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February 16, 2018

Dear Chairman Hatch and Senator Wyden:

We are a local Utah non-profit organization called the Trauma Informed Care Network whose mission is to network and educate the community around issues related to trauma informed care, as well as facilitate client and patient access to trauma informed professionals and organizations. We are made up of mental health, medical, and other professionals, individuals, and organizations in the community who are committed to helping Utah become a more trauma informed state. We currently have more than 500 members across the state who support instituting trauma informed practices in all our human services activities.

We support The Campaign for Trauma-Informed Policy and Practice (CTIPP) wholeheartedly in their recommendations on actions the Finance Committee can take to help address the opioid epidemic, in response to the questions in your February 2, 2018 letter and as delineated below.

Warmly,

Kristan Warnick, MS, CMHC
TICN Founder and Executive Board Member,

Over the past twenty years, neuroscience has made some dramatic discoveries about the way early childhood adversity (also called childhood trauma or Adverse Childhood Experiences (ACEs)) causes changes in the brain that cause that person to be particularly vulnerable to substance abuse when they grow up. Recent studies have confirmed that, finding that that persons who suffer extensive childhood adversity are three times more likely to become victims of Opioid Use Disorder (OUD) and five times more likely to engage in injection drug use. [i] Thus, persons who suffered multiple ACEs but are not yet addicted are much more vulnerable to OUD, while those who already suffer from OUD need to address their ACEs if they are to fully heal and not relapse.

In addition to discovering that ACEs and other forms of trauma are at least one if not the major cause of OUD, neuroscience has provided guidance on ways to prevent having had multiple ACEs from driving persons to OUD and ways to treat those with multiple ACEs who are already suffering from OUD. Programs and therapies that put this science to work are often called "trauma-informed". The focus of our recommendations below is on ways the Committee can put the neuroscience discoveries to work by incorporating trauma-informed initiatives in the programs under your jurisdiction in order to prevent the spread of OUD to those most vulnerable to addiction and provide neuroscience-based, trauma-informed treatment to those already addicted to help them heal and avoid a relapse

The core of trauma-informed policies and practices are based on the findings by the Kaiser Permanente-CDC Adverse Childhood Experience (ACE) Study[ii] that adverse childhood experiences (ACEs) such as physical, sexual, substance, physical or emotional abuse in the home leads to a host of social and health problems during adulthood, including greater likelihood of suicide, substance abuse, domestic violence, poor performance at school and work, obesity, diabetes, heart disease and cancer. The study found a direct dose response in that the more ACEs you had, the greater the likelihood that you will suffer from these outcomes.

These findings have been reinforced by the neuroscience findings that explain how ACEs lead to these outcomes –that early and extensive adversity during childhood causes changes in the brain that lead the body to continually pump the stress hormone cortisol into the person's blood stream throughout the lifespan, even after there is no longer anything threatening that person. This causes the person to live in fear and under stress even though there is nothing in real world that is threatening. People too frequently deal with this continued stress by drinking, using drugs, beating up a spouse or child, overeating, and other dysfunctional behavior. Their focus on this fear makes the person a

poor student and a poor worker. The continual flow of cortisol also harms the body, leading to the diseases listed above that are correlated with multiple ACEs.

What is significant about the ACE study and the neuroscience for the purposes of your February 2nd letter is the studies, long before the opioid epidemic began, that showed a very strong correlation between multiple ACEs during childhood and substance abuse.[iii] More recent studies have confirmed the same correlation applies to opioid use disorder. One study found that 54% of those using painkillers to get high and 78% of those engaged in IV drug use suffered adverse childhood experiences[iv]. The data on opioids, coupled with the data on ACEs and substance abuse generally[v] and the neuroscience findings on what ACEs do to the brain, lead to the conclusion that ACEs are one of the significant underlying causes of OUD and misuse of related drugs such as heroin, that are connected to OUD.

Knowing an underlying cause of a problem opens the door to solutions. (It also tells you when you are devoting resources to treating symptoms of the problem rather than the underlying cause. This appears to be the present situation in the case of OUD, which helps to explain why present efforts have had such little effect on slowing down the epidemic.) The core of our recommendations below is on ways to infuse neuroscience-based trauma-informed elements into the programs under the Committee's jurisdiction. Much of the present effort around opioids has focused on treating those already addicted. While this saves lives, it does nothing to stop the spread of the epidemic. Trauma-science allows for a focus on prevention -- programs that work to prevent the next person and the next generation from becoming addicted. CTIPP and our recommendations focus on:

- **Immediate Prevention – Helping those most vulnerable to OUD because they suffered multiple ACEs from becoming addicted tomorrow, next week, next month and next year;**
- **Long-term Prevention -- Preventing ACEs in the next generation so it does not grow up vulnerable to OUD; and**
- **Trauma-informed Treatment – Using trauma-informed approaches to treat persons already addicted in order to address the underlying cause of their addiction and thereby increases their ability to heal and not relapse.**

Our recommendations follow:

A. Recommendations for Immediate Prevention Activities Through the Implementation of Resiliency Programs

1. Provide Funding for Community-wide Coalitions to Develop and Implement Community-wide Strategies for Addressing the Opioid Epidemic

Life-saving actions are critical for those already addicted. However, if upstream preventive measures are not also taken, the epidemic will continue to grow, overwhelming the medical system and further destroying communities and families. Given the correlation between multiple ACEs and OUD, teenagers and adults who suffered multiple ACEs as a child are the ones most vulnerable to becoming the next victim of OUD. As indicated above, multiple ACEs lead to continual stress throughout the lifespan, which leads to the seeking of relief, which opioids and other drugs offer. If those who suffered multiple ACEs are provided with what are called **resiliency** techniques, techniques that enable them to control their stress without turning to drugs, they are less likely to become the next victim of OUD.

Resilience can be achieved through strong families and close supportive relationships. It can also be achieved through a set of activities that studies have shown actually cause changes in the brain to help reeducate the brain to prevent the childhood adversity from driving them to drug use and other destructive behavior Proven resilience techniques include yoga, mindfulness and meditation. While some people may consider mindfulness, meditation and yoga to be non-medical, superficial "hippy" practices, multiple studies have shown that they work in promoting resilience and actually produce physiological changes in the brain. [vi] While some people may also think that some segments of the population would not touch such practices, the Kansas City Police Department has enthusiastically embraced yoga.

Every institution in the community can play a part in reaching a different segment of that community in order to educate that group about trauma, to promote strong families, and to teach the people in that segment about resilience techniques, including; schools, churches, synagogues, and mosques, social clubs, law enforcement departments, city governments, chambers of commerce, Boys and Girls Clubs, and others. However, there must be an entity in the community that coordinates all of these efforts. Therefore, the effort to prevent OUD going forward requires cross-sector comprehensive coalitions in communities hard-hit by the opioid epidemic to educate the community about the connection between ACEs and to coordinate the diverse range of programs needed to provide the community with the comprehensive and integrated neuroscience-based resilience programs.

The opioid epidemic is a community-wide problem so it can only be solved through a community-wide effort, It cannot be solved just by the police, medical personnel, EMTs, or other individual entities. As Laura Porter concluded after working with eight communities in the State of Washington, "[t]he answer lies in helping communities develop the capacity to reshape their own culture, from one that perpetuates cycles of trauma to one that reduces the array of ACE-related problems simultaneously and promotes health."[vii] Community resilience is defined as the sustained ability of a community to utilize available resources to withstand, and to recover from adverse situations. Resilience community initiatives align and leverage assets across multiple sectors to maximize residents' ability to cope with adversity. For example, community education about the connection between

adverse childhood experiences and opioid use disorder is critical, but it will have little impact unless there are resources in place for people who recognize they suffer from such childhood adversity to go to in order to learn resiliency techniques. The health, mental health, education, law enforcement, judicial, business, government, and other institutions in the community must come together to develop and implement a comprehensive strategic plan.

There is no need to reinvent the wheel on this regarding what a comprehensive cross-sector community wide effort would look like. There are a growing number of states, cities, tribes and community collaboratives that have or are in the process of developing comprehensive strategies to address the causes and effects of early childhood and adult adversity (often called trauma-informed initiatives). A group in St. Louis has created a program called *Alive and Well* that brings all of the above listed entities together to attack childhood trauma. A group in Salt Lake City has created the Utah ACEs Coalition. In Portland, with assistance from the Building Resilient Communities program at the George Washington School of Health, a group has created the Portland Building Resilient Communities Coalition. The Mobilizing Action for Resilient Communities facilitated by the Health Foundation of Philadelphia is assisting fourteen communities build such coalitions and the Change in Minds initiative led by the Alliance for Healthy Families and Communities is assisting 15 communities. However, these initiatives have all been funded through foundation grants, but there is no existing Federal program to fund such programs, while communities hard-hit by the opioid epidemic are already strapped for funds.

RECOMMENDATION # 1 -The single most important recommendation in this paper, because it is the key to the success of most of the others, is the establishment of a funding stream to fund comprehensive cross-sector community-wide initiatives in communities hard-hit by the opioid epidemic to develop and implement a comprehensive, integrated approach for addressing the epidemic, designing an approach that meets the communities unique needs and culture. The Finance Committee should recommend increased funding authorization from the funds the Budget Agreement allocated for the opioid epidemic to any one of a number of programs under its jurisdiction to provide states with funds to award grants to communities to create such cross-sector community-wide coalitions. Possible committee programs include the Title XX Social Services Block Grant Program; Child Care and Development Block Grants and the Promoting Safe and Stable Families Program.

2. Recommendations to Assist Targeted Vulnerable Groups Receive Resiliency Training

Below are recommendations for targeted programs within the Committee's jurisdiction to promote and teach resilience techniques among those segments of the population that are the most vulnerable to becoming the next OUD victim.

a) **Implementing Resiliency training in Job training programs --**An example of what can be done in a targeted area under the jurisdiction of the Committee is in the area of job training. The opioid epidemic has removed a substantial number of persons of working age from the workforce. There is already a shortage of workers in some parts of the country. When one adds in the millions of jobs the tax reform legislation, is projected to create, employers are going to have trouble finding enough workers to fill their vacancies if workers keep dropping out of the workforce because they are suffering from OUD or SUD. Therefore a priority area of prevention should be to teach reliance techniques to those participating in job training programs so they join the ranks of the employed rather than the ranks of those with OUD.

It is likely that given the population that participates in Federally-funded job training programs, many of them have suffered multiple ACEs, making them vulnerable to OUD. Teaching them resilience techniques as part of the training can help ensure they will become the next gainfully employed worker rather than the next OUD victim. A study by Rutgers University found that the resilience components contained in the Camden New Jersey job training program called Hopeworks produced a 20% increase in the job training retention rate.[viii]

RECOMMENDATION # 2 --*The Committee should direct HHS to require the job training programs funded by TANF to incorporate trauma-informed reliance techniques into their training programs and provide the grantees with additional funding from the $6 billion allocated for the opioid epidemic to enable them to do so. This will produce a double benefit – reduce the epidemic and better insure the tax reform legislation will promote increased employment and economic growth as intended.*

3. Authorizing Medicaid to Pay for the Provision of Resiliency Training in Schools – One of the best places to provide resiliency training is in the schools. A University of Cincinnati study found that teaching mindfulness yoga to youth "…helped them develop long-term coping skills and concluded such programs are needed in earlier ages in schools to help vulnerable youth to channel their skills more effectively….These findings highlight the importance of implementing positive coping strategies for at-risk youth particularly for reducing illicit drug use and risky sexual behavior." [ix] The best people to provide school training are behavioral health personnel, which an increasing number of schools are deploying. But while such personnel may bill Medicaid for services provided to an individual student, they are not permitted to bill for school-wide education programs. Permitting such payments will repay themselves many times over in light of the conclusion by the author of the Cincinnati study that for resilience programs in the schools "the return on investment may be substantial especially if they can reduce arrests, repeat offenses and other negative outcomes for risk-taking youth."[x]

RECOMMENDATION # 3. *The Committee should give CMS the authority to grant waivers to permit school behavior health personnel to bill Medicaid for educating students about opioids and teaching them resilience techniques.*

4. **Paying Pediatric Medical Providers to Screen for and Treat Patients with Multiple ACEs**

Opioid addiction can be both a direct cause of ACEs, through parent consumption, and an outcome of ACEs, producing an increased risk for substance dependence. In both cases, pediatric medical providers play a crucial role. Pediatric medical providers, in particular those in primary-care, are in a unique position to identify children who are experiencing ACEs, and other potentially traumatic events, given their long term and often trusted relationship with the family and their training in disease prevention. Medical providers can use systematic approaches, such as routine and universal ACEs screening, to identify children and families with ACEs, and link them to prompt intervention to reduce exposure and thus risk of negative outcomes. CTIPP does not recommend mandatory ACE screening but rather, recommends that pediatricians, particularly those in areas hard-hit by the opioid epidemic, be given the tools they need to identify child and family ACEs in an effective and sensitive manner and have resources for referrals to assist the child and family get the treatment they need and the ability to bill Medicaid, CHIP and other third-party payors for providing those services.

Effective procedures for medical providers to use when addressing ACEs and trauma in children and families exist. Under the director of Dr. Nadine Burke-Harris, the Center for Youth Wellness' National Pediatric Practice Community on Adverse Childhood Experiences aims to enhance the quality of pediatric care and improve health outcomes by providing technical support, tools, training, resources and learning opportunities for pediatric medical providers, with the goal of widespread integration of ACEs screening and intervention into pediatric medicine. Many other institutions, such as the Johns Hopkins School of Public Health, are providing training for pediatricians on how to identify and treat ACEs. The American Academy of Pediatrics has developed a toolbox for trauma-informed primary care physicians called the Resilience Project Toolkit. There are a number of other ACEs toolkits available. The problem is that some of the services that these toolkits recommend be provided are not covered by Medicaid or CHIP so the provider may not bill for them.

RECOMMENDATION # 4

- *That the Committee direct CMS, together with other DHHS agencies, to collect and evaluate the various ACE toolkits and disseminate the ones identified as the best practices to enable pediatricians to apply the ACE study in their practice;*

- *That the Committee direct CMS to review all of its practices and policies to insure that all aspects of ACE screening and treatment are fully covered by Medicaid and CHIP and insure that primary care and mental health services can be billed the same day. If CMS identifies any gaps in the legislation that bar it from covering all such services, it should be directed to report them to the Committee to address legislatively.*
- *That the Committee require that ACE screening and treatment be part of the mandatory coverage required of insurers by the Affordable Care Act.*

5. Mothers-to-Be. One of the most heart-wrenching effects of the opioid epidemic is the growing number of babies suffering from Neonatal Abstinence Syndrome (NAS) because they were born to addicted mothers.

RECOMMENDATION # 5 *-- CMS should be directed to grant Medicaid waivers to States with communities hard-hit by the opioid epidemic to enable health workers to bill Medicaid when:*

- *educating mothers-to-be about the effects of the drug on their babies;*
- *when they educate obstetrical providers about ACEs so they can refer mothers to-to-be with multiple ACEs to resilience programs early in pregnancy and refer mothers-to-be with OUD to treatment programs.*

6.**Billing for Wrap-Around Services to Families in Which A Member is Addicted.** Since family members of those addicted are among the most vulnerable for addiction themselves, there is a need to provide funding for site teams in communities hard hit by the opioid epidemic composed of law enforcement, educators, child welfare, behavioral health and other professionals to work with families in which a family member has been identified as suffering from opioid or other addiction.

RECOMMENDATION # 6--*Congress should pass the Families First Prevention Act to allow, among other provisions, federal child welfare funds to be used to enhance family stability and decrease foster care placements by addressing the substance misuse and mental health care needs of families at-risk of being child welfare involved.*

7. **Resilience programs for patients who are being prescribed opioids**: Another group within a community that is highly vulnerable to becoming addicted and therefore needs to be targeted for resilience training is the one composed of patients who are have been issued or are being considered for opioid prescriptions and who have multiple ACEs. The challenge is to help the patients avoid becoming addicted, while at the same time avoid denying people in pain the relief that opioids offer. CTIPP does not support the imposition

of mandatory screening for ACEs of patients receiving opioid prescriptions. Instead, we recommend Congress direct HHS to work with the Association of Addictive Medicine to identify existing or develop new trauma-informed guidelines for prescribers of opioids that advise them on how to explore the patient's past without re-traumatizing the patients and how to recommend resilience programs to which the patients who appear to have had adversity in their past can be referred.

RECOMMENDATION # 7 – *That the Committee direct CMS to review the guidelines developed pursuant to the recommendation above to determine if any of the procedures recommended in those guidelines are not billable under Medicaid and to report back to the Committee so it can plug any holes in the Medicaid legislation that prevent providers from being able to bill for all of the procedures called for by the guidelines.*

8. Providing Resiliency Training to Prevent Secondary Trauma Among First Responders, Teachers and other Providers Who Daily Come into Contact with Traumatized Persons -- There is now strong evidence that persons who work intensively with traumatized persons, including police, first responders, health personnel, teachers, social workers, justice-involved workers, foster parents, workers at homeless shelters are vulnerable to secondary trauma, which is as deadly as primary trauma. For years it has been called burnout, but the neuroscience has concluded that it causes physiological changes in their brains similar to those found in persons traumatized by multiple ACEs or severe adult trauma. These workers could benefit from the same resilience techniques recommended for those in target areas. For example, as mentioned above, in Kansas City, the police department has provided yoga training to its entire force to help them deal with secondary trauma. The police say that not only does it make them better officers, but it makes them better husbands and wives because it provides them with a way to leave their stress behind when they return home after being out on the streets. We need to protect our first responders from secondary trauma, which is a danger for any profession that works closely with persons who are traumatized.

RECOMMENDATION # 8 The Committee should earmark funding under the Social Services Block Grant or another program under its jurisdiction to pay for the provision of secondary trauma prevention training for local police departments, the emergency medical treatment workers, critical care and hospital emergency department workers, and others who are regularly engaging with persons addicted to opioids.

9. Native American Communities --The opioid epidemic and other drug problems have hit Indian reservations and Alaska Native villages particularly hard. The populations of these communities suffer from the dual traumatic effects of high ACEs and historical trauma, which make them particularly vulnerable to addiction. On the other hand, these

communities have traditional approaches for preventing and treating trauma, ones that have been passed down for many generations. While not "evidence-based" they have withstood the test of time and are accepted as effective by their communities, a critical part of any healing approach. Some states will permit Native American healers to bill Medicaid for such services but others do not.

RECOMMENDATION #10. *The Committee should direct CMS to require that all states approve Medicaid and CHIP payments for the use of traditional Native American healing practices that are used to address addiction.*

A. Preventing Childhood Adversity in Future Generations

According to the Medicaid Early Childhood Innovation Lab at the Center for Health Care Strategies, "Efforts to reduce early childhood trauma and ACEs could have major long-term payoffs, for individuals and the states and health care systems serving them as adolescents and into adulthood."[xi] Not only can it help to reduce the half a trillion dollars the opioid epidemic is costing the country, it will save money in many other areas. For example, researchers have found statistical evidence showing that individuals reporting ACEs use more health and medical services throughout their lifetime in comparison to those reporting no ACEs.[xii]

However, unless we cut off ACEs at their source, the country faces a future of continued drug epidemics, poor school performance, extensive obesity and diabetes and the other results of ACEs. What makes this so sad is that we have the knowledge and the tools to prevent this. What is needed is the will and the funding. In her new book, "The Deepest Well", pediatrician Dr. Nadine Burke Harris ends with a picture of the world in 2040 when, as the result of community education and adequate funding for the kinds of programs listed below to help build healthy families, the United States has seen a 60% decrease in the number of Americans with four or more ACEs. Reduction in ACEs will lead to a comparable decrease in substance abuse generally and opioids specifically. These kinds of programs, that must be 2 gen programs that treat both the child and the parent. They include:

- The Maternal, Infant, and Early Childhood Home Visiting Program (MIECHV) Act that supports evidence-based home visiting programs in states.
- The Nurse Family Partnership has been shown in experimental trials to reduce state verified rates of abuse and neglect by 48%, reduce emergency room visits by 56%, and produce a 79% reduction in the number of days that children were hospitalized with injuries and ingestions during the first two years of life.[xiii]

- The Triple P Program was demonstrated in a U.S. experimental trial to reduce the rates of child maltreatment in the counties in which it was implemented by 20% while also decreasing out of home placements and childhood injuries. [xiv]
- Parent Child-Interaction Therapy was shown in an experimental trial to reduce child abuse. It was shown in an experimental trial to reduce reported child abuse to 19% as against 49% in the control group."[xv]
- Others are available at the SAMHSA document "Programs that Work "

RECOMMENDATION # 9 --*That Committee urge the Senate to allocate a portion of the funds the Budget Agreement allocated for the opioid epidemic to provide increased funding for programs that work to promote healthy families. The tendency will be to want to allocate all of the funds to programs that deal with the immediate crisis, but that kind of short-term thinking will guarantee that the opioid epidemic will become a multi-generational plague on the country.*

C. **Providing Trauma-Informed Treatment Approaches to Help Those Already Addicted to Fully Recover and Not Relapse**

1. Once their addiction has been stabilized with appropriate evidence-based medical care and they have passed the life-saving stage, people who are suffering from opioid use disorder need treatments that address their underlying trauma in order to help them heal faster and fully and to reduce the likelihood of relapse. A recent study found that addicted persons with multiple ACEs are more likely to relapse during treatment.[xvi] Specifically, it found that each unit increase of ACEs score was associated with a 25% higher odds of relapse over the course of opioid use disorder treatment using Burprenorphine. That is happening because nothing was done to help them deal with the underlying problems that were caused their multiple ACEs. The study also found that the longer patients remained in treatment that included trauma-informed counseling, the less likely they were to relapse.

There are a number of proven trauma-informed therapies for treating the underlying trauma for people with substance abuse. Trauma-informed Cognitive Behavioral Therapy is one. Group therapy is another (and is required with the prescribing of Burprenorphine). In addition, techniques for resilience discussed above, yoga, mindfulness and meditation have also been shown to be effective in helping to treat persons suffering from Opioid Use Disorder. So has Equine Assisted Psychotherapy. The site, "Effective Treatments for Youth Trauma" by the National Child Traumatic Stress Network (NCTSN) links to fact sheets that provide descriptive summaries of some of the clinical treatments, mental health interventions, and other trauma-informed service approaches that the NCTSN and its various centers have developed and/or implemented as a means of promoting the Network's mission of raising the standard of care for traumatized youth and families.

Mindfulness has been proven through numerous studies to be an effective therapy for reducing the likelihood of relapse. www.mindfulrp.com/Research.html provides summaries of over 20 studies that found that Mindfulness-Based Relapse Prevention (MRPB) has this result. For example, a 2016 study by Zemestani, M and Ottaviani. C., concluded after conducting a controlled group study that: "Results suggest that MRBP could be implemented as an effective intervention for patients with comorbid depression.[xvii]

RECOMMENDATION: *That the Committee work with CMS to remove all barriers to payment for the provision of these trauma-informed treatment programs under the Medicaid and Medicare programs. In addition, it should remove all limits on the length of treatment for opioid use disorder. There is no "right" length of time for such treatment programs. Just as someone with diabetes may need insulin injections all of their lives, some people suffering from opioid use disorder may need treatment for long periods of time or for all of their life. Since the cost of treatment is far less than the cost of having another addicted person in society who is placing demands on the EMTs, the emergency rooms, the police, the foster care system and on and on, it is cost-effective to permit a physician to prescribe a treatment for as long as he or she concludes it is necessary.*

D. FUNDING

The Committee should advocate with the decision-makers in the Senate:

1. For a portion of the funding the budget agreement allocated for the opioid epidemic be earmarked for programs that promote resilience, with priority for those communities hard-hit by the opioid and other drug epidemics;
2. That the Committee, in conjunction with the Appropriations Committee, set aside a portion of that funding for data collection and evaluation studies. While the science on trauma is so powerful, it is also very new so there is a shortage of evaluations and a shortage of data.

END NOTES

[i] Quinn Study
[ii] ACE study
[iii] Quinn
[iv]
[v]
[vi] http://www.mindfulrp.com/Research.html

[vii] Porter, L., Martin. K., Anda R. "Self=Healing communities, a transformational process model for improving intergenerational health". www.rwj.org/content/da,/farm/reports/reports 2016/rwjf430225
[viii] Fletcher, N., "The Efficacy of a Trauma-Informed Methodology for Hopeworks 'N Camden", Rutgers Center for Urban Research and Education,2016 (unpublished)
[ix] Dariotis, J, "A Qualitative Exploration of Implementation Factors in a School-Based Mindfulness and Yoga Program, Psychology in the School, November 2016
[x] Schefft, M,. "Yoga Can Reduce Risky Behavior in Troubled Youth", U of Cincinnati Magazine, December 2017
[xi] www.chcs.org/project/medicaid-early-childhood-innovation-lab/
[xii] Wolf, J.P., et al. "Are community level opioid overdoses associated with child harm? A spatial analysis of California Zip Codes, 20001-20011. *Drug and alcohol Dependence,* 166, 202-208 (2016)
[xiii] www.nursefamilypaartnership.org/proven-results; Olds DI., et.a. "Preventing child abuse and neglect: a randomized trial of nurse home visitation. *Pediatrics* 65-78. (1986)
[xiv] www.nchi.nim.nih.gov/pmc/articles/PMC5549819/; Prinz, R.J., et. al. "Population-based prevention of child maltreatment: The U.S. Triple P System population trial." *Prevention Science, 10, 1-12 (2009)*
[xv] Chaffin, M. et. al. Parent-child Interaction Therapy with physically abusive parents." *Journal of Consulting and Clinical Psychology 72(3), 500-510.*
[xvi] Study at the U. of Tenn Meical Center, presently under review