Coalition for Evidence-Based Policy
A NONPROFIT, NONPARTISAN ORGANIZATION

Top Tier Evidence Initiative:

Evidence Summary for the Triple P System

HIGHLIGHTS:

- **Intervention:** A system of parenting programs for parents with children age 0-8.
- **Evaluation Methods:** A well-conducted randomized controlled trial of the Triple P System as implemented community-wide in nine South Carolina counties.
- **Key Findings:** 13-33% reductions in county-wide rates of child maltreatment, hospital visits for maltreatment injuries, and foster-care placements, two years after random assignment.
- **Other:**
  - (i) These findings apply to the full Triple P System for families with children age 0-8 (as opposed to other versions of Triple P.[1])
  - (ii) A study limitation is its relatively small and homogeneous sample – 18 South Carolina counties. Thus, replication of these findings in a second trial, in another setting, would be desirable to confirm the initial results and establish that they generalize to other settings where the System might be implemented.

I. The Top Tier initiative's Expert Panel has identified this intervention as *Near Top Tier*.

The Panel finds that this intervention meets the "Near Top Tier" evidence standard, defined as:

Interventions shown to meet almost all elements of the Top Tier standard (i.e., well-conducted randomized controlled trials… showing sizable, sustained effects), and which only need one additional step to qualify. This category includes, for example, interventions that meet all elements of the standard in a single site, and just need a replication trial to confirm the initial findings and establish that they generalize to other sites.

II. Description of the Intervention:

The Triple P (Positive Parenting Program) System is a system of parenting interventions for families with children ages 0-8,[1] which seeks to strengthen parenting skills and prevent dysfunctional parenting, so as to prevent child maltreatment and emotional, behavioral, and developmental problems. The System emphasizes five core principles of positive parenting: (i) ensuring a safe, engaging environment; (ii) promoting a positive learning environment; (iii) using assertive discipline; (iv) maintaining reasonable expectations; and (v) taking care of oneself as a parent.

System services include various combinations of parenting seminars, parent skills-training sessions, and individual consultations. These services are provided in one to ten or more sessions, with the type and amount of service (i.e., service "levels") tailored to the severity of the family's dysfunction and/or child's behavioral problems. Sessions are delivered by a variety of service providers from different settings (e.g., healthcare, preschools, elementary schools, mental health, social services) who have completed Triple P's 3-5 day training regimen. The System also includes media strategies

[1] Other versions of Triple P serve children up to age 12 and/or provide specific components ("levels") of Triple P but not the full System (see discussion of service levels under "Description of the Intervention").

Updated May 2017

promoting positive parenting practices community-wide (e.g., news stories, parenting articles, newsletters, radio announcements).

In the study described below, the System trained approximately 650 existing service providers in nine counties to deliver Triple P county-wide for families with children ages 0-8. The cost of building a public health infrastructure to deliver the Triple P System on roughly this scale – including training and supporting the service providers, and implementing the media strategies – is about $2.3 million, or $12 per child age 0-8, in 2010 dollars.[2]

Click here to go to the program's website.

III. Evidence of Effectiveness:

This summary of the evidence is based on a systematic search of the literature, and correspondence with leading researchers, to identify all well-conducted randomized controlled trials of the full Triple P System that evaluated its effect over a sustained period of time. Our search identified one such study, as follows.

Overview of the Study Design: Randomized controlled trial evaluating county-wide implementation of Triple P in a sample of 18 rural and semi-urban South Carolina counties.

The trial randomly assigned 18 South Carolina counties to (i) a group that implemented the Triple P System county-wide for families with at least one child under eight years old; or (ii) a control group that provided usual county services without implementation of Triple P.

The counties were selected for the trial based on their population size (mid-sized, between 50,000 to 175,000 people). None had prior exposure to Triple P. All were rural or semi-urban, with an average African American population of 31% and poverty rate of 15%. The study estimated, based on a survey of service providers in the Triple P counties, that between 9,000 and 13,500 families in Triple P counties received Triple P services during the two-year study period.

Effects of Triple P two years after random assignment (versus the control counties):

These are the county-level effects on all of the primary outcomes that the study measured at the two-year follow-up.[3]

- 33% reduction in the rate of substantiated child maltreatment (10.9 cases of substantiated child maltreatment each year per 1,000 children age 0-8 in Triple P counties vs. 16.3 cases in control counties). This effect was statistically significant at the 0.05 level;

---

[2] This is the cost estimate for a set of counties whose total population is about 15-20% larger than that of the nine Triple P counties participating in the study. This estimate is comprised primarily of one-time start-up costs, and does not include the ongoing cost to service providers of delivering the parenting programs. The magnitude of that ongoing cost depends on how easily the providers can incorporate Triple P activities into their regular routine, substituting for other activities.

[3] The effects shown here are statistically adjusted (using regression covariates) to account for any pre-program differences between counties in the outcome measure over the five-year period prior to intervention delivery, as reported in Prinz et. al. 2016.

- 16% reduction in the rate of out-of-home placements – e.g., in foster homes (3.9 out-of-home placements each year per 1,000 children age 0-8 in Triple P counties vs. 4.6 in control counties). This effect was statistically significant at the 0.10 level, but not the 0.05 level;

- 13% reduction in the rate of hospitalizations or emergency room visits for child maltreatment injuries (1.5 each year per 1,000 children age 0-8 in Triple P counties vs. 1.8 in control counties). This effect was statistically significant at the 0.10 level, but not the 0.05 level.

Discussion of study quality:

- This study evaluated the Triple P System as implemented on a large scale across nine mid-sized South Carolina counties, thus providing evidence of the System's effectiveness under real-world implementation conditions.

- The study had no sample attrition: Outcome data were obtained for all 18 counties in the original sample.

- At the start of the study, there were no statistically significant differences between the Triple P and control group counties in observable characteristics (e.g., child maltreatment rates over the prior five years, poverty rates, racial composition).

- The study measured outcomes for all counties assigned to the Triple P group, regardless of how well they actually implemented the System (i.e. the study used an intention-to-treat analysis).

- Outcomes were all measured using official data recorded by independent organizations (i.e., Child Protective Services, the foster care system, and hospitals), and data were not recorded or collected by personnel involved in the delivery of the intervention.

- The study's statistical analysis accounted for the fact that counties, rather than individual families, were randomly assigned to the Triple P and control groups.

- A study limitation is that the sample is relatively small and homogeneous – 18 mid-sized counties in one state. The study was able to find statistically-significant effects, despite its small sample, because the effects are large in size. Still, the Top Tier initiative's Expert Panel believes that replication of these findings in a second trial, conducted in another setting by the same or other researchers, would be desirable to (i) rule out the possibility that the findings occurred by chance (due to the small sample); and (ii) confirm that the System is effective in other settings where it would normally be implemented.

Other Studies:

This is the only randomized controlled trial of the multi-level Triple P System as implemented community-wide to prevent maltreatment of infants and young children. A number of other randomized controlled trials have been carried out to evaluate specific levels within the Triple P System (e.g., skills-training sessions tailored to parents of children with detectable behavior problems) and/or program adaptations (e.g., a self-guided version for parents). The findings of these trials are generally consistent with those of the study described above. These trials are not summarized here because they did not evaluate the same version of the intervention (i.e., the full

System). In addition, the Top Tier initiative's review of these other versions found the evidence to be suggestive, but not yet strong enough to qualify any of these versions for Top Tier or Near Top Tier (e.g., due to only short-term follow-up).

IV. Summary of the Intervention's Benefits and Costs:

If taxpayers fund the delivery of the Triple P System, what benefits to society can they expect to result, and what would be their net cost? The following table provides a summary. This is intended to be a general overview of social benefits in relation to taxpayer cost, rather than a comprehensive benefit-cost analysis. It assigns monetary value to particular benefits and costs only when doing so requires minimal assumptions. The monetary amounts shown are in 2010 dollars.

Benefits To Society
▪ **13-33% reductions in county-wide rates of child maltreatment, hospital visits for maltreatment injuries, and foster-care placements for children age 0-8, two years after random assignment.**
Net Cost To Taxpayers
▪ **The cost of building the public health infrastructure to deliver the System – including training service providers, and implementing the media strategies – was about $12 per child age 0-8.***
▪ **This cost was at least partly offset by reduced government spending on foster care placements and public services related to child maltreatment.**

* This estimate is comprised primarily of one-time start-up costs, and does not include the ongoing cost to service providers of delivering the parenting programs. The magnitude of that ongoing cost depends on how easily the providers can incorporate Triple P activities into their regular routine, substituting for other activities.

V. References:

Prinz, Ronald J., Matthew R. Sanders, Cheri J. Shapiro, Daniel J. Whitaker, and John R. Lutzker. "Addendum to: 'Population-Based Prevention of Child Maltreatment: The U.S. Triple P System Population Trial.'" *Prevention Science*, 2016, vol. 17, no. 4, pp. 410-416.

Prinz, Ronald J., Matthew R. Sanders, Cheri J. Shapiro, Daniel J. Whitaker, and John R. Lutzker. "Population-Based Prevention of Child Maltreatment: The U.S. Triple P System Population Trial." *Prevention Science*, 2009, vol. 10, no. 1, pp. 1-12.

Foster, E. Michael, Ronald J. Prinz, Matthew R. Sanders, and Cheri J. Shapiro. "The costs of public health infrastructure for delivering parenting and family support." *Children and Youth Services Review*, 2008, vol. 30, pp. 493-501.