Appendix D Table 12. Benefits of Primary Care Interventions for Child Maltreatment Prevention from Randomized, Controlled Trials in the Sensitivity Analysis (KQ1) – Reports to child protective services, Categorical Outcomes

| Author, Year  Quality  Overall Sample Size (Analyzed) | Outcome Definition | Followup Timing | Number of Incident Reports, G1  No. (%) | Number of Incident Reports, G2  No. (%) | Number of Incident Reports, G3  No. (%) | Number of Incident Reports, G4  No. (%) | Effect Estimate or Other Outcome Measure |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Barth, 1991134  Poor  Total N=191 caregiver randomized (N analyzed=191) | Reports of child abuse and removal from home obtained from county social service records | 3 years  (Range 2-5 years) | 9 (9.6) | 11 (10.3) | NA | NA | Authors reported no statistically significant differences in numbers of families reporting child abuse or neglect, child welfare, or court-ordered in-home or out-of-home services, or other health outcomes. |
| DePanfilis et al, 2005172  Poor  Total N=154 families\* randomized (N analyzed=111) | Indicated/substantiated reports of child abuse or neglect; assessed by computerized searches of official reports from birth until 6 months after the intervention ended† | 6 months after intervention terminationǂ | 4 (5.7) | NR | 1 (1.4) | NR | Calculated RR, for G3 vs. G1: 0.284 (95% CI, 0.03 to 2.46)  Reported Chi-square=1.823, p=0.177 |
| DePanfilis et al, 2005172  Poor  Total N=154 families\* randomized (N analyzed=139) | All reports of child abuse or neglect; assessed by computerized searches of official reports from birth until 6 months after the intervention ended | 6 months after intervention terminationǂ | 5 (7.1) | NR | 6 (8.7) | NR | Calculated RR, for G3 vs. G1: 1.22 (95% CI, 0.39 to 3.80)  Reported Chi-square=0.115, p=0.735 |
| Dubowitz et al, 2009148  Poor  Total N=729 parents randomized (N analyzed=558) | At least one report to child protective services, including substantiated and unsubstantiated reports but excluding “ruled-out” reports. Analysis controlled for the number of children. | 42 months after study onset§ | 48 (19.2) | 41 (13.3) | NA | NA | Calculated RR, 1.44 (95% CI, 0.98 to 2.11) |
| Dubowitz et al, 2012147  Poor  Total N=1,119 families randomized (N analyzed=1,119) | State child protective services reports involving study families were obtained. Reports after June 2006 were considered during SEEK. Ruled-out reports (i.e., reports investigated, but with no supporting evidence of maltreatment) were excluded. | NRǁ | 2 (0.4) | 8 (1) | NA | NA | Calculated OR, 3.52 (95% CI, 0.75 to 16.51), reported p=0.69¶ |
| Duggan et al, 2004146  Poor  Total N=730 mothers randomized (N analyzed=643) | Number and percentage of families with all substantiated child protective service reports in the index child’s first 3 years of life; verified by matching study sample with Department of Human Services (HDHS) records. Excluded substantiated CPS reports that were based on toxicology screens at the time of the child’s birth. | 3 years of age | 11 (4.1) | 12 (3.2) | NA | NA | No significant difference, p=0.56 |
| Duggan et al, 2004146  Poor  Total N=730 mothers randomized (N analyzed=643) | Number and percentage of families with all substantiated child protective service reports in the index child’s third year of life; verified by matching study sample with HDHS records. Excluded substantiated CPS reports that were based on toxicology screens at the time of the child’s birth. | 3 years of age | 2 (0.7) | 4 (1.1) | NA | NA | NR |
| Duggan et al, 2004146  Poor  Total N=730 mothers randomized (N analyzed=643) | Number and percentage of families with all substantiated child protective service reports in the index child’s second year of life; verified by matching study sample with HDHS records. Excluded substantiated CPS reports that were based on toxicology screens at the time of the child’s birth. | 2 years of age | 6 (2.2) | 5 (1.3) | NA | NA | NR |
| Duggan et al, 2004146  Poor  Total N=730 mothers randomized (N analyzed=643) | Number and percentage of families with all substantiated child protective service reports in the index child’s first year of life; verified by matching study sample with HDHS records. Excluded substantiated CPS reports that were based on toxicology screens at the time of the child’s birth. | 1 year of age | 3 (1.1) | 3 (0.8) | NA | NA | NR |
| Duggan et al, 2004146  Poor  Total N=730 mothers randomized (N analyzed=643) | Number and percentage of families with substantiated child protective service reports of abuse or neglect (excludes threats) in the index child’s first 3 years of life; verified by matching study sample with HDHS records. Excluded substantiated CPS reports that were based on toxicology screens at the time of the child’s birth. | 3 years of age | 4 (1.5) | 4 (1.1) | NA | NA | No difference, p=0.55 |
| Duggan et al, 2004146  Poor  Total N=730 mothers randomized (N analyzed=643) | Number and percentage of families with substantiated child protective service reports of abuse or neglect (excludes threats) in the index child’s third year of life; verified by matching study sample with HDHS records. Excluded substantiated CPS reports that were based on toxicology screens at the time of the child’s birth. | 3 years of age | 0 (0) | 1 (0.2) | NA | NA | NR |
| Duggan et al, 2004146  Poor  Total N=730 mothers randomized (N analyzed=643) | Number and percentage of families with substantiated child protective service reports of abuse or neglect (excludes threats) in the index child’s second year of life; verified by matching study sample with HDHS records. Excluded substantiated CPS reports that were based on toxicology screens at the time of the child’s birth. | 2 years of age | 3 (1.1) | 3 (0.8) | NA | NA | NR |
| Duggan et al, 2004146  Poor  Total N=730 mothers randomized (N analyzed=643) | Number and percentage of families with substantiated child protective service reports of abuse or neglect (excludes threats) in the index child’s first year of life; verified by matching study sample with HDHS records. Excluded substantiated CPS reports that were based on toxicology screens at the time of the child’s birth. | 1 years of age | 1 (0.4) | 0 (0) | NA | NA | NR |
| Gray et al, 1979135  Poor  Total N=100 mothers randomized (N analyzed=50) | Central Child Abuse Registry reports and indications of “abnormal parental practices” involving medical concern | 17–35 months following delivery# | 1 (4) | 2 (8) | NA | NA | Calculated RR, 2.0 (95% CI, 0.19 to 20.67) Chi-squared result p<0.46 |
| Gray et al, 1979135  Poor  Total N=100 mothers randomized (N analyzed=50) | Central Child Abuse Registry reports and indications of “abnormal parental practices” involving medical concern | 17 months post delivery | 1 (4) | 1 (4) | NA | NA | Calculated RR, 1.0 (95% CI, 0.07 to 15.12)  Chi-squared result p<0.99 |
| Mejdoubi et al, 2015176  Poor  Total N=460 mothers randomized (N analyzed=332) | Child maltreatment during pregnancy and within first 3 years of life; based on reports made by professionals and citizens, such as family members, to CPS on suspected cases of child maltreatment including physical abuse, physical neglect, emotional/psycholo-gical abuse, emotional/psycholo-gical neglect, or sexual abuse. | 3 years and 6 months after randomi-zation; 3 years of age | 31 (19) | 18 (11) | NA | NA | RR 0.58 (95% CI, 0.28 to 0.96)\*\* |
| Paradis et al, 2013178  Poor  Total N=497 families randomized (N analyzed=216) | Avoidance of CPS reports; based on independent review of CPS reports among participants completing the program “to date” | 24 months from baseline†† | NR (95) | NR (98) | NA | NA | p=NSǂǂ |
| Wagner and Clayton, 1999179  (PAT: Teen)  Poor  Total N=704 families randomized (N analyzed=363) | Child had opened case of child abuse or neglect; based on child abuse data from the CA Office of Child Abuse Prevention | NR§§ | 4 (2.4) | 3 (1.3) | 4 (2.7) | 0 (0) | One-tailed T-values compared with G1: G2: -0.08, p=NS G3: 0.02, p=NS G4: -0.31, p<0.05 |

\* 473 children

† Reports were coded prior to intervention, during intervention, or during 6 months following termination of intervention

ǂ Intervention lasted for 3 or 9 months. Average age of children was 8.3 years (range: newborn to 20 years).

§ Infants 6–8 months age on average at baseline, age range 0–5 years.

ǁ From study start toward the end of the study (age of children not specified, but followup for up to 12 months after baseline for other measures, children 25–27 months at baseline).

¶ Assessment of the difference between CPS reporting during SEEK was adjusted for pre-SEEK differences.

# Average age was 26.8 months post-delivery, during home evaluation.

\*\* Authors also reported on results from subgroup analyses stratified by gender or ethnicity of the child revealed no significant differences in CPS reports. No confounders were found significant.

†† Average age of children: 6 months (range 1–26 months).

ǂǂ “On recent followup of initial program graduates, 97% of G2 graduates continued to avoid CPS indications after services ended.” No comparison data are given for G1, nor sample size for either group.

§§ Unclear, however, program lasted for 3 years and teens were pregnant or had an infant <6 months of age at recruitment.

**Abbreviations:** CA=California; CPS=child protective services; DCF=(Massachusetts) Department of Children and Families G=group; HDHS=Department of Human Services; KQ=key question; NA=not applicable; NR=not reported; NS=not statistically significant; NYS=New York state; OR=odds ratio; PAT=Parents as Teachers; RR=relative risk; SEEK=Safe Environment for Every Kid.