Cover Letter

Statistical Analysis Plan

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FIOC Statistical Analysis Plan

- Initial descriptive summations and simple statistical tests will compare groups.

- Primary Aims 1-4: Effects of the intervention. To examine if coparenting and individual adjustment outcomes are superior for FIOC families than for control group families at 3- and 12-months post-partum two-sided independent sample t-test for equivalence will first be employed for single time point comparisons. We will test hypotheses further using linear or generalized linear models to control for potential confounding and account for imbalance between the two treatment conditions.

- For longitudinal outcomes that are continuous (measured at Baseline; 3; and 12 months post-partum) we will use repeated measures analysis of covariance (ANCOVA; Crowder & Hand, 1990) to detect if treatment and control groups perform differently at any time points. For longitudinal outcomes that are categorical, generalized linear model (GLM, McCullagh & Nelder, 1989) will be used for the same purpose. Repeated measures ANCOVA and GLM allow us to account for correlation between repeated measures and detect possible moderating/confounding between treatment effects and subject individual differences. Multiple comparison adjustment will be addressed in analyses. We will report significance under both regular (.05) and Bonferroni-adjusted alpha.

- Exploratory Aim 1: To examine whether extent of father engagement is associated with better infant socioemotional adjustment regression analyses will examine variance in infants' 12-month ITSEA Internalizing, Externalizing, Dysregulation and Competence scores explained by 3- and 12-month father engagement.

- Exploratory Aim 2: To examine whether FIOC prevents the emergence of IPV and help to prevent future IPV in couples where it was previously reported, we will first explore simple chi-square analysis to compare FIOC and TAU conditions on the binary variable of any instance of physical violence between partners reported on the CTS2 over the 12 months of follow-up. Next,

we will conduct a linear regression model with intervention group and baseline CTS2 scores as predictors and CTS2 12-month scores as outcome variables. Next, hierarchical regression will be used to assess the main effects of the intervention group and severity of previous violence (reported on the CTS2 at baseline) on the severity of IPV over the 12 months of follow-up, and the interaction effect of FIOC x previous IPV on IPV severity at follow-up.