tell them so bad. … I did cuz I knew they were gonna find out anyway and I … just I wanted to know that I was doing it the right way, you know? So, I- I should have asked for help sooner. I should have, but I just, I couldn't do it. Um, but towards, I think it was maybe I was like halfway …through my pregnancy. And I let them know, I…I hadn't taken any opiates at all um …. And then they told me: well you can have your own prescription, you know do it… the right way, and take the right … dosage. Um, so, you know but I just felt like, like, you know,

like a huge weight lifted off my shoulders when I told him, you know? [coded as: illegally obtaining suboxone, fear of disclosing about use with providers]

Narratives like this suggest that shame and stigma can impede treatment-seeking behaviors in this population, unfortunately during a time when medical support has potential to greatly improve both maternal and fetal health. Indeed, research suggests that stigmatizing policies, such as those targeting mothers who smoke, can negatively impact disadvantaged mothers in particular, resulting in poorer mental health, "avoidance or delay" in seeking medical treatment, and poorer quality of care by medical providers (Burgess, Fu, & Ryan, 2009, p. S151). For substance using pregnant women, fear of criminal justice systems reduce treatment seeking not only for substance use but also for comprehensive medical treatment during their pregnancies (Stone, 2015).

Despite these barriers, most participants (54%) tried to quit prior to engaging with Milagro, and many who sought out treatment had difficulty obtaining it. A quarter of participants reported having significant difficulty finding appropriate and satisfactory SUD treatment services prior to Milagro, and four reported having difficulty obtaining medication-assisted treatment through a medical provider before beginning with Milagro.

"…it got to the point where we couldn't pay rent anymore because of me. And um, I was, I didn't…I didn't want to go through the withdrawal. But I knew that I needed to get clean. And I had a job at the time, so I couldn't like run off to some random rehab place and have to pay for that. ... I basically was just sick of this thing consuming my life and ... I just wanted to find a way to get out of it... And I tried for probably a good six months, called every doctor you could think of. Um, looked into methadone programs. But then, you know, you had to go every

morning at 6 AM and get your dose, … and like, nothing would work for me. And so, I basically just…. you know kept buying suboxone off the street trying to stay off the pills. And um, so that was about six months' frustration. I even had, one of my bosses at my old job … was a recovering addict as well, and so, he helped me call places and you know try and find programs. But like, they can only have so many, you know patients at one time. And with, you know, opiate use so high. There is…no, no one's willing to help. Everyone's full. Everyone's you know, a lot of doctors stopped even doing [prescribing] suboxone because it's so heavily regulated. And you have to be specifically licensed to prescribe it…But the people available to help is decreasing. … And so basically you know, unless you're a pregnant woman, it's almost impossible to get help to get clean. And that's kind of, depressing. I think about all, all of … me and my husband's friends that have OD-ed over the years. And it's like, if only it was easier to get help, these people might still be alive. [coded as: tired of lifestyle/wanted to change, previous attempts to quit before pregnancy, hard to find medical provider for MAT, options outside Milagro unappealing, obtaining suboxone illegally, wish more people could get treatment]

Such comments make a strong case for an increase both in the number of available services for prenatal SUD treatment and in their visibility and accessibility to populations who need them, including both pregnant women and other substance users.

Medication-assisted treatment. Medication-assisted treatment (MAT) is a feasible, safe, effective treatment for substance use in pregnant women struggling with addiction (Klaman et al., 2017). Although women were not specifically asked about their

views on MAT, only about their experiences with the Milagro providers through which they may have received it, most women in this study (79%) expressed positive views towards MAT. For example, many asserted that it helped not only with sobriety but also with general well-being and even their ability to complete day to day tasks of being a mom. Some (17%) did express negative views towards medication-assisted treatment, such as viewing it as its own addiction, and several (13%) reported shame over using this treatment method. These results suggest that both reducing stigma towards this therapy and increasing its availability may allow more pregnant opioid users to get sober. Indeed, a nonjudgmental stance has been shown to increase pregnant mothers' comfort with and use of medication-assisted treatment (Harvey, Schmied, Nicholls, & Dahlen, 2015), a finding that was supported by the narratives of a number of women in the present study, including the one quoted below.

> "I'm glad they were there [Milagro]. And um, as soon as…I went… everyone there was…amazing. They're just…I don't know, they just get it. You know what I mean? Like, the hospital staff themselves were very judgmental towards me. But nobody in Milagro or FOCUS has ever *ever* made me feel like a bad person. They make me feel like a good person because I went and got help." [coded as: glad for [Milagro] program; emotional support (by Milagro), negative experiences with providers/programs outside Milagro/FOCUS, not feeling judged at Milagro]

Mothers' health goals. Mothers were also asked to describe their personal health goals, and their answers advanced the prominent themes already seen throughout the interviews of mothers' resiliency, and their commitment to both their children and sobriety. In response to this question of personal health goals, 46% asserted commitment

to their roles as mothers. Fifty-eight percent identified physical health goals related to diet, exercise, or weight changes, 29% identified maintaining sobriety as a primary goal, and one quarter expressed desire to maintain their overall physical health. When asked what would help them accomplish these goals, sixty-three percent identified their own strengths and commitment.

Motherhood

Women in this sample spoke positively both about their children and their roles as mothers. Most mothers (63%) reported that their pregnancy was unexpected; one was taking birth control at the time she got pregnant and several had previously been informed that they could not conceive by doctors. Despite this surprise for many and the stressors that accompany impending motherhood, less than half of participants (42%) made any negative comments about motherhood at any point in their interview, including seven reports of ambivalence about the pregnancies when they discovered them (29%), and three (13%) indications that motherhood was hard work and sometimes overwhelming. Almost half (42%) made very positive statements about motherhood, such as indicating that becoming a mother had turned their whole life around and changed them completely, as seen in the following interview excerpts below.

> "I had it really rough before he [her son] was born. I think... he … made like a really big breakthrough in my life, because I was strung out on heroin. And he pretty much like stopped all of that…. But I mean like, I was living on the streets and I had nothing and like I have my own house. I have two cars. I have a boat. I have, you know? And all within two years. …like he probably saved my life [her

son]. Cuz I probably wouldn't be here I'd probably be dead or something. You know what I mean?" [coded as: [baby improved life/turned life around]

"Oh God. Um, you can ask any member of my family. I was always not gonna have kids. Was never gonna have kids. And I just kind of accepted that. You know what I mean? And um, but, in reality it turns out that having these kids actually saved my life. Because who knows where I would be right now um, if I hadn't gotten clean, had my babies. They completely changed my world. I can't imagine not having them here… Like I never thought I would be a good mother and….my mother instincts just turned on right away. And I want the best for them in everything. Yeah, it's the best thing I've ever done. Ever. Is be a mommy .....Or like all the stuff I never thought I would say in my life like uh … please don't take off your sister's diaper. Don't put food in your sister's hair. Stop biting yourself. Just all these crazy things I never thought I would say in my life. All cuz of these. [gesturing to kids] Like fun things and meaningful things and just uh, adding so much to uh your life. …. I feel like I have a purpose now. You know I never had a career, I didn't finish college, I didn't think I'd really amount to anything. But now I have the most important job in the world." [coded as: motherhood was unexpected, motherhood turned whole life around, caring for child/wanting to be a good mom, motherhood gives purpose/sense of accomplishment/identity]

Mothers in this study also showed evidence of strong positive identification with their roles as mothers. For example, as mentioned previously, in response to a question about the mothers' *personal* goals for staying healthy, almost half (46%) articulated goals related to motherhood, including being a good mom, providing stability for their kids,

and/or teaching their kids healthy habits. Participants were asked what motherhood means to them. In response 38% reported that motherhood gave them a sense of identity, purpose, and/or accomplishment, including one mother who stated that she saw her child as a blessing. More than half (58%) expressed commitment to be a good mother to their child(ren) in response to this question, and nine (38%) made statements suggesting positive growth in their skills as mothers. Most mothers (88%) also expressed their commitment to their roles as mothers such as by describing their intention to set a positive example for their children, as seen in the following example.

> "I would love [her daughter] to look at me and you know think … my mom's stable, my mom's strong, my mom you know comes home every day when she says so. I want her to trust me completely, you know, I don't ever want to let her down. I don't *ever* want to let her down. I don't ever even want to be like five minutes late to picking her up. Cuz I don't ever want her to feel like she cannot 100% count on me to always be there for her no matter what she's going through. And like I said we really want to do the Spanish thing with her to teach her …. And I really want her and her sister [half-sister] to be close. That is like a really big priority for me cuz family is so important to me. … I just really want to … show my daughter that she's going to be okay and that I'll always be there for her." [coded as: wanting to be a reliable/trustworthy/stable mom, child education, wanting child to have positive family relationships, generic positive]

Mothers in this study reported hopes and goals for their children that are similar to those reported by a comparable study sample of 6700 pregnant women (Reese et al., 2016) across the range of socioeconomic levels. The latter study found that with

increasing levels of parental education that parents articulated hopes for their children at higher levels of the Maslow hierarchy of needs, such as self-actualization and belonging. Although most mothers in the current study (58%) identified healthy development as a primary goal, which is at the lowest level on the hierarchy of needs, many (54%) also articulated hopes related to happiness (54%) and education (50%), which are at higher levels on the needs hierarchy. Mothers in the current study are no different from other mothers; they want the best for the kids and have aspirations for not only their survival but also their self-actualization.

Social Support

Though a primary focus of the interviews was participants' experiences with providers in the Milagro and FOCUS treatment programs, most participants reported having support from their families and baby's fathers, including those who were and were not romantically involved with them. Participants answered questions about their perceived levels of emotional and instrumental support and were not asked to specify the sources of that support on this questionnaire. Mothers in this study reported much higher levels of emotional support, and moderately higher levels of instrumental support, than substance users and controls in another study that used the same measures of these constructs (NIH Toolbox Emotional Support and Instrumental Support). Participants in this study may thus have higher than average social support resources than for substance users in general, though it is unknown what mothers saw as the source of these supports.

Participant feedback about Milagro and FOCUS. Participants' comments about both Milagro and FOCUS were overwhelmingly positive, both in terms of general comments and those in reference to the quality of services offered and the degree of

competency and professionalism, especially regarding medical doctors and nurses. All participants reported feeling emotional support and/or interpersonal connections with providers at both the Milagro and FOCUS clinics, and most (63%) indicated that FOCUS was helping with their child's ongoing development. The following quote comes from one participant's response to the question of what helped them be successful in getting sober.

> "Um, you know Milagro and FOCUS. It's, it was mostly... them. You know it just they, um, they're very supportive. …I usually just look forward to seeing them though because they're so helpful and they're so supportive and they're you know, they … really do care about what's going on with me and the girls and you know um. So, I mean um having them has, has really helped me. … I really don't think I could have done it without you know either program. …the way they help you, the way they support you. I mean there's no, there's no way of failing. There's no way. … Um, even … when I took the medication for the you know, they said you know, if you, if you relapse it's not the end of the world. … But um, I mean they're just really supportive and they just make you, they don't make me feel like, they just, there's no chance of failure with them. So, I just, without them, … I really don't think I'd be where I am today. So, yeah, they're mostly what helped me." [coded as emotional support of programs]

Participants reported having on average quite strong therapeutic alliances with their FOCUS clinic Early Intervention specialists, in the areas of shared goals, emotional

bond, and tasks towards goals, regardless of their SES, history of adverse childhood events, or current depression levels. This highlights the significant success of FOCUS providers in connecting and engaging with this complex population. Several participants expressed gratitude for having FOCUS providers in their lives and referred to their EI specialists as friends. These findings may highlight the importance of the patient-provider bond in both providing effective SUD treatment and maintaining engagement with it (Wolfe, Kay-Lambkin, Bowmen, & Childs, 2013) in this particular population of substance users. Many mothers in this study described how close they felt to providers in Milagro and FOCUS. The following mother's comments, about how FOCUS fits into her goals for motherhood in the following year, highlight how significant a role that provider relationships can play in the lives of women being seen in FOCUS.

> "And you know FOCUS also takes a lot of like stress off me because you know I know that [her Early Intervention specialist] you know has … her Bachelors degree in … early childhood education so she also you know is kind of like a backup net for me like if I don't notice something that my daughter could be doing, you know she you know can be like "hey you know maybe we should get some speech therapy over here." … And you know she also gives me an ear to talk to. … you know a lot of moms are lonely, especially like I was super lonely for like the first two years of [daughter's] life cuz I gave up everybody I knew for my daughter. Like my phone probably … literally has not rang... for me in almost two years because I cut everybody off. So, I was really, really lonely and that was what I had to do to stay sober was stay away from everybody I knew. And it was nice knowing okay [her Early Intervention specialist] is coming in you know five

> days, you know what I mean? I'll have somebody to you know a girlfriend over here to talk to and … it's nice. And you know like I said she got the massage therapist over here to teach me how to massage [her daughter]. And she [her Early Intervention specialist] did her Bachelors degree and that's what I'm trying to get. I can also ask her like you know questions on you know how to be successful like what steps she took to manage her life and get it in order so that you know. [coded as: FOCUS interpersonal/emotional support, FOCUS supporting child development, FOCUS helping to get connected with resources/referrals, FOCUS supporting mom's goals]

Another noteworthy finding was that resiliency was positively related to emotional support from FOCUS. Of course, this correlational finding allows no conclusions about causal relationships. Perhaps in this study, resilient individuals were better able to benefit emotionally from working with providers at FOCUS. Or perhaps the extent of FOCUS emotional support increased women's ability to draw on their personal strengths and grow in positive ways. Still countless other possibilities exist, such as a third variable influencing both simultaneously. Prior research has offered some potential insight into these relationships in other clinical populations. For example, one study found that medical provider empathy for cancer patients (as perceived by the patients) was associated with better psychological adjustment and lower patient distress (Lelorain, Bredart, Dolbeault, & Sultan, 2012). In an adolescent sample, positive emotions were found to mediate between social support and depression, suggesting that social support improves well-being by increasing the incidence of positive emotions (Li, Jiang, & Ren, 2017). Resilience research has demonstrated that those who efficiently adapt to and cope

with difficult experiences do so by cultivating positive emotions (Tugade & Fredrickson, 2004). In the present study, resilience may have been increased by emotional support of FOCUS providers through the generation of positive emotions. Further research with former users of prenatal substance users to attempt replicating this finding and clarifying the causal nature of this relationship may offer useful insights.

Care Outside Milagro and FOCUS

Patients were asked to describe any previous prenatal care they had had outside of FOCUS, and some also gave descriptions of SUD treatment outside of Milagro and FOCUS, though the latter was not elicited by any interview questions or measures. Several participants reported feeling judged by other SUD treatment providers, but several indicated that their external SUD treatment had helped them with their sobriety. Of the sixteen participants who had had prenatal care prior elsewhere prior to engaging with Milagro, almost half (44%) had negative comments about those experiences in general, several of them (19%) reported negative impressions of their previous PNC providers interpersonally, and several (19%) had negative comments about the quality of their previous PNC. In response to this question about prenatal care before Milagro, almost half of respondents (44%) made general positive comments about Milagro and a third (31%) indicated that they thought the quality of care was better at Milagro. These negative prior histories with SUD and medical providers suggest another potential reason for some women's unwillingness to share about their addictions with doctors while they were pregnant.

Potential Treatment Applications and Suggestions for Future Research

To the extent that this sample is representative of women likely to benefit from comprehensive, coordinated services from pregnancy through post birth, these results offer potential avenues for guiding future treatment research. For example, evidence of these women's significant personal strengths suggests that treatment programs have much on which to capitalize when engaging with them, such as their commitment to being good mothers and their ability to draw on this commitment even when their sense of self-preservation fails to motivate sobriety. Pregnancy may represent a unique period of increased motivation in which to reach at-risk substance users who would otherwise be difficult to engage in substance use treatment (Mitchell, Severtson, & Latimer, 2008). Providers might be more effective at supporting health behavior change with pregnant substance users if they considered the strong possibility up front that these women are likely to care deeply about their unborn children and would not have used if they knew they were pregnant, that they might already have tried to get SUD treatment, and that they are highly motivated to get sober for the sake of their child. A stance of unconditional positive regard and accurate empathy are critical underpinnings of Motivational Interviewing, a set of therapy techniques for assisting people in resolving ambivalence regarding health behaviors (Miller & Rollnick, 2013), which has been found to be effective, in combination with cognitive behavioral therapy, in supporting abstinence with pregnant substance users (Yonkers et al., 2012). The findings of the current study, with its rich detail about these women's lived experiences, certainly provide the foundation for increased empathy and positive regard for working with women in this population. Best practices recommendations for treating pregnant substance users include integration of substance use treatment with gender-specific and

trauma-informed therapy (Saia et al., 2016). Perhaps best practice training could also encourage strategies that increase empathy and unconditional positive regard.

Pregnancy is associated with unmet treatment needs in substance using populations (Terplan et al.2012). Participants from this study reported a lack of acceptable treatments for opioid dependence, though most women had tried to get sober before starting the Milagro program, and many before they even got pregnant. On top of this lack of treatment availability, the present study suggests that other barriers may interfere with treatment seeking, such as shame and secrecy surrounding an opioid dependency. On an individual provider-patient level, prenatal care providers could offer an emotionally safe environment in which to disclose any current substance use issues and communicate about patients' treatment options and legal rights, in attempts to increase disclosure and treatment seeking (Harvey et al., 2015). Results from this study highlight the positive response of patients to meaningful patient-provider relationships, which has also been emphasized in previous qualitative research around factors promoting treatment success with this population (Sword et al., 2009).

The present study also suggests that medication-assisted treatment is useful for many but is subjected to the same societal stigma that taints perceptions of substance use. While most participants reported that they found medication-assisted treatment helpful for their well-being, several also expressed negative views about this treatment, reflecting a shameful view of using any "substance." Although medication-assisted treatment is an effective harm reduction strategy that reduces maternal opioid use and improves pregnancy outcomes (Pritham, Troese, & Stetson, 2007; Tran, Griffin, Stone, Vest, & Todd, 2017), several women in this study thought of themselves as "addicts" as long as

they were on this treatment. In order to increase pregnant women's willingness to seek medication-assisted treatment, perhaps stigma must be targeted and reduced both in providers and patients.

Limitations

This study aimed to increase understanding of a marginalized medical population with unique treatment needs that faces multiple barriers to seeking and obtaining appropriate treatment. A primary goal was to gather data using qualitative methodology and standardized measures in order to *describe* their lived experiences, not to develop *theory* about the constructs of interest. There are obvious limitations to qualitative research. Significantly, in the absence of experimental manipulation and longitudinal data, no conclusions may be drawn about causal relationships between any variables of interest. (For example, we cannot assess whether resiliency influenced the amount of emotional support people reported getting from FOCUS, or whether FOCUS emotional support increased resiliency). Additionally, qualitative research intends to avoid preconceived notions and to let the individuals participating in the study guide the research (Corbin & Strauss, 2008). However, no research, even that which utilizes experimental design to protect against bias, can be completely free of prior assumptions (Lilienfeld & O'Donohue, 2007). The four coders in this study generated codes based not only on data but also their training and backgrounds in psychology, their prior conceptions of substance use and pregnancy, and the study's explicit intent to understand individuals' strengths in this population. Though codes were created, assigned, and finalized in an iterative, collaborative process involving all four of us, our final codes may or may not reflect an understanding of women in this population that is highly

representative of people of other fields, genders, or backgrounds. The use of open-ended questions presents further challenges. As described previously, interpretation of question answers and comparisons between different individuals' answers, was difficult given the great latitude allowed for interview responses. For example, if one participant reported intense withdrawal symptoms and another did not, we could not conclude that the latter did not experience them, only that they did not report any. Additionally, this was an intentionally strengths-focused interview, eliciting specific types of narratives, and this factor should be taken into consideration in interpreting these data. For example, it is likely that the prevalence of statements demonstrating resiliency could have been as lower with an interview addressing the same topics with less of a focus on strengths.

The sample utilized in this study, while appropriate for qualitative inquiry, reduces the potential generalizability of this study's findings to other similar samples, both due to size and composition. In addition to being a very specific sample of former users of prenatal substances (i.e., former patients in the Milagro program, current patients in the FOCUS program, New Mexico residents), sampling bias may additionally limit their representativeness of Milagro and FOCUS patients. All participants in this sample had utilized Milagro services and remained in treatment through post pregnancy. All agreed to do a research study in exchange for a gift card, allowing me to go into their homes and ask personal questions. Perhaps these women differ from those who did not remain in treatment post pregnancy, or from the few who declined participation in this study, or those who volunteered but were lost to follow-up. Recruitment procedures led to even more biased sampling. Those with acute psychosis or who had recently relapsed were not included in the study, in order to avoid compromising patient care or addiction

recovery by administering an interview that could cause significant distress. Further research is needed in order to accurately characterize what is likely a diverse sample of women who utilize services in Milagro and FOCUS, and who may potentially vary greatly in their narratives about substance use, motherhood, well-being, and treatment.

The small sample size also limited usability of quantitative data, by limiting power, given the number of comparisons delineated in the hypotheses, and the necessary corrections made to reduce the chance of Type I errors. At this adjusted alpha level, results did not indicate significant relationships between any variables of interest, including ACEs, SES, depression, meaning and purpose, and social support, except that childhood emotional neglect was negatively related to family education and maternal income. These results may reflect Type II errors or may indicate an actual lack of association between any of these variables. A larger sample size could potentially help clarify the reasons for these findings.

Data were obtained using self-report. Both interviews and questionnaires could potentially be subject to the social desirability effect or other motivations. The short amount of time getting acquainted with the interviewer, combined with the highly sensitive nature of the data, could have resulted in underreporting, for example in regard to adverse childhood experiences and past severity of substance use issues. As much as it was emphasized that their data were completely confidential and not related to their ongoing care at FOCUS, they had still met the study investigator in the FOCUS clinic and been introduced to her by FOCUS providers. As described previously, study participants spoke very positively about their FOCUS providers. Perhaps they felt pressure to speak positively about Milagro and FOCUS because of the investigator's even

minimal association with the latter program, out of a strong investment in these provider relationships. Additionally, interview lengths varied significantly from 17 to 95 minutes, demonstrating a large variability in engagement and degree of self-disclosure. Thus, it is indeterminable the extent to which dominant trends observed in the narratives were truly representative of most participants.

In terms of quality of data, the interview environment was often not ideal. In most interviews the child and other family members were present for most of the interview, sometimes coming in and out of the room, resulting in frequent interruptions, audio recordings punctuated with ambient noise and baby cries, potentially compromising both the quality of the recordings and participants' honesty and depth in responses. Given the generosity of mothers with young children volunteering their time for a research study, we aimed to make interviews as convenient as possible and considered these factors an acceptable source of noise, if interviewing women in their homes increased their willingness and ability to participate in the study.

Summary and Conclusion

This study provided complex, nuanced windows into the lived experiences of women engaged with comprehensive care. Qualitative methodology was used to analyze women's personal narratives, as told in their own words, guided by a focus on patient and program strengths. Findings run counter to conceptions of pregnant substance users as having poor character or being unfit mothers, which underlie punitive legislation for prenatal substance use. To the extent that the current study's results are representative of former users of prenatal substance, treatment seeking in this population may perhaps be better conceptualized as an act of bravery, in the face of stigma and fear of judgment or

legal repercussions, often requiring a complete restructuring of their entire lives and social networks, all for the love of their unborn child. For example, one woman in our study sought out treatment despite believing that she might face legal consequences.

> "But I knew that you know, either way, as long as the baby was okay it kind of didn't matter the discipline that I had to endure if, if you know, if that meant that they had to investigate me then it meant that they had to investigate me. You know I knew that I was a good enough mother that, I just came to terms with a lot of things. Like, just because I knew that the safety-ness and the well-being of the child you're carrying is more important than judgment and more important than a lot of things."

All participants reported psychosocial and/or health difficulties of some sort, average personal income was well below the poverty level, not one participant had earned a Bachlors degree, and rates of adverse childhood experiences were higher than in normative samples, however, all participants reported having experienced some positive growth or realized some personal strength about themselves, related to their substance use and/or being a mother. Resiliency across the entire sample despite the significant co-occurring difficulties faced by these women offers hope that women from this high-risk population can make dramatic changes in their health behaviors and as mothers, particularly when provided with comprehensive and coordinated care.

These narratives suggest the presence of not only significant internal resiliency factors, but also supportive (external) resources. All participants spoke positively about their experiences with providers at both Milagro and FOCUS, often comparing them to past negative experiences with other providers, and many cited their appreciation for the

convenience of the comprehensive care model. For pregnant and parenting women with opioid use disorders, medication-assisted treatment within the context of a comprehensive treatment context is the standard clinical practice according to several recent reviews (Saia et al., 2016; Klaman et al., 2017). Narratives derived from this study identified important barriers to women from this population in accessing care, including shame about their situations and fear of involvement with child protective services, thus revealing potential targets for increasing use of empirically-supported treatments in this population.

The women's narratives shared in this study advance a new understanding of women who seek treatment for addiction while pregnant, as bravely fighting against their many disadvantages out of commitment to their children's well-being, with the potential to thrive when given the opportunity to form positive therapeutic alliances with interpersonally skilled providers in a comprehensive care setting. These women's strengths and successes provide a compelling case for utilizing a treatment model to support the well-being and sobriety of pregnant women struggling with addiction, rather than punitive measures. The narratives of these women also demonstrate that engagement with a comprehensive, coordinated treatment program from birth through toddlerhood of their child is not only feasible but can be extremely beneficial, in supporting sobriety and emotional well-being, even within a highly complex and at-risk population.

LIST OF APPENDICES

Appendix A

Qualitative Interview

Introduction: My name is Jen and I'm a graduate student in clinical psychology. For this project I'd like to learn more about families with young children and how best to support them, as well as what brings people to FOCUS. You're the expert on yourself and your life. Hearing the stories of mothers like you will help us better understand what moms like you look for in programs like FOCUS.

In this part of the session, I'd like to hear your story about motherhood and how FOCUS has fit into that. I'll ask some specific questions and, as always, every part is completely voluntary.

Congratulations again on your new baby! (1) How have you been managing these last 6-12 months?

I see that your baby is X months old. (2) What do you enjoy most about your child at this age?

(3) **Do you have other kids? Tell me about your relationship with your other children.**

(4) How does the father feel about the new baby? (*Or*, how is the father of this baby reacting to this pregnancy?)

(5) **Tell me about your experiences with this recent pregnancy and the birth.**

Now I'd like to ask about your experiences with providers at Milagro. Before I do that, (6) what comments do you have about Milagro overall?

(7) What were your experiences like with the people at the front desk when you checked in?

(8) What were your experiences with the person who did your first assessment (the person who weighed you and took your temperature, etc)?

(9) Tell me about your experiences with Milagro medical doctors?

(10) What about medical residents?

(12) Tell me about your experiences with Milagro nurses.

(11) With SU counselors?

(13) With those providing you with medication-assisted treatment?

(14) **(*If mother has been pregnant before):* Tell me about your past experiences with providers who you saw for prenatal care. (*Probe for good and bad experiences).***

(15) **What does it mean to you to be a mother?**

(16) What do you hope your baby's life will be like?

(17) Tell me about your goals and plans for motherhood this year.

(18) How does FOCUS fit into those parenting plans for this year?

(19) **At FOCUS are you getting EI and medical services or just EI?**

(20) Why do you come to FOCUS and not somewhere else?

(21) What would make FOCUS services even better?

Now I'd like to ask about your experiences with providers at FOCUS. Before I do that, (22) **what comments do you have about FOCUS overall?**

(23) What have your experiences been like with the people at the front desk when you check in?

(24) Tell me about your interactions with the person who does your scheduling.

(25) What were your experiences with the person who did your first assessment for FOCUS (the person who weighed you and took your temperature, etc)?

(26) What have your interactions been like with medical doctors you've seen?

(27) With medical residents? (28) With nurses?

Now I will ask about your thoughts on substance use. Please do not share any details about specific substances that you used or your level of use. I am more interested in your thoughts about the role that substance use played in your life.

You've made some impressive changes in your substance use! That is hard for a lot of people to do. (29) What was your main reason for changing your use of alcohol or other substances? (30) What's helped you to be successful?

(31) Before you knew you were pregnant, how were you thinking about substance use? What were your main reasons for using?

(32) **Tell me your personal goals for staying healthy now that your baby has been born.** (33) **What things will help you reach that goal? (*Probe for programs, people, or other aspects of life that will help*)**

(34) What things do you think will make it harder to stay clean? (*Probe for triggers in terms of people, particular stressful situations?)*

(35) What else would you like to share about recent experiences you've had that have helped you stay healthy? What might you recommend to others trying to get sober?

That is really impressive! Lots of people struggle with making those changes.

How did you put yourself in that situation? How were you able to do that?

Appendix B

Question 1: "How have you been managing since the baby was born?" Descriptions of each coding category are provided as examples.

Category	Code	Total number of participants
Support, General, Family	*Statements indicating that participants felt supported by their families (not specifying whether instrumental or emotional)*	12
	support from family	12
Difficulties, General	*Descriptions of life difficulties.*	20
	difficulties/hardships - e.g., $, housing	19
	difficulties/hardships before baby born	1
Resiliency	*Statements indicating personal strengths and/or positive growth*	18
	adjustment/coping well - including personal growth, doing well	17
	optimism/hope/hope for the future	2
Kid(s), Positive	*Positive Statements about kid(s).*	7
	positive kid qualities	7
Kid(s), Negative	*Negative Statements about kid(s)*	2
	negative kid qualities	2
Negative Health, Kid	*Reports of child's health difficulties*	5
	baby's time in hospital after birth	2
	child health problems after birth	3
General, Neutral		2
	neutral reporting	2
Surprise Pregnancy	*Statements indicating that the pregnancy was unexpected.*	2
	surprise about pregnancy	2
Motherhood, Negative	*Negative statements about motherhood.*	1
	negative attitudes about having baby or being a mom	1

General, Positive		1
	positive general (not about coping well)	1
Support, General, Programs	*Statements indicating that participants felt supported by the programs (unspecified whether instrumental or emotional support)*	6
	support from program (Milagro or FOCUS) helps	6
Motherhood, Positive	*Positive statements about motherhood.*	4
	bonding/closeness/frequently or always with child/ child is priority	4
Positive Health, Mom	*Mom's good health.*	1
	positive pregnancy	1
Negative Health, Mom	*Mom's poor health.*	1
	negative pregnancy	1
Support, General, Other Programs	*Nonspecific support from programs outside Milagro and FOCUS.*	3
	support from outside providers (not FOCUS or Milagro)	3
Negative Support, Father	*Lack of support or interpersonal difficulty with the child's father.*	3
	father not in baby's life	3
Motherhood, Very Positive	*Highly positive statements about motherhood.*	2
	baby improved life/turned life around/saved life	2
Sobriety, Negative	*Negative statements about sobriety.*	1
	sobriety is hard	1

Sobriety, Positive, Motherhood	*Positive statements about sobriety related to motherhood.*	1
	sobriety is necessary to be a mom	1
Medication-assisted treatment, Positive, Sobriety	*Indications that medication-assisted treatment helps with sobriety.*	1
	suboxone helps with sobriety	1
Milagro, Support, Competence	*Reports of benefitting from professional services through Milagro.*	1
	did Milagro residential therapy	1

Appendix C

Question 2: "What is your favorite thing about your child at this age?"

Category	Code	Total Number of Participants
Motherhood, Positive		17
	positive generic/parental benefits	17
	family bonding	4
Kid(s), Positive		20
	positive kid personality/kid strengths	17
	positive growth/development	15
General, Neutral		3
	neutral or mixed	3
Kid(s), Neutral		2
	neutral growth/development	1
	adjusting home for baby	1
Kid(s), Negative		6
	negative personality or behavior	6
Kid, Negative Health		1

	developmental delays	1
Resiliency		1
	mom's growth as a parent	1
Surprise Pregnancy		1
	unexpected baby/pregnancy	1

Appendix D

Question 3: "Tell me about your relationship with your other children."

Category	Code	Total # of ppts
Motherhood, Positive		10
	good relationships/family closeness	10
	pride about her efforts/accomplishments as a mom	1
Motherhood, Neutral		4
	neutral/ reporting	4
Kid(s), Negative		6
	negative statements about other kids	6
Difficulties, General		4
	difficulties/hardships	4
Negative Support, General		1
	lack of support	1

Support, General, Family		7
	family support (including other kids help with childcare)	7
Kid(s), Positive		5
	positive statements about other kids	5
Difficulties, Motherhood		8
	living apart from other children - including shared custody	7
	new or shaky relationship with other kids	4
	kid(s) raised by someone else	1
	Kid(s) have better opportunities/better life living with other caregivers	1
	parenting partner's other kid(s)	1
General, Positive		3
	general positive	3
Incarceration, Mom		2
	mom was incarcerated previously	2
Motherhood, Positive, Commitment		1
	trying to be a good mom	1
General, Neutral		8
	NA	8
Kid(s), Negative Health		1
	other child MH issues	1

Support, General, Father		1
	father support of other children	1
Kid(s), Neutral		1
	neutral or ambivalent growth/devt	1

Appendix E

Question 4. "How does the father feel about having a new son/daughter? How did he react when you found out you were pregnant?"

Category	Code	Total # of ppts
Support, Motherhood, Father		20
	positive paternal relationship/closeness	9
	positive paternal emotions about or towards the baby	15
	father helping with child care/supportive during pregnancy	8
	dad turned his whole life around when discovered pregnancy	1
Negative Support, Motherhood, Father		4
	negative or limited paternal relationship	2
	Dad not helping with childcare	1
	Dad negative emotions about baby	1
	Dad neutral or mixed or nonexistent emotions about baby	1
	mom ambivalent about dad being involved with baby's life	1
Father, Neutral		6
	shared traits	2
	dad intermittently supportive of mom/baby	1
	NR (no response)	3

Resiliency		3
	good for their relationship/positive couple relationship - e.g., relationship got more serious after pregnancy	3
Partner, Negative		8
	Mom's ambivalence or negative feelings about relationship with the father	4
	negative couple relationship	5
	dad using substances	1
Partner, Positive		2
	positive couple relationship	1
	mom thankful for dad	1
Difficulties, General		4
	difficulties/hardships unrelated to couple relationship	4
General, Neutral		4
	description of other couples - negative	2
	neutral	3
Surprise Pregnancy		8
	unexpected pregnancy	8
Motherhood, Positive		1
	planned pregnancy	1
Incarceration, Father		4
	incarceration	4
Kid(s), Positive		1
	baby helped dad get sober	1

Sobriety, Positive, Changes		1
	life changes to stay sober - e.g., changing social networks	1
Couple, Difficulties		1
	difficulties/hardships pertaining to couple relationship that are circumstantial, not relational (e.g., long distance, one or both having legal issues)	1
Support, Partner, Instrumental		2
	father is only provider/works a lot of the time	2

Appendix F

Question 5: "Please tell me about your [most recent] pregnancy and birth, anything you are willing to share about those experiences."

Category	Code	Total # of ppts
Mom, Negative Health		15
	pregnancy difficulty/complications	15
	previous high risk pregnancy	1
Baby, Negative Health		12
	child illness/complications (after birth)	12
	time in hospital	3
Support, Programs, General		10
	support from programs or providers, including FOCUS or	10

	Milagro	
Mom/baby, Negative Health		15
	birth complications/difficulties	15
Using, Negative		4
	difficult to see child withdrawing	3
	fear about hurting baby from SU	2
	worry that baby predisposed to SUD	1
Mom, Positive Health		11
	positive pregnancy experience	11
	Mom positive well-being or health since baby was born	1
Mom/baby, Positive Health		8
	birth positive	8
Pregnancy, Neutral		10
	pregnancy neutral/reporting	10
Mom/baby health, Neutral		9
	birth neutral/ reporting	6
	neutral/reporting – other - e.g., getting referred to Milagro	3
Negative Support, Providers, Judgment		5
	Judgment from providers (outside Milagro/FOCUS)	5

Self, Negative		3
	Negative self-statements	3
Baby, Positive Health		5
	Positive baby health since birth	5
Sobriety, Positive, Changes		2
	Mom maintaining sobriety	2
Motherhood, Negative		7
	ambivalence about pregnancy or being a mom	7
	insecure/unsure about taking care of a baby	1
Motherhood, Positive		3
	Bonding with family and baby	3
Kid(s), Positive		4
	positive thoughts/emotions about the baby	4
Difficulties, Child Health		5
	Distress about child's health issues (other than withdrawal)	4
	Worry about child's future health	1
Surprise Pregnancy		5
	unexpected or unknown pregnancy	5
Resiliency		1
	positive post birth	1

Sobriety, Positive, Previous Attempts		3
	attempts to get sober before pregnancy or before finding out about pregnancy	3
Difficulties, Mom/baby health		1
	post-birth complications or difficulties relating to mom or baby (e.g., difficulties breastfeeding, C-section healing difficulties)	1
Using, Negative, Secrecy		1
	fear of judgment/repercussions with providers in disclosing about use	1
Negative Support, General		1
	relational issues/lack of support during pregnancy	1
Support, Family, Motherhood		5
	family support	5
Difficulties, General		1
	difficulty finding job while pregnant	1
Difficulties, Motherhood		4
	testing positive at birth / CYFD involvement	1
	separation from baby after birth b/c of incarceration	1

	distress about being separated from child after birth	2
Negative Support, Other Providers, Competence		1
	negative experiences outside Milagro (e.g., UNMH other than Milagro)	1
MAT, Positive, General		1
	suboxone/MAT was helpful	1
MAT, Limited services		1
	previous difficulty getting MAT	1
Partner, Negative		2
	relational issues with partner during birth	2
Didn't Want Abortion		1
	didn't want abortion	1
Support, Milagro, Emotional		2
	feeling comfortable/not judged at Milagro	2
Engagement, Negative		1
	shame about sharing her predicament	1
Sobriety, Negative		1
	fear about ability to stay sober while pregnant	1

Support, Milagro, General		1
	positive experience with Milagro	1

Appendix G

Question 5a: Comments participants made about their kid currently in FOCUS that were not in response to any interview questions.

Category	Code	Total ppts
Motherhood, Positive		5
	positive generic / parental benefits	5
	family benefits, e.g., bring family closer	1
Kid(s), Positive		9
	positive kid personality	7
	positive growth/development	7
Kid(s), Neutral		12
	neutral or mixed	1
	NA (no comments made about child outside of responses to questions)	11
Kid(s), Negative		4
	personality or behavior negative	4
Motherhood, Neutral		2
	describing parenting strategies	2
Positive Health, Kid		1
	positive baby health	1

Difficulties, Motherhood		2
	feeling protective of/anxious about child	2
Surprise Pregnancy		1
	unexpected pregnancy	1
Positive, Program(s)		1
	glad for program	1
Negative Health, Kid		1
	child health problems	1
Using, Negative		1
	guilt over child health issues	1

Appendix H

Question 6: "I am going to ask about your experiences with each of the different types of providers at Milagro. Before I do so, please tell me what your experiences were like at Milagro overall."

Category	Code	Total ppts
Milagro, Positive		20
	positive general	19
	glad there's a program like this/think it's good	10
	Worried about end of program or services	2
	program gave hope	1
Milagro, Very Positive		11

	exceed expectations/go above & beyond / effusive praise and thanks	8
	Recommending the program to others	3
	Milagro was reason for continuing with FOCUS	1
Support, Milagro, Instrumental		5
	instrumental support	5
Negative Support, General, Other Providers		3
	negative experience at another program/provider external to Milagro or FOCUS	3
Support, Milagro, Emotional		18
	Emotional/interpersonal support	16
	Not feeling judged at Milagro	7
	Positive about relationship with a specific provider	5
Limited Services, General		2
	limited options for services other than Milagro	2
Support, Milagro, Growth		2
	Milagro helping with mom's growth/change	2
Program(s), Neutral		7
	Reporting/neutral, including neutral description of process of referral to Milagro	7

Previously Used Program		1
	Previously used the program	1
Milagro, Negative		7
	negative statements about Milagro/suggestions for improvement	7
MAT, Positive, General		2
	positive statements about suboxone/MAT	2
Using, Negative, Secrecy		2
	not wanting to tell others about use	1
	fear of legal repercussion	1
Using, Negative		2
	worrying about baby's health because of prenatal substance exposure	2
	addiction is hard	1
Support, Milagro, Competence		3
	competency/professional/quality of care	3
Incarceration, Mom		1
	mom's incarceration	1
Milagro, Neutral		1
	limited interaction/time with Milagro (referred late in pregnancy)	1

Negative Support, Milagro, Emotional		1
	feeling judged at Milagro	1
Milagro, Very Negative		2
	reporting negatively to others about Milagro	1
	didn't think Milagro was a place for her/felt uncomfortable and ashamed going there	1
Resiliency		1
	felt encouraged to help others as a result of her experience	1
Limited Knowledge of Services		2
	wish program were more well-known to others	2
Milagro, Positive, Motherhood		1
	Milagro helped her to be a mom	1
Milagro, Positive, Sobriety		1
	Milagro helped mom get sober	1
Milagro, Positive, Services		1
	Milagro is the only place with integrated care for this population	1

Appendix I

Question 7: "What were your experiences like when you would check in at the front desk at Milagro?"

Category	Code	Total ppts
Milagro, Positive		10
	generic positive	8
	noticing improvements/efforts to improve	1
	glad there's a program like this	1
	like amenities/other positive aspects of waiting room	2
Milagro, Neutral		6
	Neutral/reporting	3
	recognizing it’s a hard job to run the front desk	2
	NR (no response)	1
Support, Milagro, Emotional		20
	interpersonal positive	20
Support, Milagro, Competence		6
	competence/ professionalism	6
Milagro, Negative		4
	long wait time	3
	negative general	2
Negative Support, Milagro, Emotional		3
	negative interpersonal	3
	feeling judged	1
Milagro, Very Positive		1
	went above and beyond	1

Appendix J

Question 8: “Tell me about your experiences at your very first appointment at Milagro, when you completed the intake. This included taking your temperature, weighing you, etc.”

Category	Code	Total ppts
Milagro, Neutral		12
	don't remember	4
	neutral	7
	NA (no intake)	1
Milagro, Positive		7
	positive general	7
Support, Milagro, Emotional		16
	interpersonal positive	15
	not feeling judged	1
	provided psychoeducation about MAT to partner/family	1
	specific provider positive	2
Previously Used Program		1
	done program before/familiar with program	1
Didn’t Know Opioids Were Addictive		1
	didn't know prescription pain meds were a drug	1
Support, Milagro, Competence		3
	competence/professionalism	3

Illegal Suboxone		1
	getting suboxone off the streets before Milagro	1
Using, Negative		1
	expressed negative attitudes about SU	1
Using, Negative, Shame		1
	emotionally difficult experience to present self to Milagro	1
Negative Support, Milagro, Emotional		1
	interpersonal negative	1
Resiliency		1
	statements indicating positive growth (not stating directly that it's b/c of programs)	1

Appendix K

Question 9: "What were your experiences like with the Milagro medical doctors?

Category	Code	Total ppts
Milagro, Neutral		4
	neutral/facts/NR/declined to comment	4
Milagro, Positive		10
	generic positive	10

Support, Milagro, Emotional		19
	interpersonal positive	16
	specific doctors positive	9
	Milagro improved their attitudes towards doctors or providers	1
	not feeling judged	1
	Milagro doctors better interpersonally than previous ones	1
Support, Milagro, Competence		5
	competence positive/doctor professionalism	5
Negative Health, Mom		1
	Having specific health needs or being high risk	1
Milagro, Negative		3
	not feeling comfortable sharing about personal difficulties (e.g., partner, home)	1
	Negative general	2
Negative Support, Other Providers, GEneral		3
	negative past experiences	3
Support, Milagro, Instrumental		1
	instrumental positive	1
Milagro, Very Positive		1

Appendix L

Question 10: "What were your experiences like with the Milagro medical residents?"

Category	Code	Total ppts
Milagro, Positive		12
	General positive	12
Milagro, Neutral		12
	neutral	11
	NR (no response)	1
Support, Milagro, Emotional		7
	Interpersonal positive	6
	Specific provider positive	2
Negative Support, Milagro, Emotional		2
	interpersonal negative	2
Support, Milagro, Competence		4
	competence/professionalism	4
Milagro, Negative		2
	general negative	2

Appendix M

Question 11: "If you got substance use counseling at Milagro, what was that experience like for you?"

Milagro, Positive		3
	generic positive	3

Milagro, Negative		3
	changing providers/counselor turnover	2
	counselor quit so didn't get counseling at Milagro but was supposed to	1
Negative Support, Milagro, Emotional		2
	interpersonal negative	2
Support, Milagro, Emotional		4
	interpersonal positive	4
	positive statements about specific providers	1
Support, Milagro, Instrumental		2
	instrumental help/specific help unrelated to counseling	2
Milagro, Neutral		22
	reporting/neutral	4
	NA (did not get SU counseling at Milagro)	18
General, Neutral		3
	external provider	3
Support, Milagro, Growth		1
	helped motivate goals	1
Support, Milagro, Competence		1
	accommodating/convenient	1

Appendix N

Question 12: "Tell me about your experiences with the Milagro medical nurses."

Category	Code	Total ppts
Milagro, Positive		9
	generic positive	9
Milagro, Neutral		5
	reporting/neutral	1
	NR (no response)	3
	recognizing the job is hard	1
Support, Milagro, Emotional		18
	interpersonal positive	16
	specific provider positive	3
Support, Milagro, Competence		2
	competence/professionalism	2
Milagro, Very Positive		1
	going above and beyond	1

Appendix O

Question 13: "If you got maintenance treatment at Milagro, what was that like for you?"

Category	Code	Total ppts
Milagro, Positive		10
	generic positive	9
	Milagro better than other options	2
	glad there's a program like this	1

Milagro, Neutral		6
	neutral/reporting	6
MAT, Positive, Sobriety		4
	medication-assisted treatment (e.g., suboxone) helping with sobriety	4
Support, Milagro, Emotional		9
	interpersonal positive	8
	not feeling judged	2
Support, Milagro, Competence		8
	competence/ professionalism - e.g., helping get appropriate dose	8
MAT, Positive, General		3
	statements about suboxone being beneficial other than helping with sobriety	2
	searched on their own for suboxone provider before Milagro	1
	MAT seemed like only option to have baby/safe pregnancy	1
Negative Support, Milagro, Emotional		1
	interpersonal negative	1
General, Neutral		4
	NA - got MAT elsewhere	4

Using, Negative, Shame		1
	shame/embarrassment about their use	1
Milagro, Positive, Services		1
	only place that offers MAT to pregnant women	1
Sobriety, Positive, Previous attempts		1
	got sober on their own before program	1
Suboxone Before		1
	already using suboxone before program	1
Using, Negative, Judgment		1
	judgment from others about SU	1
Sobriety, Positive		1
	problem recognition/need for help	1
Using, Negative, Secrecy		1
	fear about telling OBGYN/provider about SU before Milagro	1
Using, Negative, Fear		1
	scared of CYFD involvement/losing kids	1
Milagro, Negative		1

	inconvenient	1
MAT, Negative		1
	didn't want MAT	1
	refused to take MAT as directed	1
Using, Negative, Motherhood		1
	happy/relieved baby didn't have withdrawal symptoms when born	1
Negative Support, Other providers, Emotional		1
	feeling judged by pharmacists	1
Limited Services, MAT		1
	previous difficulty getting affordable MAT	1

Appendix P

Question 13a: Participant descriptions of SUD treatment outside Milagro and FOCUS, not provided in response to any interview questions.

Category	Code	Total ppts
General, Neutral		21
	word of mouth connection to Milagro	2
	NA - b/c didn't mention outside of answers to other questions	19
Milagro, Positive		1
	thankful for Milagro	1
	Milagro program growth	1

Negative Support, Other programs, General		2
	other SUD tx negative	2
Limited Knowledge of Services		1
	not knowing about other options	1
Sobriety, Positive, Previous Attempts		2
	trying to get sober before pregnant or already sober/on MAT when got pregnant	2
Using, Negative, Secrecy		1
	fear of judgment/repercussions with past providers	1
Support, Other Programs, Sobriety		2
	helped with sobriety	1
	General positive comments about other SUD tx	1
Limited Services, General		1
	difficulty getting tx before Milagro	1

Appendix Q

Question 13b: Participant descriptions of the process of getting connected with Milagro, that were not provided in response to any interview questions.

Category	Code	Total ppts
Milagro, Neutral		23
	referral to Milagro from another provider	2
	referred by a friend or acquaintance	2
	NA (no comments made about this outside of responses to questions)	19
Using, Negative, Secrecy		2
	hiding use from others/not confiding in anyone	2
General, Neutral		1
	neutral/reporting	1
Milagro, Positive		3
	glad there's a program like this/thankful for help she received	2
	general positive about Milagro	2
Sobriety, Positive, Previous Attempts		2
	attempts to quit before pregnant	2
Chronic Pain		1
	used to cope with chronic pain	1
Illegal Suboxone		1
	getting suboxone off the street before Milagro	1
Surprise Pregnancy		1
	unexpected pregnancy	1

Limited Services, General		1
	hard to get help elsewhere for herself and others	1
Sobriety, Positive, Motherhood		1
	wanted to save baby's life so got tx right away	1
Using, Negative, Withdrawal		1
	withdrawing was hard	1

Appendix R

Question 14: "If you have ever had prenatal care outside Milagro, please share about your experiences with those services."

Category	Code	Total ppts
Negative Support, Other Providers, General		5
	general negative	5
Negative Support, Other Providers, Emotional		3
	interpersonal negative	3
Milagro, Positive		7
	Milagro was better generic	6

	glad for program	2
Support, Milagro, Emotional		6
	Milagro better interpersonally	6
Support, Milagro, Competence		5
	Milagro was better professionally/competency	3
	Milagro monitored pregnancy more closely / more frequent appointments	2
Negative Support, Other Providers, Competency		3
	negative professional/competency	3
Support, Other Programs, General		7
	positive about previous PNC	7
General, Neutral		17
	neutral/reporting	8
	NA (no previous PNC before Milagro)	8
	SU with most recent pregnancy but not with previous one(s)	1
	previous PNC had more frequent visits b/c high-risk pregnancy	1
	positive prior pregnancy	1
Difficulties, mom/baby health		1
	previous pregnancies easier than most recent one	1

Using, Negative, Shame		1
	emotionally difficult to tell people her story/request help	1
Using, Negative, Judgment		1
	feeling judged by people (non-providers)	1
Milagro, Negative		1
	previous PNC was better than Milagro	1
Previously Used Program		1
	used Milagro for previous PNC	1

Appendix S

Question 15: "What does it mean to you to be a mother, especially to [child currently in FOCUS program]?"

Category	Code	Total ppts
Motherhood, Positive		15
	generic positive/ benefits	13
	strong bond/closeness/attachment	3
Kid(s), Positive		4
	kid positive (personality, development, or other)	4
Motherhood, Negative		4
	hard work/ overwhelmed	3
	inconvenience	1
	personal sacrifices for kid	1

Resiliency		9
	motherhood motivated/motivates sobriety	5
	motherhood turned her whole life around or changed her completely	4
	motivated to be better with youngest child than with past child(ren)	1
	current baby is a second chance from previous mothering difficulties	1
Motherhood, Positive, Commitment		14
	caring for/loving child - e.g., don't want to be selfish anymore / wanting to be a good mom	14
	want to make child happy	1
Motherhood, Neutral		6
	describing responsibilities of motherhood	4
	neutral or mixed attitudes	2
Surprise Pregnancy		3
	motherhood was unexpected	3
Support, Other, General		2
	support from non-specified people outside Milagro/FOCUS - e.g. family, friends (emotional or instrumental or general)	2
Support, Programs, General		1
	support from Milagro/FOCUS	1
Motherhood, Very Positive		9

	motherhood gives purpose/sense of accomplishment/identity	9
	motherhood is a blessing/thankful for baby/motherhood	1
Hopes, Kid(s)		2
	hoping child makes better choices (e.g. stays sober)	1
	hope children are good people/have good character	1
Difficulties, Motherhood		1
	trying to get custody of previous kid	1

Appendix T

Question 16: "What do you hope for your child's life to look like?"

Category	Code	Total ppts
Hopes, Kid(s)		24
	child education	12
	career/ success/ advancement	4
	generic positive	12
	happy	13
	positive personality	2
	intelligence/ talent	1
	family of their own	3
	self-sufficiency/independence	2
	activities/extracurricular	4
	social development	3
	wanting their child to have positive family relationships	3
	wanting stable family house for child	3
	wanting child to have self-confidence	2
	spirituality/religion	2
	healthy child	4
	better life than mom and/or dad had - including making better decisions	7
	be a good person/have good character	3
	care for parent	1
	want child to be loved	1

Difficulties, Motherhood		3
	Feeling protective of their child	2
	lack of support	1
Resiliency		4
	Intention to set positive example for kids	4
Motherhood, Positive, Commitment		6
	wanting to be a reliable/trustworthy/stable mom	4
	support whatever child wants to do	2
Sobriety, Positive, Kid(s)		6
	wanting future sobriety for child	6
Kid(s), Positive		2
	positive statements about child	1
	positive statements about other child(ren)	1
Mom Hopes		1
	mom's education goals	1

Appendix U

Question 17: "What are your goals for motherhood and [child currently in FOCUS] just for the next year?"

Category	Code	Total ppts
Hopes, Kid(s)		20

	child health	6
	child activities - e.g., daycare, Head Start	7
	development/milestones/skills	14
	child education	5
	child's independence	2
	keeping child safe/comfortable	2
	teach baby Spanish at home	1
Kid(s), Positive		9
	positive kid personality/strengths / optimism about child	9
Motherhood, Positive, Commitment		9
	being a good mom generic	5
	family stability - e.g. housing, family staying together	3
	positive family relationships as a goal	1
	setting a positive example for kid(s)	3
	more patience with their kid(s)	1
Motherhood, Neutral		7
	balancing mom and child needs	2
	balancing work and parenting	5
Mom Hopes		4
	Mom education	3
	Mom's job/financial goals	2
Negative Health, Kid		2
	Baby health concerns	1
	baby's devt delays	1

Difficulties, Family		1
	family conflict (other than with baby-daddy)	1
Difficulties, General		3
	instrumental needs (e.g., transportation, financial, job)	3
Sobriety, Positive, Commitment		1
	mom's sobriety	1
Kid(s), Negative		2
	negative about child	2
Difficulties, Motherhood		1
	wants to get custody of child	1

Appendix V

Question 18: "How does FOCUS fit into those motherhood goals for the next year?"

Category	Code	Total ppts
Support, Instrumental, FOCUS		12
	instrumental help from FOCUS - including information and guidance, support in getting housing, support in parenting skills	11
	FOCUS supports mom's personal goals	2
FOCUS, Positive		8
	glad there is a program like this/think it's good this program	3

	exists	
	generic positive about FOCUS	3
	worried about program ending	2
FOCUS, Neutral		4
	neutral/reporting	4
Support, FOCUS, Child Development		15
	FOCUS helping to get child connected with resources/referrals outside FOCUS	9
	FOCUS supporting child development	11
	FOCUS helping with getting child into daycare	1
	FOCUS supports child health (e.g., timely immunizations)	1
Kid(s), Positive		1
	Positive statements about the child	1
Negative Health, Kid(s)		1
	Child health issues	1
Support, FOCUS, Emotional		13
	not feeling judged	1
	FOCUS interpersonal positive/emotional support	10
	counseling is helpful	1
	FOCUS provides accountability for sobriety	1
Support, Family, General		2
	family support (any kind)	2

Difficulties, Motherhood		2
	mom struggling with disciplining child	2
Difficulties, Family		1
	conflict with family (other than child's father)	1
Incarceration, Mom		1
	mom incarceration	1
Milagro, Positive		2
	other people had good experiences at FOCUS	2
Support, FOCUS, Motherhood		1
	FOCUS helping with Mom mental health	1
Support, FOCUS, MAT		1
	suboxone	1
MAT, Positive, General		2
	suboxone is helpful in ways other than sobriety	2
Support, FOCUS, Sobriety		2
	FOCUS helps mom stay sober	2

Appendix W

Question 20: [followup to Question 19: "Do you get early intervention and perinatal services at FOCUS?" (All participants indicated "yes.")] "Why do you go to FOCUS for these services and not somewhere else?"

Category	Code	Total ppts
FOCUS, Positive		8
	generic positive	5
	recommendation from someone else that Milagro is good - e.g., family	1
	worry about FOCUS ending	1
	FOCUS better than other bad options	1
Support, FOCUS, Emotional		19
	interpersonal positive/comfortable	13
	not feeling judged/nonjudgmental	3
	Because of affiliation with Milagro/consistency of providers	8
	positive statements about specific providers at FOCUS	7
	feel emotionally safe with FOCUS	1
Negative Support, Other Programs, General		2
	negative experience with past programs	1
	don't like doctors outside FOCUS	1
Support, FOCUS, Competence		15
	convenience	12
	competence/professionalism	5

FOCUS, Support, Services		8
	the only option for what it offers	7
	specific specialty/services	1
FOCUS, Negative		1
	general negative about FOCUS	1
FOCUS, Support, MAT		4
	suboxone/methadone/subutex	4
FOCUS, Neutral		2
	contract to stay with FOCUS	1
	NR (no response)	1
FOCUS, Very Positive		1
	FOCUS goes above and beyond	1
FOCUS, Support, Sobriety		1
	FOCUS helps sobriety	1

Appendix X

Question 21: "What could FOCUS do to improve their services, if anything?"

Category	Code	Total ppts
FOCUS, Positive		17
	nothing	15
	general positive	7

Support, FOCUS, Emotional		2
	interpersonal positive	2
	praise for a particular doctor	1
Negative Support, Other Programs, General		1
	negative past experiences with other programs/other options are bad	1
FOCUS, Negative		14
	long wait times	7
	last-minute appointments not available	3
	would like help finding employment	1
	would like help with childcare	1
	would like bigger office space	1
	would like on-site family center	1
	would like fundraising for SUD tx causes	1
	inconsistency with doctors	1
Support, FOCUS, Services		1
	convenience/svcs	1

Support, FOCUS, Competence		1
	professional/competent	1
General, Neutral		1
	NR (no response)	1
FOCUS, Neutral		1
	understanding they have a lot on their plates (FOCUS does)	1

Appendix Y

Question 22: "I am going to ask the same questions I asked about Milagro, about your experiences with each of the different kinds of providers at FOCUS. Before I do that, what are your general comments about your experiences at FOCUS overall?"

Category	Code	Total ppts
Support, FOCUS, Instrumental		3
	instrumental support	3
Support, FOCUS, Emotional		17
	emotional support/interpersonal positive	14
	known for a while/comfortable/familiar	6
	positive relationship with a specific provider	6
FOCUS, Positive		16
	worry about not being in program/end of svcs	2
	general positive	14
	negative past experiences and FOCUS better	1

FOCUS, Neutral		4
	neutral/reporting	4
FOCUS, Very Positive		3
	recommending program to others	2
	goes long out of her way to get to FOCUS because won't go anywhere else	1
	effusive praise	1
Support, FOCUS, Sobriety		3
	program supports sobriety	3
FOCUS, Negative		4
	general negative	3
	trouble with friends from FOCUS	1
	shame about being associated with other drug users at Milagro	1
	uncomfortable with UI screens	1
Support, FOCUS, Competence		2
	professional/competent	2
Support, FOCUS, Services		2
	efficiency/convenience (e.g., all in one place)	2
Negative Support, FOCUS, Competence		1
	unprofessional	1

Appendix Z

Question 23: “What are your experiences like when you check in at the front desk at FOCUS?”

Category	Code	Total ppts
FOCUS, Positive		12
	generic positive	10
	like waiting room amenities (kids' toys, coffee, refreshments)	2
Support, FOCUS, Emotional		13
	interpersonal positive	13
	specific person positive	1
FOCUS, Neutral		3
	neutral/reporting	3
FOCUS, Negative		4
	negative	4
Support, FOCUS, Competence		5
	competence/professionalism/efficiency	5

Appendix AA

Question 24: “Have you had any interactions with the person who does the appointment scheduling at FOCUS? If so, what have those interactions been like for you?”

Category	Code	Total ppts
FOCUS, Neutral		15
	neutral/reporting	15

Emotional, FOCUS, Support		7
	interpersonal positive/comfort	4
	specific person positive	3
Support, FOCUS, Instrumental		3
	instrumental support	3
FOCUS, Positive		9
	generic positive	9
Support, FOCUS, Competence		3
	competence	3
Support, FOCUS, Services		1
	convenience/accessibility	1
FOCUS, Very Positive		1
	exceeded expectations /went above/beyond	1

Appendix AB

25. "Tell me about your very first appointment at FOCUS, so the intake you completed after [child] was born. They would have done things like weigh you and take your temperature."

Category	Code	Total ppts

FOCUS, Positive		7
	general positive	7
FOCUS, Neutral		13
	neutral/reporting or don't remember	11
	NR	2
Negative Support, FOCUS, Emotional		3
	interpersonal negative/uncomfortable	2
	didn't feel comfortable answering questions at intake	1
Support, FOCUS, Emotional		7
	interpersonal positive/comfortable	6
	specific provider positive	1
	not feeling judged	1
Support, FOCUS, Services		4
	convenience or efficiency	4
Support, FOCUS, Competence		1
	professionalism/competency positive	1
Difficulties, Motherhood		1
	stress from CYFD involvement prior to FOCUS	1
FOCUS, Very Positive		1
	especially helpful/accommodating	1

Appendix AC

Question 26: "Tell me about your experiences with medical doctors at FOCUS."

Category	Code	Total ppts
Support, FOCUS, Emotional		22
	interpersonal positive	12
	specific provider positive	14
Support, FOCUS, Competence		7
	competence positive/professionalism	7
FOCUS, Positive		12
	generic positive	12
Support, Instrumental, FOCUS		1
	instrumental support	1
FOCUS, Neutral		6
	neutral/reporting	6
FOCUS, Negative		2
	negative comments about FOCUS	2
Negative Support, Other Programs, General		1
	negative past experiences	1
General, Neutral		1
	outside provider	1

Negative Support, FOCUS, Competence		2
	competence/professionalism negative	2
Negative Support, FOCUS, Emotional		1
	specific provider negative	1

Appendix AD

Question 27: "Tell me about your experiences with medical residents at FOCUS."

Category	Code	Total ppts
Support, FOCUS, Emotional		12
	interpersonal positive	11
	positive about specific doctors	1
FOCUS, Positive		13
	general positive	12
	general positive about non-resident doctors (no specific providers named)	1
FOCUS, Neutral		6
	neutral reporting	6
Support, FOCUS, Competence		3
	competence/ professionalism	3

FOCUS, Negative		4
	negative experience	2
	lots of providers/confusion about providers	1
	general negative	1
Negative Support, FOCUS, Competence		1
	long redundant conversations	1
FOCUS, Very Positive		1
	exceeds expectations	1

Appendix AE

Question 28: "What have your experiences been like with FOCUS nurses?"

Category	Code	Total ppts
Support, FOCUS, Emotional		15
	interpersonal positive	15
	specific provider positive	1
FOCUS, Positive		6
	general positive	6
FOCUS, Neutral		5
	neutral reporting	5
Support, FOCUS, Competence		1
	competence/professional	1

Negative Support, FOCUS, Emotional		1
	interpersonal negative	1

Appendix AF

Question 29: "It's clear that you've made some really impressive changes. Many people find it very hard to do what you've done. What were your reasons for making these changes?"

Category	Code	Total ppts
Sobriety, Positive, Motherhood		19
	not losing kids/being separated from kids	4
	pregnancy motivated sobriety	7
	being a good mom / general reason was for kid	11
	don't want kid(s) to use	1
	family/motherhood as motivation to quit	1
	happy that baby didn't have health problems when born	1
Child Only Reason		3
	kid was only reason for sobriety	3
Using, Negative, Consequences		11
	inconvenience/costly	2
	tired of the lifestyle/wanting to change/negative consequences of use	11

	avoided heroin/didn't want to become a heroin junkie	1
	addiction is really unpleasant	1
Resiliency		9
	religion to help quit	1
	quit for self	7
	lack of desire or urges to use	1
	glad for pregnancy b/c motivated sobriety	1
	mom turned whole life around after discovering pregnancy	1
Sobriety, Positive, Changes		5
	actions to quit	4
	avoid certain people	1
Negative Self-Views		2
	lack of motivation to change for herself	2
	negative self-views prior to quitting	1
Using, Negative, Consuming		2
	taking over life/unable to control	2
Using, Negative, General		3
	negative attitudes about other people who use	2
	not someone who uses/never used anything before/addiction was a surprise	1
	negative attitudes about substances and their accessibility	1
Sobriety, Positive, Advantages		3
	happy/glad/proud to be sober now	1

	education goals	2
Sobriety, Positive, General		4
	Want to live/almost died	1
	wishing she sought help sooner	1
	for partner	1
	has family responsibilities	1
Medication-assisted treatment, Negative		1
	not wanting medication-assisted treatment	1
Didn't Want Abortion		1
	didn't want to have abortion (as motivation for sobriety)	1
Sobriety, Positive, Previous Attempts		4
	previous attempts to quit (before pregnancy)	4
Using, Negative, Motherhood		1
	guilt over baby withdrawal	1
Medication-assisted treatment, Limited Services		1
	hard to find medical provider that gives medication-assisted treatment	1
General, Limited Services		1
	hard to find SUD tx in general	1
	options outside Milagro not appealing	1

Using, Positive		1
	tempted by heroin	1
Using, Neutral		1
	didn't think she had a problem with SU at the time	1
Support, Sobriety, Father		1
	partner support	1
Using, Negative, Withdrawal		1
	addiction/withdrawal symptoms/unpleasantness (one of the consequences of use - not as a reason to quit)	1
Didn't know opioids were addictive		1
	didn't know pain meds were an addictive substance	1
Sobriety, Negative		1
	sobriety is hard	1

Appendix AG

Question 30: "How were you able to make such difficult changes? What helped you do that?"

Category	Code	Total ppts

Support, Family, Sobriety		11
	family support	11
Support, MAT, Sobriety		6
	maintainence support /suboxone	6
Support, Programs, Sobriety		14
	programs (FOCUS and Milagro) - other than emotional support - e.g., accountability	14
Support, Programs, Emotional		7
	emotional support of programs	6
	not feeling judged	2
	therapy	1
Resiliency		12
	personal strengths, willpower	6
	feeling they've come a long way/they're different than they were in the past/positive growth / no longer addicted - e.g., SU isn't consistent with their self-identity	5
	church/religion	1
	education/employment goals	1
	personal desire to quit	1
	don't want to use anymore	1
Negative Support, Other Programs, Sobriety		1

	past negative experiences in other treatment programs - e.g., weaned off suboxone too quickly	1
Negative, Using, Withdrawal		2
	withdrawal was unpleasant	2
Using, Negative, Motherhood		4
	don't want to lose kids/be separated from kids	3
	worried about baby withdrawing	1
Sobriety, Positive, Advantages		4
	enjoying sober life	3
	job/education/professional goals	2
Sobriety, Positive, Motherhood		10
	doing it for the sake of the kid/wanting to be a good mom	10
	focusing on staying sober not forever but just for pregnancy (like addicts who say "just for today no drinking - you only have to make it through today) as primary motivation	1
Sobriety, Positive, Changes		4
	avoiding old social networks/changing lifestyle to help maintain sobriety	4

Negative Self-Views		1
	self-shame, any negative self-statements	1
Sobriety, Positive		1
	other people they care about as a reason to stay sober (other than Milagro/FOCUS providers)	1
Support, Other Programs, Sobriety		3
	support from a hospital - e.g., detox, sending to rehab	2
	other programs' support	1
Difficulties, General		1
	unable to get a job	1
Support, Other Programs, Emotional		2
	therapy (outside FOCUS/Milagro)	1
Using, Negative, Consequences		2
	negative statements about SU/people who use/physical effects or consequences	1
	past consequences of SU as motivator	1
	guilt preventing use	1
Using, Negative, Judgment		1
	feeling judged for situation (by non-provider(s))	1

Support, Father, Sobriety		1
	partner getting sober	1
Support, Other Programs, Instrumental		1
	getting health insurance	1
General, Neutral		1
	neutral	1
Support, FOCUS, Sobriety		1
	instrumental support of FOCUS	1

Appendix AH

Question 31: "Before you found out you were pregnant with [child currently in FOCUS] (or, "before you began trying to get sober [if mom tried to get sober before finding out she was pregnant]") what were your main reasons for using at the time?"

Category	Code	Total ppts
Using, Positive, Social		1
	partner use	1
Consuming		16
	addiction - including withdrawal, tolerance	12
	habit/ long time use - e.g., pt reports started in childhood	6
	consumes life/ negative cycle	7

	was a big part of her life	1
Using, Positive, Emotional		18
	stress - e.g., financial, relationship issues	8
	fun/pleasure	4
	curiosity/ impulsivity	2
	avoid negative feelings/deal with negative emotions	9
	boredom	3
	loneliness/social isolation	1
	upset because not able to see kid(s)/separation from kid(s)	1
Resiliency		5
	positive growth since time they used - e.g., person who used was different than who they are now / proud of who they are now / don't want to use anymore / happy to be sober	4
	thankful for pregnancy in helping sobriety	1
Using, Negative, Consequences		11
	negative life consequences/costs of use	9
	tired of it/want to change it	3
	regrets over past use	1
Environment		8
	readily available/environment	5
	social factors/ environment	6
Using, Negative		3
	general negative attitudes about SU	3
	avoiding heroin/glad didn't resort to heroin	1

Commitment, Positive, Sobriety		2
	Intention to maintain positive lifestyle changes	2
Trauma		2
	forced on her	1
	coping with trauma or past difficult experiences	1
Sobriety, Positive, Previous Attempts		7
	previous attempts to quit before pregnancy	7
General, Neutral		1
	unsure/don't remember	1
Negative Self-Views		2
	giving up on life or parasuicidal behavior	1
	negative self-views	1
Started with Prescription		4
	started with prescription	4
Neutral, Using		1
	denial of seriousness of their use at the time	1
Chronic Pain		6
	use to cope with physical pain	6
DK Opioids Addictive		1
	didn't know prescription pain meds were addictive	1

Sobriety, Positive, Motherhood		2
	baby was reason to quit	2
Illegal Suboxone		2
	getting MAT off the street	2
MAT, Positive, General		2
	was trying to find suboxone prescription before Milagro	1
	suboxone helpful/good/thankful for it	1
Support, Milagro, Sobriety		1
	doesn't think would've been possible to get clean without Milagro	1
Support, Family, General		1
	mom had family support	1
Using, Positive, Functioning		2
	using to get through the day/function/be able to parent	2
Using, Negative, Motherhood		1
	intense guilt about SU/baby	1

Using, Negative, Judging		1
	judgment from others (non-providers)	1
MAT, Negative, Shame		1
	feel like an addict for taking suboxone	1
Sobriety, Positive, Advantages		1
	positives of being sober/glad to be sober/no interest in using again	1
Support, Programs, Sobriety		1
	thankful for programs	1
Sobriety, Positive, Changes		1
	avoiding old social network	1

Appendix AI

Other comments about substance use not made in response to interview questions.

Category	Code	Total ppts
Using, Negative, Consequences		5
	addiction is expensive/financial issues from use	3
	negative life consequences from use	3

	desire for options other than meds for chronic pain	1
	regret actions done while addicted	1
Using, Negative		5
	negative attitudes about substances	3
	addiction is giving up on life	1
	glad she never did heroin	1
Resiliency		7
	person who used is different from who mom is - positive growth, pride etc	5
	positive feelings about sobriety now	4
	getting sober increased self-worth/self-esteem	2
	want to help other addicts	1
Support, Other, Sobriety		4
	social support other than Milagro/FOCUS (unspecified whether other programs or family)	4
Support, Programs, Sobriety		3
	program support (Milagro/FOCUS)	3
MAT, Negative, End		5
	desire to get off MAT	5
Partner, Negative		2
	partner use	2
Sobriety, Positive, Commitment		2
	intention to maintain sobriety/positive lifestyle changes to maintain sobriety - e.g., avoiding ppl who use	2

MAT, Positive, General		5
	suboxone/methadone/subutex is helpful/beneficial	5
	tried to get suboxone before Milagro	1
Started With Prescription		2
	started with prescription	2
Child Only Reason		1
	child was only reason for sobriety	1
Using, Negative, Shame		2
	their own use/addiction was unexpected to them	1
	continued struggle with guilt	1
Using, Negative, Motherhood		2
	didn't want to hurt the baby with her use	2
Using, Negative, Secrecy		1
	hiding use from others	1
Negative Support, Other Programs, Sobriety		1
	negative experiences with other providers/programs	1

Using, Positive, Emotional		1
	avoiding negative emotions by using	1
Sobriety, Negative		2
	sobriety is hard	2
FOCUS, Very Positive		1
	recommending program to others	1
Negative Self-Views		3
	negative self-views	3
Commitment, Positive, Using		1
	avoiding old social networks	1
Environment		1
	parent or other family member used and influenced their own use	1
Consuming		2
	longstanding habit and/or started in childhood	1
	addiction took over life	1
Want More		1
	wishes help were more accessible/that there were more programs like this	1
MAT, Negative		2
	considers medication-assisted treatment an addiction	2
Using, Negative, Judgment		1
	feeling judged by others	1

Motherhood, Positive, Commitment		2
	wanting to be a good mom/set good example for kids/make them proud	1
	mom was ok with legal consequences if it meant her kid(s) got what they needed, so she sought out help for SUD issues	1
Sobriety, Positive, Motherhood		1
	child motivated sobriety	1
General, Neutral		6
	NA	6
MAT, Negative, Shame		2
	society's negative view of suboxone	1
	secrecy about suboxone/fear of being judged	1
Limited Services, MAT		1
	difficulty getting replacement suboxone outside FOCUS (from pharmacy)	1

Appendix AJ

Question 32: "What are your personal goals for staying healthy, now that [child currently in FOCUS] is here?"

Category	Code	Total ppts
Mom Hopes		18
	weight changes	9
	health issues or overall physical health/living long for child	6

	healthy diet	8
	financial goals	2
	physical exercise	10
	quit smoking	3
	mental health goals	5
	education goals	1
	relationship goals/keeping family together	1
	job/working/employment goals	3
	want to feel good (SWB)	1
	attending doctor's appointments	2
	consistently going to therapy/maintaining mental health	1
	taking medication(s) (other than MAT)	1
Motherhood, Positive, Commitment		11
	teaching kids healthy habits	3
	being a good mom - e.g., kids are priority, taking care of kids	8
	stability/consistency for kids	3
Motherhood, Neutral		2
	balancing mom and baby needs	2
Difficulties, Change		2
	trouble making health changes - e.g., barriers such as longstanding unhealthy habits	2
Sobriety, Positive, Commitment		8
	staying sober	7
	social network goals (e.g., staying away from certain ppl)	1

MAT, Negative, End		4
	getting off suboxone is a primary goal	4
Resiliency		1
	plan to rely on religion/spirituality/church community	1
Sobriety, Positive, Motherhood		1
	kid is main motivator for sobriety	1
Support, FOCUS, Growth		1
	FOCUS helping with goals	1

Appendix AK

Question 33: "What do you believe will help you with those goals?"

Category	Code	Total ppts
Support, FOCUS, Growth		6
	FOCUS program	6
Resiliency		15
	their own commitment	9
	new coping strategies/skills (e.g., positive affirmations)	2
	not an option/not who they are anymore	3
	confidence in staying sober (e.g., "I know I can do it."	2
	staying busy with personal goals	4

	intention/ideas/plans to change	2
	religion/spirituality	1
Support, FOCUS, Emotional		4
	support from program staff - e.g., counseling	4
Support, MAT, General		2
	MAT (medication-assisted treatment)	2
Support, Other, Growth		5
	social support	3
	medication (other than MAT)	2
Using, Positive, Emotional		1
	stress as a trigger	1
Support, Other Programs, Sobriety		4
	programs other than FOCUS	2
	therapy other than at FOCUS - e.g., recovery meetings	3
Support, Family, Sobriety		4
	their kids and family	4

Difficulties, General		1
	anticipated (future) life stability, e.g. housing	1
Using, Neutral		1
	using was a developmental phase, teenage rebellion	1
Sobriety, Positive, Commitment		3
	new environment/social network/avoiding certain ppl	3
Difficulties, Change		2
	barriers to change/ meeting goals and changing habits is hard and inconvenient	2
Motivation		2
	costs of unhealthy habits	2
	reasons to change/what can be gained	1
Sobriety, Positive, Advantages		3
	good things about being sober - e.g., happier	2
	sobriety will help with other goals	1
Self-Care		4
	balancing mom and baby needs - e.g., take time for self in order to be a good mom	2
	job/working	3
MAT, Negative, End		1
	want to get off suboxone	1

Sobriety, Positive, Motherhood		3
	doesn't want to lose kids	1
	doing it for kids/family / not being selfish	2
Difficulties, Motherhood		1
	focus on getting custody of kid	1
Support, FOCUS, Sobriety		1
	accountability with FOCUS providers	1

Appendix AL

Question 34: "What if anything could make it harder for you to maintain your sobriety?"

Category	Code	Total ppts
Sobriety, Positive, Changes		13
	changing one's social network/avoiding friends who use or people who would trigger use	13
Environment		2
	living with someone who uses	2
Difficulties, Change		1
	difficulties with weight, eating, or exercising	1
	changing longstanding habits is hard	1

Using, Positive, Emotional		3
	stress	2
	if something happened to kids/family	1
Resiliency		9
	intention to rely on supports	3
	statement of commitment to sobriety/willpower	3
	optimism in ability to stay sober	3
	no interest or desire to use again	3
	nothing	1
Negative Self-Views		2
	negative thoughts/feelings about self as a trigger	2
Sobriety, Positive, Motherhood		2
	staying sober for the child	2
Difficulties, Family		1
	having to support others	1
Chronic Pain		1
	chronic pain	1
Partner, Negative		1
	partner or baby-daddy use	1
Difficulties, Couple		2
	potential relationship issues with romantic partner	2

MAT, Positive, Sobriety		2
	being without maintenance tx or neglecting to take consistently would threaten sobriety	2
Support, Programs, Sobriety		1
	not going to meetings/doing the work	1
Support, Family, Sobriety		1
	family support is helpful	1
Difficulties, General		1
	unemployment	1
General, Neutral		2
	NR (no response)	2

Appendix AM

Question 34a: Participants' comments about what they would recommend or what they wish others would do if they were struggling with addiction during pregnancy.

Category	Code	Total ppts
Programs, Very Positive		1
	FOCUS and/or Milagro programs	1
	recommending the programs to others	1

Limited Knowledge of Services		1
	Lack of knowledge in their social networks about available options	1
Resiliency		3
	overcoming fear of change	1
	accepting help	2
	being committed /saying focused on goal	1
	be honest with yourself	1
	know it's not easy	1
Sobriety, Positive, Motherhood		3
	think of hurting your baby/think of your kids / don't be selfish	2
	fear of disappointing family	1
General, Neutral		18
	NA	18

Appendix AN

List of all codes organized by category and question.

Categories	Question	Code	Total
Difficulties, General			21
	difficulties/hardships - e.g., $, housing, health issues in family or with baby	1.how managing since baby born	19
	difficulties/hardships before baby born	1.how managing since baby born	1
	difficulties/hardships	3.otherchildren	4
	difficulties/hardships unrelated to couple relationship	4.father	4
	pregnancy made finding a job hard	5.pregnancy&birth	1
	instrumental needs (e.g., transportation, $, job) - combine with mom's job/$ goals	17.motherhood goals	3
	unable to get a job	30.what helped	1
	life stability, e.g. housing	33.what'll help	1
	unemployment	34.potential challenges	1
Difficulties, Family			1
	family conflict (other than with baby-daddy)	17.motherhood goals	1
	conflict with family (other than baby-daddy)	18.FOCUS and goals	1
	having to support others	34.potential challenges	1
Kid, Negative Health			9
	baby's time in hospital after birth	1.how managing since baby born	2
	child health problems after birth (might have to collapse with difficulties if this wasn't coded for earlier)	1.how managing since baby born	3
	developmental delays	2.child this age	1
	other child MH issues	3.otherchildren	1
	child illness/complications (after birth)	5.pregnancy&birth	12
	time in hospital	5.pregnancy&birth	3
	child health problems	other comments about kid	1

Categories	Question	Code	Total
	Baby health concerns (combine with child health maybe)	17.motherhood goals	1
	baby's devt delays	17.motherhood goals	1
	Child health issues	18.FOCUS and goals	1
Mom, Negative Health			15
	negative pregnancy	1.how managing since baby born	1
	pregnancy difficulty/complications	5.pregnancy&birth	15
	previous high risk pregnancy	5.pregnancy&birth	1
	Having specific health needs or being high risk	9.Milagro doctors	1
Mom/baby, Negative Health			15
	birth complications/difficulties	5.pregnancy&birth	15
	post-birth complications or difficulties relating to mom or baby (e.g., difficulties breastfeeding, C-section healing difficulties)	5.pregnancy&birth	1
	previous pregnancies easier	14.previous PNC	1
Child Health, Difficulties			5
	Distress about child's health issues	5.pregnancy&birth	4
	worry about child's future health	5.pregnancy&birth	1
Incarceration, Mom			3
	mom was incarcerated previously	3.otherchildren	2
	mom's distressing legal issues (unrelated to Milagro) - e.g., incarceration	6.Milagro overall	1
	legal issues	18.FOCUS and goals	1
Father, Incarceration			4
	incarceration	4.father	4
Resiliency			24
	adjustment/coping well - including personal growth, doing well	1.how managing since baby born	17
	optimism/hope/hope for the future	1.how managing since baby born	2
	mom's growth as a parent	2.child this age	1
	good for their relationship/positive couple	4.father	3

Categories	Question	Code	Total
	relationship -e.g. relationship got more serious after pregnancy		
	positive post birth	5.pregnancy&birth	1
	felt encouraged to help others as a result of her experience	6.Milagro overall	1
	statements indicating positive growth (not stating directly that it's b/c of programs)	8.Milagro intake	1
	motherhood motivated/motivates sobriety	15.motherhood	5
	motherhood turned her whole life around or changed her completely	15.motherhood	4
	motivated to be better with youngest child than with past child(ren)	15.motherhood	1
	current baby is a second chance from previous mothering difficulties	15.motherhood	1
	goal to set positive example for kids	16.hopes for kid	4
	religion to help quit	29.why quit	1
	for self	29.why quit	7
	lack of desire or urges to use	29.why quit	1
	glad for pregnancy b/c motivated sobriety	29.why quit	1
	mom turned whole life around after discovering pregnancy	29.why quit	1
	personal strengths, willpower	30.what helped	6
	feeling they've come a long way/they're different than they were in the past/positive growth / no longer addicted - e.g., SU isn't consistent with their self-identity	30.what helped	5
	church/religion	30.what helped	1
	education/employment goals	30.what helped	1
	personal desire to quit	30.what helped	1
	don't want to use anymore	30.what helped	1
	positive growth since time they used - e.g., person who used was different than who they are now /	31.why used	4

Categories	Question	Code	Total
	proud of who they are now / don't want to use anymore / happy to be sober		
	thankful for pregnancy in helping sobriety	31.why used	1
	person who used is different from who mom is - positive growth, pride etc	SU_other	5
	positive feelings about sobriety now - combine with positive growth	SU_other	4
	getting sober increased self-worth/self-esteem	SU_other	2
	want to help other addicts	SU_other	1
	plan to rely on religion/spirituality/church community	32.personal goals	1
	their own commitment	33.what'll help	9
	new coping strategies (e.g., positive affirmations)	33.what'll help	2
	not an option/not who they are anymore	33.what'll help	3
	confidence in staying sober	33.what'll help	2
	staying busy with personal goals	33.what'll help	4
	intention/ideas/plans to change	33.what'll help	2
	religion/spirituality	33.what'll help	1
	intention to rely on supports	34.potential challenges	3
	statement of Commitment to sobriety/willpower	34.potential challenges	3
	optimism in ability to stay sober	34.potential challenges	3
	no interest or desire to use again	34.potential challenges	3
	overcoming fear of change	35.recs for others	1
	accepting help	35.recs for others	2
	being committed /saying focused on goal	35.recs for others	1
	be honest with yourself	35.recs for others	1
	know it's not easy	35.recs for others	1
Mom Hopes			18
	mom's education goals	16.hopes for kid	1
	mom education	17.motherhood goals	3
	mom's job/financial goals	17.motherhood goals	2

Categories	Question	Code	Total
	weight changes	32.personal goals	9
	health issues or overall physical health/living long for child	32.personal goals	6
	healthy diet	32.personal goals	8
	financial goals	32.personal goals	2
	physical exercise	32.personal goals	10
	quit smoking	32.personal goals	3
	mental health goals	32.personal goals	5
	education goals	29.why quit, 32.personal goals	2
	relationship goals/keeping family together	32.personal goals	1
	job/working/employment goals	32.personal goals	3
	want to feel good (SWB)	32.personal goals	1
	attending doctor's appointments	32.personal goals	2
	consistently going to therapy/maintaining MH	32.personal goals	1
Negative, Self			3
	Negative self-statements	5.pregnancy&birth	3
	lack of motivation to change for herself	29.why quit	2
	negative self-views prior to quitting	29.why quit	1
	self-shame, any negative self-statements	30.what helped	1
	giving up on life or parasuicidal behavior	31.why used	1
	negative self-views	31.why used, SU_other	3
	negative self-views	31.why used, SU_other	3
	negative thoughts/feelings about self as a trigger	34.potential challenges	2
Negative, Sobriety			3
	sobriety is hard	1.how managing since baby born, 29.why quit, SU_other	3
	fear about ability to stay sober while pregnant	5.pregnancy&birth	1
	sobriety is hard	1.how managing since baby born, 29.why quit, SU_other	3
	sobriety is hard	1.how managing since baby born, 29.why quit, SU_other	3

Categories	Question	Code	Total
DK Opioids Addictive			1
	didn't know prescription pain meds were a drug	8.Milagro intake	1
	didn't know pain meds were an addictive substance	29.why quit	1
	didn't know prescription pain meds were addictive	31.why used	1
Chronic Pain			6
	used to cope with chronic pain	finding Milagro	1
	use to cope with physical pain	31.why used	6
	chronic pain	34.potential challenges	1
Positive, Using			1
	tempted by heroin	29.why quit	1
Emotional, Positive, Using			19
	stress - e.g., financial, relationship issues	31.why used	8
	fun/pleasure	31.why used	4
	curiosity/ impulsivity	31.why used	2
	avoid negative feelings/deal with negative emotions	31.why used	9
	boredom	31.why used	3
	loneliness/social isolation	31.why used	1
	not able to see kid(s)/separation from kid(s)	31.why used	1
	avoiding negative emotions by using	SU_other	1
	stress as a trigger	33.what'll help	1
	stress	34.potential challenges	2
	if something happened to kids/family	34.potential challenges	1
Environment			9
	readily available/environment	31.why used	5
	social factors/ environment	31.why used	6
	parent or other family member used and influenced their own use	SU_other	1
	living with someone who uses	34.potential challenges	2
Trauma			2
	forced on her	31.why used	1
	coping with trauma or past difficult experiences	31.why used	1

Categories	Question	Code	Total
Started With Prescription			4
	started with prescription	31.why used, SU_other	4
Functioning, Positive, Using			2
	using to get through the day/function/be able to parent	31.why used	2
Positive, Social, Using			1
	partner use	31.why used, SU_other	3
Motherhood, Positive, Sobriety			24
	sobriety is necessary to be a mom	1.how managing since baby born	1
	wanted to save baby's life so got tx right away	finding Milagro	1
	not losing kids/being separated from kids	29.why quit	4
	pregnant (and did not want to hurt baby - stated or implied by fact that pregnancy led to sobriety)	29.why quit	7
	being a good mom / general reason was for kid	29.why quit	11
	don’t want kid(s) to use	29.why quit	1
	family as motivation to quit	29.why quit	1
	happy baby didn't have health problems when born; glad didn't use MT	29.why quit	1
	doing it for the sake of the kid/wanting to be a good mom	30.what helped	10
	focusing on staying sober not forever but just for pregnancy (like addicts who say just for today no drinking - you only have to make it through today)"	30.what helped	1
	baby was reason to quit	31.why used	2
	child motivated sobriety	SU_other	1
	kid is main motivator for sobriety	32.personal goals	1
	doesn't want to lose kids	33.what'll help	1
	doing it for kids/family / not being selfish	33.what'll help	2
	staying sober for the child	34.potential challenges	2
	think of hurting your baby/think of your kids / don't be selfish	35.recs for others	2

Categories	Question	Code	Total
	fear of disappointing family	35.recs for others	1
Motherhood, Negative, Using			9
	happy/relieved baby didn't have withdrawal sxs	13.Milagro maintenance tx	1
	guilt over baby withdrawal	29.why quit	1
	don’t want to lose kids/be separated from kids	30.what helped	3
	worried about baby withdrawing	30.what helped	1
	intense guilt about SU/baby	31.why used	1
	didn't want to hurt the baby with her use	SU_other	2
Kid(s), Positive, Sobriety			6
	wanting future sobriety for child	16.hopes for kid	6
Child Only Reason			3
	kid was only reason for sobriety/saved mom	29.why quit	3
	child was only reason for sobriety	SU_other	1
Positive, Sobriety			6
	problem recognition/need for help	13.Milagro maintenance tx	1
	want to live/almost died	29.why quit	1
	wishing she sought help sooner	29.why quit	1
	for partner	29.why quit	1
	has family responsibilities	29.why quit	1
	other people they care about as a reason to stay sober (other than Milagro/FOCUS providers)	30.what helped	1
Judgment, Negative, Using			2
	judgment from others about SU	13.Milagro maintenance tx	1
	feeling judged by people (non-providers)	14.previous PNC	1
	feeling judged for situation (by non-provider(s))	30.what helped	1
	judgment from others (non-providers)	31.why used	1
	feeling judged by others	SU_other	1
Negative, Shame, Using			4
	emotionally difficult experience	8.Milagro intake	1
	shame/embarrassment about their use	13.Milagro maintenance tx	1
	emotionally difficult to tell people her story/request	14.previous PNC	1

Categories	Question	Code	Total
	help		
	their own use/addiction was unexpected to them	SU_other	1
	continued struggle with guilt	SU_other	1
Fear, Negative, Using			1
	scared of CYFD involvement/losing kids	13.Milagro maintenance tx	1
Consequences, Negative, Using			16
	inconvenience/costly	29.why quit	2
	tired of the lifestyle/wanting to change / negative consequences of use	29.why quit	11
	avoided heroin/didn't want to become a heroin junkie	29.why quit	1
	addiction is really unpleasant	29.why quit	1
	negative statements about SU/people who use/physical effects or consequences	30.what helped	1
	past consequences of SU as motivator	30.what helped	1
	guilt preventing use	30.what helped	1
	negative life consequences/costs of use	31.why used	9
	tired of it/want to change it	31.why used	3
	regrets over past use	31.why used	1
	addiction is expensive/financial issues from use	SU_other	3
	negative life consequences from use	SU_other	3
	desire for options other than meds for CP	SU_other	1
	regret actions done while addicted	SU_other	1
General, Negative, Using			3
	difficult to see child withdrawing	5.pregnancy&birth	3
	fear about hurting baby from SU	5.pregnancy&birth	2
	worry that baby predisposed to SUD	5.pregnancy&birth	1
	guilt over child health issues	other comments about kid	1
	worrying about baby's health	6.Milagro overall	2
	addiction is hard	6.Milagro overall	1
	expressed negative attitudes about SU	8.Milagro intake	1

Categories	Question	Code	Total
	Negative attitudes about other people who use not someone who uses/never used anything	29.why quit	2
	before/addiction was a surprise	29.why quit	1
	negative attitudes about substances and their level of availability	29.why quit	1
	general negative attitudes about SU	31.why used	3
	avoiding heroin/glad didn't resort to heroin	31.why used	1
	negative attitudes about substances	SU_other	3
	addiction is giving up on life	SU_other	1
	glad she never did heroin	SU_other	1
Negative, Using, Withdrawal			4
	withdrawing was hard	finding Milagro	1
	addiction/withdrawal symptoms/unpleasantness (one of the consequences of use - not as a reason to quit)	29.why quit	1
	quitting was/is hard - e.g., withdrawal hurts	30.what helped	2
Consuming			17
	taking over life/unable to control	29.why quit	2
	addiction - including withdrawal, tolerance	31.why used	12
	habit/ long time use - e.g., pt reports started in childhood	31.why used	6
	consumes life/ negative cycle	31.why used	7
	was a big part of her life	31.why used	1
	longstanding habit and/or started in childhood	SU_other	1
	addiction took over life	SU_other	1
Advantages, Positive, Sobriety			8
	happy/glad/proud to be sober now	29.why quit	1
	education goals	29.why quit, 32.personal goals	2
	enjoying sober life	30.what helped	3
	job/education/professional goals	30.what helped	2
	positives of being sober/glad to be sober/no interest	31.why used	1

Categories	Question	Code	Total
	in using again		
	good things about being sober - e.g., happier	33.what'll help	2
	sobriety will help with other goals	33.what'll help	1
Commitment, Positive, Sobriety			11
	mom's sobriety	17.motherhood goals	1
	Intention to maintain positive lifestyle changes	31.why used	2
	intention to maintain sobriety/positive lifestyle changes to maintain sobriety - e.g., avoiding ppl who use	SU_other	2
	staying sober	32.personal goals	7
	social network goals (e.g., staying away from certain ppl)	32.personal goals	1
	new environment/social network/avoiding certain ppl	33.what'll help	3
Changes, Positive, Sobriety			16
	life changes to stay sober - e.g., changing social networks	4.father	1
	mom maintaining sobriety	5.pregnancy&birth	2
	actions to quit	29.why quit	4
	avoid certain ppl	29.why quit	1
	avoiding old social networks/changing lifestyle to help maintain sobriety	30.what helped	4
	avoiding old social network	31.why used	1
	changing one's social network/avoiding friends who use or ppl who would trigger use	34.potential challenges	13
Motivation			2
	costs of unhealthy habits	33.what'll help	2
	reasons to change/what can be gained	33.what'll help	1
Change, Difficulties			3
	trouble making health changes - e.g., barriers such as longstanding unhealthy habits	32.personal goals	2
	barriers to change/ meeting goals and changing	33.what'll help	2

Categories	Question	Code	Total
	habits is hard and inconvenient		
	difficulties with weight, eating, or exercising	34.potential challenges	1
	changing longstanding habits is hard	34.potential challenges	1
Positive, Previous Attempts, Sobriety			13
	attempts to get sober before pregnancy or before finding out about pregnancy	5.pregnancy&birth	3
	got sober on their own before program	13.Milagro maintenance tx	1
	trying to get sober before pregnant or already sober/on MAT when got pregnant	SUD tx outside Milagro	2
	attempts to quit before pregnant	finding Milagro	2
	previous attempts to quit (before pregnancy)	29.why quit	4
	Previous attempts to quit in the past and/or relapses before pregnancy	31.why used	7
Negative, Secrecy, Using			6
	fear of judgment/repercussions with providers in disclosing about use	5.pregnancy&birth	1
	not wanting to tell others about use	6.Milagro overall	1
	fear of legal repercussion	6.Milagro overall	1
	fear about telling OBGYN/provider before Milagro about SU	13.Milagro maintenance tx	1
	fear of judgment/repercussions with past providers	SUD tx outside Milagro	1
	hiding use from others/fearing judgment/not confiding in anyone	finding Milagro	2
	hiding use from others	SU_other	1
Engagement, Negative			1
	shame about sharing her predicament	5.pregnancy&birth	1
MAT, Positive, Sobriety			0
	suboxone helps with sobriety	1.how managing since baby born	1
	medication-assisted treatment (e.g., suboxone) helping with sobriety	13.Milagro maintenance tx	4
	medication (other than MT)	32.personal goals	2
	being without maintenance tx or neglecting to take	34.potential challenges	2

Categories	Question	Code	Total
	consistently would threaten sobriety		
MAT, Support			0
	maintenance support /suboxone	30.what helped	6
General, MAT, Positive			0
	suboxone/MT was helpful	5.pregnancy&birth	1
	positive statements about suboxone/MT	6.Milagro overall	2
	statements about suboxone being beneficial other than helping with sobriety	13.Milagro maintenance tx	2
	doing independent search for suboxone provider	13.Milagro maintenance tx	1
	MT seemed like only option to have baby/safe pregnancy	13.Milagro maintenance tx	1
	suboxone is helpful in ways other than sobriety - ppt 13 helps be a better mom	18.FOCUS and goals	2
	was trying to find suboxone prescription before Milagro	31.why used	1
	suboxone helpful/good/thankful	31.why used	1
	suboxone/methadone/subutex is helpful/beneficial	SU_other	5
	trying to get suboxone before Milagro	SU_other	1
General, MAT, Support			0
	MT (maintenance therapy)	33.what'll help	2
Limited Services, MAT			0
	previous difficulty getting MAT	5.pregnancy&birth	1
	previous difficulty getting affordable MT	13.Milagro maintenance tx	1
	hard to find medical provider that gives maintenance therapy	29.why quit	1
	difficulty getting replacement suboxone outside FOCUS (from pharmacy)	SU_other	1
Illegal Suboxone			4
	getting suboxone off the streets before Milagro	8.Milagro intake	1
	getting suboxone off the street before Milagro	finding Milagro	1
	getting MT off the street	31.why used	2

Categories	Question	Code	Total
Suboxone Before			1
	already using suboxone before program	13.Milagro maintenance tx	1
MAT, Negative			0
	didn't want MT	13.Milagro maintenance tx	1
	refused to take MT as directed	13.Milagro maintenance tx	1
	not wanting medication-assisted treatment	29.why quit	1
	considers maintenance therapy an addiction	SU_other	2
End, MAT, Negative			0
	desire to get off suboxone/methadone/subutex	SU_other	5
	getting off suboxone	32.personal goals	4
	want to get off suboxone	33.what'll help	1
MAT, Negative, Shame			0
	feel like an addict for taking suboxone	31.why used	1
	society's negative view of suboxone	SU_other	1
	secrecy about suboxone/fear of being judged	SU_other	1
Self-Care			4
	balancing mom and baby needs - e.g., take time for self in order to be a good mom	33.what'll help	2
	job/working	33.what'll help	3
	balancing mom and baby needs - e.g., take time for self in order to be a good mom	33.what'll help	2
Surprise Pregnancy			15
	surprise about pregnancy	1.how managing since baby born	2
	unexpected baby/pregnancy	2.child this age	1
	unexpected pregnancy (ppt 8 was on birth control!)	4.father	8
	unexpected or unknown pregnancy (ppt 5 was told she couldn't have them)	5.pregnancy&birth	5
	unexpected pregnancy	other comments about kid, finding Milagro	2
	unexpected pregnancy	other comments about kid, finding Milagro	2
	motherhood was unexpected	15.motherhood	3
Didn't Want Abortion			1

Categories	Question	Code	Total
	didn't want abortion	5.pregnancy&birth	1
	didn't want to have abortion	29.why quit	1
Motherhood, Positive			22
	bonding/closeness/frequently or always with child/ child is priority	1.how managing since baby born	4
	positive generic/parental benefits	2.child this age	17
	family bonding	2.child this age	4
	good relationships/family closeness	3.otherchildren	10
	pride about her efforts/accomplishments as a mom	3.otherchildren	1
	planned pregnancy	4.father	1
	bonding with baby	5.pregnancy&birth	3
	positive generic / parental benefits	other comments about kid	5
	family benefits e.g. bring family closer	other comments about kid	1
	generic positive/ benefits	15.motherhood	13
	strong bond/closeness/attachment	15.motherhood	3
Motherhood, Very Positive			10
	baby improved life/turned life around/saved life	1.how managing since baby born	2
	motherhood gives purpose/sense of accomplishment/identity	15.motherhood	9
	motherhood is a blessing/thankful for baby/motherhood	15.motherhood	1
Commitment, Motherhood, Positive			21
	trying to be a good mom	3.otherchildren	1
	caring for/loving child - e.g., don't want to be selfish anymore / wanting to be a good mom	15.motherhood	14
	want to make child happy	15.motherhood	1
	wanting to be a reliable/trustworthy/stable mom	16.hopes for kid	4
	support whatever child wants to do	16.hopes for kid	2
	being a good mom generic	17.motherhood goals	5
	family stability - e.g. housing, family staying together	17.motherhood goals	3

Categories	Question	Code	Total
	positive family relationships as a goal	17.motherhood goals	1
	setting a positive example for kid(s)	17.motherhood goals	3
	more patience with their kid(s)	17.motherhood goals	1
	wanting to be a good mom/set good example for kids/make them proud	SU_other	1
	mom was ok with legal consequences if it meant her kid(s) got what they needed	SU_other	1
	teaching kids healthy habits	32.personal goals	3
	being a good mom - e.g., kids are priority, taking care of kids	32.personal goals	8
	stability/consistency for kids	32.personal goals	3
Hopes, Kid(s)			24
	hoping child makes better choices (e.g. stays sober)	15.motherhood	1
	hope children are good people/have good character	15.motherhood	1
	child education	16.hopes for kid, 17.motherhood goals	14
	career/ success/ advancement	16.hopes for kid	4
	generic positive	7.Milagro front desk, 9.Milagro doctors, 11.MIlagro SU counselors, 12.Milagro nurses, 13.Milagro maintenance tx, 16.hopes for kid, 24.FOCUS Front desk, FOCUS scheduling, 26.FOCUS docs	24
	happy	16.hopes for kid	13
	positive personality	16.hopes for kid	2
	intelligence/ talent	16.hopes for kid	1
	family of their own	16.hopes for kid	3
	self-sufficiency/independence	16.hopes for kid	2
	activities/extracurricular	16.hopes for kid	4
	social development	16.hopes for kid	3
	wanting their child to have positive family relationships	16.hopes for kid	3
	wanting stable family house for child	16.hopes for kid	3

Categories	Question	Code	Total
	wanting child to have self-confidence	16.hopes for kid	2
	spirituality/religion	16.hopes for kid	2
	healthy child	16.hopes for kid	4
	better life than mom and/or dad had - including making better decisions	16.hopes for kid	7
	be a good person/have good character	16.hopes for kid	3
	care for parent	16.hopes for kid	1
	want child to be loved	16.hopes for kid	1
	child health	17.motherhood goals	6
	child activities - e.g., daycare, Head Start	17.motherhood goals	7
	Development/milestones/skills	17.motherhood goals	14
	Child education	16.hopes for kid, 17.motherhood goals	14
	child's independence	17.motherhood goals	2
	keeping child safe/comfortable	17.motherhood goals	2
	teach baby Spanish at home	17.motherhood goals	1
Motherhood, Negative			10
	negative attitudes about having baby or being a mom	1.how managing since baby born	1
	ambivalence about pregnancy or being a mom	5.pregnancy&birth	7
	insecure/unsure about taking care of a baby	5.pregnancy&birth	1
	hard work/ overwhelmed	15.motherhood	3
	inconvenience	15.motherhood	1
	personal sacrifices for kid	15.motherhood	1
Difficulties, Motherhood			14
	living apart from other children - including shared custody	3.otherchildren	7
	new or shaky relationship with other kids	3.otherchildren	4
	kid(s) raised by someone else	3.otherchildren	1
	better opportunities/better life living with other caregivers	3.otherchildren	1
	parenting partner's other kid(s)	3.otherchildren	1

Categories	Question	Code	Total
	testing positive at birth / CYFD involvement	5.pregnancy&birth	1
	separation from baby after birth b/c of incarceration	5.pregnancy&birth	1
	distress about being separated from child after birth	5.pregnancy&birth	2
	feeling protective of/anxious about child	other comments about kid	2
	trying to get custody of previous kid	15.motherhood	1
	Feeling protective of their child	16.hopes for kid	2
	lack of support	3.otherchildren, 16.hopes for kid	2
	get custody of child	17.motherhood goals	1
	mom struggling with disciplining child	18.FOCUS and goals	2
	stress from CYFD involvement prior to FOCUS	25.FOCUS intake	1
	focus on getting custody of kid	33.what'll help	1
Kid(s), Positive			22
	positive kid qualities	1.how managing since baby born	7
	positive kid personality/kid strengths	2.child this age	17
	positive growth/development	2.child this age, other comments about kid	18
	positive statements about other kids	3.otherchildren	5
	baby helped dad get sober	4.father	1
	positive thoughts/emotions about the baby	5.pregnancy&birth	4
	positive kid personality	other comments about kid	7
	positive growth/development	2.child this age, other comments about kid	18
	kid positive (personality, devt, or other)	15.motherhood	4
	positive statements about child	16.hopes for kid	1
	positive statements about other child(ren)	16.hopes for kid	1
	positive kid personality/strengths / optimism about child	17.motherhood goals	9
	Positive statements about the child	18.FOCUS and goals	1
Kid(s), Negative			12
	negative kid qualities	1.how managing since baby born	2
	negative personality or behavior	2.child this age	6
	negative statements about other kids	3.otherchildren	3
	other child negative statements	3.otherchildren	3

Categories	Question	Code	Total
	personality or behavior negative	other comments about kid	4
	negative about child	17.motherhood goals	2
Family, Motherhood, Support			5
	family support	5.pregnancy&birth, 30.what helped	12
Family, Sobriety, Support			14
	family support	5.pregnancy&birth, 30.what helped	12
	mom had family support	31.why used	1
	Their kids and family	33.what'll help	4
	family support is helpful	34.potential challenges	1
Family, General, Support			17
	support from family	1.how managing since baby born	12
	family support (including other kids help with childcare)	3.otherchildren	7
	family support (any kind)	18.FOCUS and goals	2
General, Other, Support			2
	support from people outside Milagro/FOCUS - e.g. family, friends (emotional or instrumental or general)	15.motherhood	2
Other, Sobriety, Support			4
	social support other than Milagro/FOCUS	SU_other	4
Growth, Other, Support			5
	social support	33.what'll help	3
	medication (other)	33.what'll help	2
General, Negative Support			2
	lack of support	3.otherchildren, 16.hopes for kid	2
	relational issues/lack of support during pregnancy	5.pregnancy&birth	1
Partner, Positive			2
	positive couple relationship	4.father	1
	mom thankful for dad	4.father	1
Father, General, Support			1
	father support of other children	3.otherchildren	1

Categories	Question	Code	Total
Motherhood, Partner, Support			9
	positive paternal relationship/closeness	4.father	9
	positive paternal emotions about or towards the baby	4.father	15
	father helping with child care/supportive during pregnancy	4.father	8
	dad turned his whole life around when discovered pregnancy	4.father	1
Instrumental, Partner, Support			2
	father is only provider/works a lot of the time	4.father	2
Father, Sobriety, Support			2
	partner support	29.why quit	1
	partner getting sober	30.what helped	1
Father, Negative Support			3
	father not in baby's life	1.how managing since baby born	3
Father, Motherhood, Negative Support			4
	negative or limited paternal relationship	4.father	2
	Dad not helping with childcare	4.father	1
	Dad negative emotions about baby	4.father	1
	Dad neutral or mixed or nonexistent emotions about baby	4.father	1
	mom ambivalent about dad being involved with baby's life	4.father	1
Negative, Partner			10
	Mom's ambivalence or negative feelings about relationship with the father	4.father	4
	negative couple relationship	4.father	5
	dad using substances	4.father	1
	relational issues with partner during birth	5.pregnancy&birth	2
	partner use	31.why used, SU_other	3
	partner or baby-daddy use	34.potential challenges	1

Categories	Question	Code	Total
Couple, Difficulties			3
	difficulties/hardships pertaining to couple relationship (e.g., long distance, one or both having legal issues)	4.father	1
	potential relationship issues with romantic partner	34.potential challenges	2
Positive, Program(s)			1
	glad for program	other comments about kid	1
Programs, Very Positive			1
	FOCUS and/or Milagro programs	35.recs for others	1
	Recommending the programs to others	35.recs for others	1
General, Programs, Support			14
	support from program (Milagro or FOCUS) helps	1.how managing since baby born	6
	support from programs or providers, including FOCUS or Milagro	5.pregnancy&birth	10
	support from Milagro/FOCUS	15.motherhood	1
Programs, Sobriety, Support			17
	programs (FOCUS and Milagro) - other than emotional support - e.g., accountability	30.what helped	14
	thankful for programs	31.why used	1
	program support (Milagro/FOCUS)	SU_other	3
	not going to meetings/doing the work	34.potential challenges	1
Emotional, Programs, Support			7
	emotional support of programs	30.what helped	6
	not feeling judged	8.Milagro intake, 9.Milagro doctors, 13.Milagro maintenance tx, 18.FOCUS and goals, 30.what helped	6
Milagro, Positive			24
	#NAME?	6.Milagro overall	19
	glad there's a program like this/think it's good	6.Milagro overall	10
	Worried about end of program or svcs	6.Milagro overall	2
	program gave hope	6.Milagro overall	1

Categories	Question	Code	Total
	generic positive	7.Milagro front desk, 9.Milagro doctors, 11.MIlagro SU counselors, 12.Milagro nurses, 13.Milagro maintenance tx, 16.hopes for kid	24
	noticing improvements/efforts to improve	7.Milagro front desk	1
	glad there's a program like this	7.Milagro front desk, 13.Milagro maintenance tx	1
	like amenities/other positive aspects of waiting room	7.Milagro front desk	2
	positive general	8.Milagro intake	7
	generic positive	7.Milagro front desk, 9.Milagro doctors, 11.MIlagro SU counselors, 12.Milagro nurses, 13.Milagro maintenance tx	24
	generic positive/general positive	10.Milagro residents	12
	generic positive	7.Milagro front desk, 9.Milagro doctors, 11.MIlagro SU counselors, 12.Milagro nurses, 13.Milagro maintenance tx	24
	Milagro better than other options	13.Milagro maintenance tx	2
	glad there's a program like this	7.Milagro front desk, 13.Milagro maintenance tx	1
	thankful for Milagro	SUD tx outside Milagro	1
	Milagro program growth	SUD tx outside Milagro	1
	glad there's a program like this/thankful for help she received	finding Milagro	2
	general positive about Milagro	finding Milagro	2
	Milagro was better generic	14.previous PNC	6
	glad for program - e.g., want others to use it	14.previous PNC	2
Milagro, Very Positive			13
	exceed expectations/go above & beyond / effusive praise and thanks	6.Milagro overall	8
	recommending the program to others	6.Milagro overall	3
	Milagro was reason for continuing with FOCUS	6.Milagro overall	1
	went above and beyond	7.Milagro front desk	1
	going above & beyond	9.Milagro doctors	1
	going above and beyond	12.Milagro nurses	1

Categories	Question	Code	Total
General, Milagro, Support			1
	positive experience with Milagro	5.pregnancy&birth	1
Emotional, Milagro, Support			24
	feeling comfortable/not judged at Milagro	5.pregnancy&birth	2
	Emotional/interpersonal support	6.Milagro overall	16
	Not feeling judged at Milagro	6.Milagro overall	7
	positive about specific provider	6.Milagro overall	5
	interpersonal positive	7.Milagro front desk, 8.Milagro intake, 10.Milagro residents, 13.Milagro maintenance tx	22
	interpersonal positive	7.Milagro front desk, 8.Milagro intake, 10.Milagro residents, 13.Milagro maintenance tx	22
	not feeling judged	8.Milagro intake, 9.Milagro doctors, 13.Milagro maintenance tx, 30. what helped	6
	provided psychoeducation about maintenance tx to partner/family	8.Milagro intake	1
	specific positive	8.Milagro intake	2
	interpersonal positive/positive doctor relationship/comfort with doctor	9.Milagro doctors	16
	specific doctors positive	9.Milagro doctors	9
	Milagro improved their attitudes towards doctors or providers	9.Milagro doctors	1
	not feeling judged	8.Milagro intake, 9.Milagro doctors, 13.Milagro maintenance tx, 30.what helped	6
	Milagro doctors better interpersonally than previous ones	9.Milagro doctors	1
	interpersonal positive	7.Milagro front desk, 8.Milagro intake, 10.Milagro residents, 13.Milagro maintenance tx	22
	positive specific provider	10.Milagro residents	2
	interpersonal positive	11.MIlagro SU counselors	4
	positive statements about specific providers	11.MIlagro SU counselors	1
	positive interpersonal relationships or interactions	12.Milagro nurses	16
	specific positive	12.Milagro nurses	3

Categories	Question	Code	Total
	interpersonal positive	7.Milagro front desk, 8.Milagro intake, 10.Milagro residents, 13.Milagro maintenance tx	22
	Milagro better interpersonally	14.previous PNC	6
Instrumental, Milagro, Support			7
	instrumental support	6.Milagro overall	9
	instrumental positive	9.Milagro doctors	1
	instrumental help positive/specific help - significant b/c it's counseling	11.MIlagro SU counselors	2
Growth, Milagro, Support			3
	Milagro helping with mom's growth/change	6.Milagro overall	2
	helped motivate goals (e.g., sobriety)	11.MIlagro SU counselors	1
Competence, Milagro, Positive			5
	did Milagro RT	1.how managing since baby born	1
	competency/professional/quality of care	6.Milagro overall	3
	competence/ professionalism	7.Milagro front desk, 10.Milagro residents	13
	competence/professionalism	8.Milagro intake, 12.Milagro nurses	5
	competence positive/doctor professionalism	9.Milagro doctors	5
	competence/ professionalism	7.Milagro front desk, 10.Milagro residents	13
	accommodating/convenient	11.MIlagro SU counselors	1
	competence/professionalism	8.Milagro intake, 12.Milagro nurses	5
	competence/ professionalism - e.g., helping get appropriate dose	13.Milagro maintenance tx	8
	Milagro was better professionally/competency	14.previous PNC	3
	Milagro monitored pregnancy more closely / more frequent appointments	14.previous PNC	2
Milagro, Motherhood, Positive			1
	Milagro helped her to be a mom	6.Milagro overall	1
Milagro, Positive, Sobriety			1
	helped mom get sober	6.Milagro overall	1
	doesn't think would've been possible to get clean without Milagro	31.why used	1

Categories	Question	Code	Total
Milagro, Positive, svcs			2
	Milagro only place with integrated care	6.Milagro overall	1
	only place that offers MT to pregnant women!	13.Milagro maintenance tx	1
Previously Used Program			2
	Previously used the program	6.Milagro overall	1
	done program before/familiar with program	8.Milagro intake	1
	used Milagro for previous PNC	14.previous PNC	1
Milagro, Negative			15
	negative statements about Milagro/suggestions for improvement	6.Milagro overall	7
	long wait time	7.Milagro front desk	3
	negative general	7.Milagro front desk	2
	not wanting to tell them about personal difficulties (e.g., partner, home)	9.Milagro doctors	1
	negative	9.Milagro doctors	6
	general negative	10.Milagro residents	4
	changing providers/counselor turnover	11.Milagro SU counselors	2
	counselor quit so didn't get counseling at Milagro but was supposed to	11.Milagro SU counselors	1
	inconvenient	13.Milagro maintenance tx	1
	previous PNC was better than Milagro	14.previous PNC	1
Milagro, Very Negative			2
	reporting negatively to others about Milagro	6.Milagro overall	1
	didn't think Milagro was a place for her/felt uncomfortable ashamed going there	6.Milagro overall	1
Emotional, Milagro, Negative Support			5
	feeling judged at Milagro	6.Milagro overall	1
	negative interpersonal	7.Milagro front desk	3
	feeling judged	7.Milagro front desk	1
	interpersonal negative	8.Milagro intake, 10.Milagro residents, 13.Milagro maintenance tx	3

Categories	Question	Code	Total
	interpersonal negative	8.Milagro intake, 10.Milagro residents, 13.Milagro maintenance tx	3
	interpersonal -	11.MIlagro SU counselors, 14.previous PNC	4
	interpersonal negative	8.Milagro intake, 10.Milagro residents, 13.Milagro maintenance tx	3
FOCUS, Positive			24
	glad there is a program like this/think it's good this program exists	18.FOCUS and goals	3
	generic positive about FOCUS/thankful	18.FOCUS and goals	3
	worried about program ending	18.FOCUS and goals	2
	generic positive	20.why FOCUS	5
	recommendation from someone else that Milagro is good - e.g., family	20.why FOCUS	1
	worry about FOCUS ending	20.why FOCUS	1
	FOCUS better than other bad options	20.why FOCUS	1
	nothing	22.improve FOCUS, 34.potential challenges	15
	general positive	3.otherchildren, 22.improve FOCUS, 23. FOCUS overall, 28.FOCUS nurses	19
	worry about not being in program/end of svcs	23. FOCUS overall	2
	general positive	3.otherchildren, 22.improve FOCUS, 23. FOCUS overall, 28.FOCUS nurses	19
	negative past experiences/FOCUS better	23. FOCUS overall	1
	generic positive	7.Milagro front desk, 9.Milagro doctors, 11.MIlagro SU counselors, 12.Milagro nurses, 13.Milagro maintenance tx, 16.hopes for kid, 24.FOCUS Front desk, FOCUS scheduling, 26.FOCUS docs	24
	like waiting room amenities (kids' toys, coffee, refreshmens)	24.FOCUS Front desk	2
	generic positive	7.Milagro front desk, 9.Milagro doctors, 11.MIlagro SU counselors, 12.Milagro nurses, 13.Milagro maintenance tx, 16.hopes for kid,	24

Categories	Question	Code	Total
		24.FOCUS Front desk, FOCUS scheduling, 26.FOCUS docs	
	general positive	25.FOCUS intake, 27.FOCUS residents	17
		7.Milagro front desk, 9.Milagro doctors, 11.MIlagro SU counselors, 12.Milagro nurses, 13.Milagro maintenance tx, 16.hopes for kid, 24.FOCUS Front desk, FOCUS scheduling,	
	generic positive	26.FOCUS docs	24
	general positive	25.FOCUS intake, 27.FOCUS residents	17
	positive about non-resident doctors	27.FOCUS residents	1
	other ppl had good experiences at FOCUS	18.FOCUS and goals	2
	general positive	3.otherchildren, 22.improve FOCUS, 23. FOCUS overall, 28.FOCUS nurses	19
FOCUS, Very Positive			6
	FOCUS goes above and beyond	20.why FOCUS	1
	recommending program to others	23. FOCUS overall, SU_other	3
	goes out of her way to get to FOCUS b/c won't go anywhere else	23. FOCUS overall	1
	effusive praise	23. FOCUS overall	1
	exceeded expectations /went above/beyond	FOCUS scheduling	1
	especially helpful/accommodating	25.FOCUS intake	1
	exceeds expectations	27.FOCUS residents	1
	recommending program to others	23. FOCUS overall, SU_other	3
FOCUS, Instrumental, Support			15
	instrumental help from FOCUS - including information and guidance, support in getting housing, support in parenting skills	18.FOCUS and goals	11
	FOCUS supports mom’s personal goals	18.FOCUS and goals	2
	instrumental help	21.why come back	1
	instrumental support	23. FOCUS overall, FOCUS scheduling, 26.FOCUS docs	9
Child Devt, FOCUS, Support			15

Categories	Question	Code	Total
	FOCUS helping to get connected with resources/referrals outside FOCUS	18.FOCUS and goals	9
	FOCUS supporting child development	18.FOCUS and goals	11
	getting child into daycare	18.FOCUS and goals	1
	FOCUS supports child health	18.FOCUS and goals	1
Emotional, FOCUS, Support			24
	not feeling judged	18.FOCUS and goals, 30.what helped	6
	FOCUS interpersonal positive interpersonal/emotional support	18.FOCUS and goals	10
	counseling is helpful	18.FOCUS and goals	1
	accountability for sobriety	18.FOCUS and goals	1
	interpersonal positive/comfortable	20.why FOCUS, 25.FOCUS intake	15
	not feeling judged/nonjudgmental	20.why FOCUS	3
	b/c of affiliation with Milagro / consistency/comfort	20.why FOCUS	8
	positive statements about specific providers at FOCUS	20.why FOCUS	7
	feel emotionally safe with FOCUS	20.why FOCUS	1
	interpersonal positive	22.improve FOCUS, 24.FOCUS Front desk, 26.FOCUS docs, 27.FOCUS residents, 28.FOCUS nurses	22
	praise for a particular doctor	22.improve FOCUS	1
	emotional support/interpersonal positive	23. FOCUS overall	14
	known for a while/comfortable/familiarity	23. FOCUS overall	6
	positive relationship with a specific provider	23. FOCUS overall	6
	interpersonal positive	22.improve FOCUS, 24.FOCUS Front desk, 26.FOCUS docs, 27.FOCUS residents, 28.FOCUS nurses	22
	specific person positive	24.FOCUS Front desk, FOCUS scheduling	3
	interpersonal positive/comfort	FOCUS scheduling	4
	specific person positive	24.FOCUS Front desk, FOCUS scheduling	3
	interpersonal positive/comfortable	20.why FOCUS, 25.FOCUS intake	15

Categories	Question	Code	Total
	specific provider positive	25.FOCUS intake, 28.FOCUS nurses	2
	not judged	25.FOCUS intake	1
	interpersonal positive	22.improve FOCUS, 24.FOCUS Front desk, 26.FOCUS docs, 27.FOCUS residents, 28.FOCUS nurses	22
	specific positive interpersonal/relationship	26.FOCUS docs	14
	interpersonal positive	22.improve FOCUS, 24.FOCUS Front desk, 26.FOCUS docs, 27.FOCUS residents, 28.FOCUS nurses	22
	positive about specific doctors	27.FOCUS residents	1
	interpersonal positive	22.improve FOCUS, 24.FOCUS Front desk, 26.FOCUS docs, 27.FOCUS residents, 28.FOCUS nurses	22
	specific provider positive	25.FOCUS intake, 28.FOCUS nurses	2
	support from program staff - e.g., counseling	33.what'll help	4
Competence, FOCUS, Support			20
	convenience/ services	20.why FOCUS	12
	competence/ professionalism	20.why FOCUS, 27.FOCUS residents	13
	professional/competent	22.improve FOCUS, 23. FOCUS overall	3
	professional/competent	22.improve FOCUS, 23. FOCUS overall	3
	competence/professionalism/efficiency	24.FOCUS Front desk	5
	competence	FOCUS scheduling	3
	professionalism/competency positive	25.FOCUS intake	1
	competence positive/professionalism	26.FOCUS docs	7
	competence/ professionalism	20.why FOCUS, 27.FOCUS residents	13
	competence/professional	28.FOCUS nurses	1
FOCUS, Services, Support			13
	the only option for what it offers	20.why FOCUS	7
	specific specialty/services - maybe combine later with only place for what it offers""	20.why FOCUS	1
	convenience/svcs	22.improve FOCUS	1

Categories	Question	Code	Total
	efficiency/convenience (e.g., all in one place, fast)	23. FOCUS overall	2
	convenience/accessibility	FOCUS scheduling	1
	convenience or efficiency	25.FOCUS intake	4
FOCUS, Sobriety, Support			5
	FOCUS helps sobriety	20.why FOCUS	1
	program supports sobriety	23. FOCUS overall	3
	instrumental support of FOCUS	30.what helped	1
	accountability with FOCUS providers	33.what'll help	1
FOCUS, Motherhood, Support			1
	FOCUS helping with Mom MH	18.FOCUS and goals	1
FOCUS, MAT, Support			0
	suboxone	18.FOCUS and goals	1
	suboxone/methadone/subutex	20.why FOCUS	4
FOCUS, Growth, Support			7
	FOCUS helps mom stay sober (maybe combine with mom's goals)	18.FOCUS and goals	2
	FOCUS helping with goals	32.personal goals	1
	FOCUS program	33.what'll help	6
FOCUS, Negative			20
	general negative about FOCUS	20.why FOCUS	1
	long wait times	22.improve FOCUS	7
	last-minute appointments not available	22.improve FOCUS	3
	help finding employment	22.improve FOCUS	1
	childcare	22.improve FOCUS	1
	bigger office space	22.improve FOCUS	1
	on-site family center	22.improve FOCUS	1
	fundraising for SUD tx causes	22.improve FOCUS	1
	inconsistency with doctors	22.improve FOCUS	1
	general negative	10.Milagro residents, 23. FOCUS overall, 27.FOCUS residents	4
	trouble with friends from FOCUS	23. FOCUS overall	1

Categories	Question	Code	Total
	shame about being associated with other drug users at Milagro	23. FOCUS overall	1
	uncomfortable with UI screens	23. FOCUS overall	1
	negative	24.FOCUS Front desk	6
	negative comments about FOCUS	26.FOCUS docs	2
	negative experience	27.FOCUS residents	2
	lots of providers/confusion about providers	27.FOCUS residents	1
	general negative	23. FOCUS overall, 27.FOCUS residents	4
Competence, FOCUS, Negative Support			4
	unprofessional	23. FOCUS overall	1
	competence/professionalism negative	26. FOCUS docs	2
	long redundant conversations	27. FOCUS residents	1
Emotional, FOCUS, Negative Support			4
	interpersonal negative/ uncomfortable	25.FOCUS intake	2
	didn't feel comfortable sharing right away	25.FOCUS intake	1
	specific provider negative	26.FOCUS docs	1
	interpersonal negative	28.FOCUS nurses	3
Judgment, Negative Support, Providers			5
	Judgment from providers	5.pregnancy&birth	5
General, Other Programs, Support			9
	support from outside providers (not FOCUS or Milagro)	1.how managing since baby born	3
	positive about previous PNC	14.previous PNC	7
Other Programs, Sobriety, Support			11
	helped with sobriety	SUD tx outside Milagro	1
	positive about other SUD tx (e.g., ASAP Clinic)	SUD tx outside Milagro	1
	support from a hospital - e.g., detox, sending to rehab	30.what helped	2
	social support outside programs	30.what helped	3
	other programs' support	30.what helped	1
	Programs other than FOCUS	33.what'll help	2

Categories	Question	Code	Total
	Therapy other than at FOCUS - e.g., recovery meetings	33.what'll help	3
Emotional, Other Programs, Support			2
	therapy	30.what helped	1
	therapy (outside FOCUS/Mil)	30.what helped	1
Instrumental, Other Programs, Support			1
	getting health insurance	30.what helped	1
General, Negative Support, Other Providers			9
	negative experience at another programs/providers external to Milagro or FOCUS	6.Milagro overall	3
	negative past experiences	9.Milagro doctors, 26.FOCUS docs	4
	other SUD tx negative	SUD tx outside Milagro	2
	generic negative	14.previous PNC	5
	negative experience with past programs	20.why FOCUS	1
	don't like doctors outside FOCUS	20.why FOCUS	1
	negative past experiences with other programs/other options are bad	22.improve FOCUS	1
	negative past experiences	9.Milagro doctors, 26.FOCUS docs	4
Competence, Negative Support, Other Providers			4
	negative experiences outside Milagro (e.g., UNMH other than Milagro)	5.pregnancy&birth	1
	negative professional/competency	14.previous PNC	3
Emotional, Negative Support, Other Providers			4
	feeling judged by pharmacists	13.Milagro maintenance tx	1
	interpersonal negative	14.previous PNC	4
Negative Support, Other Programs, Sobriety			2
	past negative experiences in other treatment programs - e.g., weaned off suboxone too quickly	30.what helped	1
	negative experiences with other providers/programs	SU_other	1
General, Limited Services			3
	limited options for services other than Milagro	6.Milagro overall	2

Categories	Question	Code	Total
	difficulty getting tx before Milagro	SUD tx outside Milagro	1
	hard to get help elsewhere for herself and others	finding Milagro	1
	hard to find SUD tx in general	29.why quit	1
	options outside Milagro not appealing	29.why quit	1
Limited Knowledge of Svcs			3
	wish program were more well-known to others	6.Milagro overall	2
	not knowing about other options	SUD tx outside Milagro	1
	lack of knowledge in their social networks about available options	35.recs for others	1
Want More			1
	wishes help were more accessible/that there were more programs like this	SU_other	1
Baby, Positive Health			5
	positive baby health since birth	5.pregnancy&birth	5
	positive baby health	other comments about kid	1
Mom, Positive Health			11
	positive pregnancy	1.how managing since baby born	1
	positive pregnancy experience	5.pregnancy&birth	11
	Mom positive well-being or health since baby was born	5.pregnancy&birth	1
Mom/baby, Positive Health			8
	birth positive	5.pregnancy&birth	8
Mom/baby health, Neutral			9
	birth neutral/ reporting	5.pregnancy&birth	6
	neutral/reporting other - e.g., getting referred to Milagro	5.pregnancy&birth	3
General, Positive			4
	positive general (not about coping well)	1.how managing since baby born	1
	general positive	3.otherchildren	19
General, Neutral			24
	neutral reporting	1.how managing since baby born, 27.FOCUS	10

Categories	Question	Code	Total
		residents, 28.FOCUS nurses	
	neutral or mixed	2.child this age, other comments about kid	4
	NA	3.otherchildren, other comments about kid, 8.Milagro intake, 11.MIlagro SU counselors, finding Milagro, 14.previous PNC, SU_other, 35.recs for others	24
	description of other couples - negative	4.father	2
	neutral	4.father, 8.Milagro intake, 10.Milagro residents, 30.what helped	16
	external provider	11.MIlagro SU counselors	3
	NA - got elsewhere	13.Milagro maintenance tx	4
	word of mouth connection to Milagro	SUD tx outside Milagro	2
	NA - b/c didn't mention outside of answers to other questions	SUD tx outside Milagro	19
	neutral/reporting	7.Milagro front desk, 13.Milagro maintenance tx, finding Milagro, 14.previous PNC, 18.FOCUS and goals, 23. FOCUS overall, 24.FOCUS Front desk, FOCUS scheduling, 26.FOCUS docs	23
	neutral/reporting	7.Milagro front desk, 13.Milagro maintenance tx, finding Milagro, 14.previous PNC, 18.FOCUS and goals, 23. FOCUS overall, 24.FOCUS Front desk, FOCUS scheduling, 26.FOCUS docs	23
	NA	3.otherchildren, other comments about kid, 8.Milagro intake, 11.MIlagro SU counselors, finding Milagro, 14.previous PNC, SU_other, 35.recs for others	24
	SU with most recent pregnancy but not with previous one(s)	14.previous PNC	1
	previous PNC had more frequent visits b/c high-risk pregnancy	14.previous PNC	1

Categories	Question	Code	Total
	positive prior pregnancy	14.previous PNC	1
	NR	4.father, 7.Milagro front desk, 10.Milagro residents, 12.Milagro nurses, 20.why FOCUS, 21.why come back, 22.improve FOCUS, 25.FOCUS intake, 34.potential challenges	24
	outside provider	26.FOCUS docs	1
	neutral	4.father, 8.Milagro intake, 10.Milagro residents, 30.what helped	16
	unsure/don't remember	31.why used	1
	NA	3.otherchildren, other comments about kid, 8.Milagro intake, 11.MIlagro SU counselors, finding Milagro, 14.previous PNC, SU_other, 35.recs for others	24
	NR	4.father, 7.Milagro front desk, 10.Milagro residents, 12.Milagro nurses, 20.why FOCUS, 21.why come back, 22.improve FOCUS, 25.FOCUS intake, 34.potential challenges	24
	NA	3.otherchildren, other comments about kid, 8.Milagro intake, 11.MIlagro SU counselors, finding Milagro, 14.previous PNC, SU_other, 35.recs for others	24
Kid(s), Neutral			14
	neutral growth/development	2.child this age	1
	adjusting home for baby	2.child this age	1
	neutral or ambivalent growth/devt	3.otherchildren	1
	neutral or mixed	2.child this age, other comments about kid	4
	NA	3.otherchildren, other comments about kid, 8.Milagro intake, 11.MIlagro SU counselors, finding Milagro, 14.previous PNC, SU_other, 35.recs for others	24
Motherhood, Neutral			15
	neutral/ reporting	3.otherchildren	4

Categories	Question	Code	Total
	describing parenting strategies	other comments about kid	2
	responsibilities of motherhood	15.motherhood	4
	neutral or mixed/ambivalent attitudes	15.motherhood	2
	balancing mom and child needs	17.motherhood goals	2
	Balancing work and parenting	17.motherhood goals	5
	balancing mom and baby needs	32.personal goals	2
Father, Neutral			6
	shared traits	4.father	2
	dad intermittently supportive of mom/baby	4.father	1
	NR	4.father, 7.Milagro front desk, 10.Milagro residents, 12.Milagro nurses, 20.why FOCUS, 21.why come back, 22.improve FOCUS, 25.FOCUS intake, 34.potential challenges	24
Neutral, Program(s)			7
	Reporting/neutral, including neutral description of process of referral to Milagro	6.Milagro overall	7
Milagro, Neutral			23
	limited interaction/time with Milagro	6.Milagro overall	1
	Neutral/reporting	7.Milagro front desk, 13.Milagro maintenance tx, finding Milagro, 14.previous PNC, 18.FOCUS and goals, 23. FOCUS overall, 24.FOCUS Front desk, FOCUS scheduling, 26.FOCUS docs	23
	recognizing it's a hard job	7.Milagro front desk	2
	NR	4.father, 7.Milagro front desk, 10.Milagro residents, 12.Milagro nurses, 20.why FOCUS, 21.why come back, 22.improve FOCUS, 25.FOCUS intake, 34.potential challenges	24
	don't remember	8.Milagro intake	4
	neutral	4.father, 8.Milagro intake, 10.Milagro residents, 30.what helped	16
	NA	3.otherchildren, other comments about kid,	24

Categories	Question	Code	Total
		8.Milagro intake, 11.MIlagro SU counselors, finding Milagro, 14.previous PNC, SU_other, 35.recs for others	
	neutral/facts/NR/declined to comment	9.Milagro doctors	4
	neutral	4.father, 8.Milagro intake, 10.Milagro residents, 30.what helped	16
	NR	4.father, 7.Milagro front desk, 10.Milagro residents, 12.Milagro nurses, 20.why FOCUS, 21.why come back, 22.improve FOCUS, 25.FOCUS intake, 34.potential challenges	24
	reporting/neutral	11.MIlagro SU counselors, 12.Milagro nurses	5
	NA	3.otherchildren, other comments about kid, 8.Milagro intake, 11.MIlagro SU counselors, finding Milagro, 14.previous PNC, SU_other, 35.recs for others	24
	reporting/neutral	11.MIlagro SU counselors, 12.Milagro nurses	5
	NR	4.father, 7.Milagro front desk, 10.Milagro residents, 12.Milagro nurses, 20.why FOCUS, 21.why come back, 22.improve FOCUS, 25.FOCUS intake, 34.potential challenges	24
	recognizing the job is hard	12.Milagro nurses	1
	neutral/reporting	7.Milagro front desk, 13.Milagro maintenance tx, finding Milagro, 14.previous PNC, 18.FOCUS and goals, 23. FOCUS overall, 24.FOCUS Front desk, FOCUS scheduling, 26.FOCUS docs	23
	referral to Milagro from another provider	finding Milagro	2
	referred by a friend or acquaintance	finding Milagro	2
	NA	3.otherchildren, other comments about kid, 8.Milagro intake, 11.MIlagro SU counselors, finding Milagro, 14.previous PNC, SU_other, 35.recs for others	24

Categories	Question	Code	Total
FOCUS, Neutral			22
	neutral/reporting	7.Milagro front desk, 13.Milagro maintenance tx, finding Milagro, 14.previous PNC, 18.FOCUS and goals, 23. FOCUS overall, 24.FOCUS Front desk, FOCUS scheduling, 26.FOCUS docs	23
	contract to stay with FOCUS	20.why FOCUS	1
	NR	4.father, 7.Milagro front desk, 10.Milagro residents, 12.Milagro nurses, 20.why FOCUS, 21.why come back, 22.improve FOCUS, 25.FOCUS intake, 34.potential challenges	24
	understanding they (FOCUS providers) have a lot on their plates	22.improve FOCUS	1
	neutral/reporting	7.Milagro front desk, 13.Milagro maintenance tx, finding Milagro, 14.previous PNC, 18.FOCUS and goals, 23. FOCUS overall, 24.FOCUS Front desk, FOCUS scheduling, 26.FOCUS docs	23
	neutral/reporting	7.Milagro front desk, 13.Milagro maintenance tx, finding Milagro, 14.previous PNC, 18.FOCUS and goals, 23. FOCUS overall, 24.FOCUS Front desk, FOCUS scheduling, 26.FOCUS docs	23
	neutral/reporting	7.Milagro front desk, 13.Milagro maintenance tx, finding Milagro, 14.previous PNC, 18.FOCUS and goals, 23. FOCUS overall, 24.FOCUS Front desk, FOCUS scheduling, 26.FOCUS docs	23
	neutral/reporting or don't remember	25.FOCUS intake	11
	NR	4.father, 7.Milagro front desk, 10.Milagro residents, 12.Milagro nurses, 20.why FOCUS, 21.why come back, 22.improve FOCUS,	24

Categories	Question	Code	Total
		25.FOCUS intake, 34.potential challenges	
		4.father, 7.Milagro front desk, 10.Milagro residents, 12.Milagro nurses, 20.why FOCUS, 21.why come back, 22.improve FOCUS,	
	NR	25.FOCUS intake, 34.potential challenges	24
		7.Milagro front desk, 13.Milagro maintenance tx, finding Milagro, 14.previous PNC, 18.FOCUS and goals, 23. FOCUS overall, 24.FOCUS Front desk, FOCUS scheduling,	
	neutral/reporting	26.FOCUS docs	23
	neutral reporting	1.how managing since baby born, 27.FOCUS residents, 28.FOCUS nurses	10
	neutral reporting	1.how managing since baby born, 27.FOCUS residents, 28.FOCUS nurses	10
Neutral, Using			3
	didn't think she had a problem with SU at the time	29.why quit	1
	denial of seriousness of their use	31.why used	1
	using was a developmental phase, teenage rebellion	33.what'll help	1
Neutral, pregnancy			10
	pregnancy neutral/reporting	5.pregnancy&birth	10

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