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On behalf of myself and the Child and Adolescent Health Measurement Initiative (CAHMI)

Before the House Committee on Oversight and Reform hearing: “Identifying, Preventing, and Treating Childhood Trauma: A Pervasive Public Health Issue that Needs Greater Federal Attention”

Chairperson Cummings and Ranking member Jordan, and members of the House Committee on Oversight and Reform, thank you for inviting me today and for your leadership on this important issue. My name is Christina Bethell, PhD, MBA, MPH and I am honored to provide testimony on behalf of myself and the leadership of the Child and Adolescent Health Measurement Initiative, also known as the CAHMI. For the past twenty-three years, the CAHMI, has been dedicated to advancing a vision and framework for measurement, data, research, policy and practices that promote the early and lifelong health of children, youth and families through collaboration with federal and state agencies, families, clinicians and service leaders and other experts, researchers and stakeholders. I serve as a Professor within the Bloomberg School of Public Health at Johns Hopkins University and have the honor of leading the CAHMI as its founding director since 1996.

My work related to preventing and healing the impacts of childhood trauma on population health and society includes the development and dissemination of national, state and local data about the prevalence and impacts of Adverse Childhood Experiences (ACEs) and child and family resilience,

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conducting research on factors to promote resilience and flourishing despite adversity and leadership of a field building collaboration resulting in a national agenda to guide federal, state, local and systems level policy and action to address adverse childhood experiences (ACEs).

I am also a person with lived experience of childhood trauma and healing and who facilitates healing-centered, trauma-informed approaches to learn about and heal developmental trauma of individuals and collective trauma in communities and systems. I was born in the mid-1960's amid cultural uproar and am a grateful beneficiary of public systems and laws, like Medicaid and the Early and Periodic Screening, Diagnosis and Testing (EPSDT) program, safety net hospitals, the Supplemental Nutritional Aid Program (SNAP) and aid to needy families (AFDC/now TANF); as well as the Child Abuse and Prevention and Treatment Act (CAPTA), Section 8 of the Housing and Community Development Act, and federal student loan programs, each of which have been pivotal in my life.

As critical was the warmth and kindness of teachers, school nurses, bus drivers, grocery store clerks, postal service workers, community centers, library and recreational facility staff, sports coaches and neighbors who made sure I knew *“it was not what was wrong with me, but what happened to me”*. Together they helped me deactivate shame just enough so that I could see a way forward as a person of value and goodness and not just a person with sadness, pain, difficulties due to absence of parental guidance and many health problems and illnesses. I was safe to wonder in my tree filled neighborhood and was even taught to “go within” when I was scared or shaking –something science now shows heals effects of trauma on the brain. No one did this for my mother. Or her mother. The intergenerational line of trauma is clear in my life and in our society. Now we know better so we can do better.

The community-based help I received came later in childhood. Early intervention—and prior to birth in my case—was essential and possible. It was what happened when I could not move in the world

freely and seek and take in the good that still takes the biggest toll on my body and health. It is a life's work to heal.

As a child, I also had the chance to live in both low income, inner city housing in Southern California and in rural, low income Paradise, California. Paradise, like New Orleans after hurricane Katrina, stands at a precipice of rebuilding after the devastating natural disaster. The disaster compels programs for healing childhood, intergenerational and collective trauma, building resilience and addressing the toxic stress, trauma and unhealthy adaptations to trauma that were present long before the Camp Fire hit my childhood town last November. I pray they will do so and perhaps become another promising model for the country—they and other communities like them can only do so if they gain the support they need from federal programs and policies such as we are discussing today.

Introduction and primer on childhood trauma

The science of ACEs and resilience require a paradigm shift in how we think of human health, disease and social dysfunction. A cross-cutting policy response is needed to bring our programs, regulations and laws into alignment with the science of human development and well-being. Doing so will catalyze not only reductions in avoidable illness and an array of other personal and societal costs we bear, but it will also foster an era of cultural healing at a time when adult death rates are increasing due to the “diseases of despair” and the US ranks 26 out of 29 developed countries in child well-being.

Here, I will briefly scan the history and state of the science and summarize the epidemiology and impacts of Adverse Childhood Experiences—a measure of risk for childhood trauma and toxic stress. I will speak to the evidence providing hope and encouraging immediate action in the form of a coordinated “through any door” federal policy response.

Primer on defining trauma: Generally speaking, “trauma” is the body’s internal response to a traumatic event, which has direct impacts on the entire body through its effects on nervous system regulation, brain functioning and other body systems-- as well as to a child’s development, sense of safety and identity going forward. Acute traumatic events are short-lived events such as experiences of a natural disaster, a serious injury to themselves, witnessing serious injury or the death of another, is threatened by serious physical injury or death, experiences a violation of personal physical integrity, or learns of a traumatic event impacting a close friend or relative.¹ When a child is not supported to heal the effects of an acute traumatic experience or is exposed to repeated traumatic events over a long period of time, such as ongoing physical, emotional, or sexual abuse or witnessing domestic or community violence, that child can develop long-term physiological, psychological and social consequences. Such sustained exposure to trauma and the resultant neuro-biological responses are often referred to as “complex trauma.”

¹ See, e.g., Michael De Bellis, [The Biological Effects of Childhood Trauma](#), 23 Child & Adolescent Psychiatric Clinics of N. Am. 185, 187 (2014); See Berens, AE, Jansen SKG, Nelson CA 3rd. Biological embedding of childhood adversity. BMC Med. 2017 Jul 20;15(1)135.1

Background on the science and epidemiology of Adverse Childhood Experiences, Impacts and HOPE

In the mid-1950's the Harvard Mastery of Stress study asked college students to characterize the caring they received from their mother and father. In 1997, a 35-year follow up study found that 87% of students reporting lower parental caring had diagnosed disease in midlife compared to 28% who reported higher caring.

“Parental loving itself, may have important regulatory and predictive effects on biologic and psychosocial health and illness.” The Harvard Master of Stress 35-year follow up study (1997; Russek, et al)

In 1998, the Center for Disease Control (CDC) alongside with Kaiser Permanente published “The Adverse Childhood Experiences (ACEs) Study,” showing that ACEs dramatically increase the likelihood of negative health outcomes for adults. (Table 1) The CDC considers 10 childhood experiences when determining an ACE: physical, emotional, and sexual abuse; physical and emotional neglect; and mental illness, incarcerated relative, violence against mother, substance abuse, and divorce. Since 2011-12 the Health Resources and Services Administration led National Survey of Children's Health (NSCH) has collected data on ACEs for children, with some differences from the CDC/Kaiser study. As a health risk measure, ACEs meets accepted criteria for causal association with child development and adult health outcomes, including strength of association, dose-response relationship, lack of temporal ambiguity, consistency of findings, biologic plausibility, specificity of association and coherence of evidence. More research is needed, but the evidence is strong enough to act now.

Epidemiologic studies estimate that nearly two-thirds of adults and half all US children have ACEs, ranging from 37.2% to 55.0% across US states. Adult rates are based on data from the 23 states that collected ACEs data through their Behavioral Risk Factor Surveillance Survey some time during 2011-2014. Rates for children are based on a representative population-based sample of children in the

US and across all states calculated using data from the 2016-2017 NSCH. While higher for some children, (Table 1), rates are high for all populations of children. And, once experienced, ACEs have a similar impact on many health outcomes. For example, approximately 40% of youth age 12-17 with 2 or more ACEs have some type of mental, emotional or behavioral (MEB) problem. This is true across all income groups and race/ethnicity is not significantly associated with this outcome after controlling for ACEs. Likewise, when youth are supported to learn to regulate their response to stress, rates of MEB are dramatically reduced in all income groups. Overall, ACEs have a dose-response effect on increasing the probability of having array of health problems for both adults and children. See Table 2 and 3.

Table 1: Prevalence of ACEs by Race/Ethnicity and Income. Data: 2016 & 2017 Combined NSCH

	All Children	White, NH*	Hispanic	Black, NH*	Asian, NH*	Other, NH*
% of all US children		51.4%	24.7%	13.1%	4.6%	6.2%
% 1+ ACEs	45.0%	39.8%	49.3%	62.3%	24.7%	51.1%
% 2+ ACEs	20.5%	18.1%	19.8%	32.8%	6.4%	27.9%
% among children with 1+ ACEs		45.6%	26.9%	17.9%	2.5%	7.0%
Income < 200% of Federal Poverty Level (43.0% of all US children in this category; 56.6% of children with 1+ ACEs)						
% 1+ ACEs	59.9%	61.5%	55.2%	66.6%	36.9%	69.8%
% 2+ ACEs	30.1%	33.0%	23.2%	37.1%	9.6%	43.2%
Income 200-399% of Federal Poverty Level (27.0% of all US Children in this category; 26.2% of children with 1+ ACEs)						
% 1+ ACEs	43.5%	40.6%	45.2%	60.7%	24.3%	51.1%
% 2+ ACEs	18.5%	16.9%	17.5%	30.8%	6.3%	25.3%
Income ≥ 400% of Federal Poverty Level (30.1% of all US Children in this category; 17.2% of children with 1+ ACEs)						
% 1+ ACEs	25.6%	23.2%	32.2%	46.4%	14.6%	27.5%
% 2+ ACEs	8.8%	8.1%	9.8%	17.6%	3.8%	10.3%

*NH=Non-Hispanic. Source: Bethell, C and Gombojav, N analysis of the 2016-2017 NSCH by the Child and Adolescent Health Measurement Initiative (2019).

Table 2: Odds of key ADULT health problems for adults with 1, 2, 3 or 4+ ACEs compared to adults with no ACEs**

Key adult outcomes	0 ACEs	1 ACE	2 ACEs	3 ACEs	4+ ACEs
Suicide attempts	100%	180%	300%	660%	1220%
Injected drugs	100%	130%	380%	710%	1003%
Consider self an alcoholic	100%	200%	400%	490%	740%
Recent depression	100%	150%	240%	160%	460%
Lung disease	100%	160%	160%	220%	390%

**SOURCE: Based on research from the CDC-Kaiser [ACEs Study](#)

Table 3: National prevalence (state ranges) in selected child outcomes by level of adverse childhood experiences exposure**

Key child outcomes (age in years)	Nation ¹		
	No ACEs (range across states)	1 ACE (range across states)	2+ ACEs (range across states)
Child has a chronic condition requiring above routine amount or type of health care services⁴ (0-17)	13.2% (9.6 – 18.9)	20.1% (12.7 – 30.4)	32.2% (19.8 – 42.1)
Child has an ongoing emotional, developmental, or behavioral problem (0-17)	4.4% (2.1 – 6.5)	8.1% (4.4 – 16.2)	18.6% (7.7 – 33.6)
Child is overweight or obese (10-17)	25.5% (12.9 – 31.8)	34.1% (19.0 – 48.4)	37.2% (25.7 – 49.8)
Child is bullied, picked on, or excluded by other children (6-17)	14.6% (9.8 – 23.0)	23.1% (13.0 – 40.0)	34.2% (23.6 – 50.8)
Child’s mother is in very good/excellent health (0-17)	75.4% (68.1 – 82.8)	55.6% (45.2 – 68.5)	41.1% (27.7 – 56.7)
Child engages in school (6-17)	75.4% (65.0 – 79.7)	64.4% (47.6 – 72.3)	53.1% (39.0 – 63.8)
Resilience and Flourishing⁵ (met all 3 criteria) (6-17)	47.9% (35.9 – 56.1)	37.8% (23.4 – 47.5)	27.6% (16.4 – 37.7)
Child’s family stays hopeful when facing problems (0-17)	60.9% (48.6 – 68.6)	55.7% (40.7 – 64.7)	48.7% (30.3 – 60.4)

**SOURCE: Child and Adolescent Health Measurement Initiative Analysis of the 2016 & 2017 combined National Survey of Children’s Health.

See this [link](#) for fact sheets prepared by the CAHMI for each state using this most recent 2016-2017 NSCH data.

Addressing some key points and common misperceptions and ACEs

While rates are high, they are even higher for the children and adults in our public programs. The vast majority of children, youth and adults in our foster care and criminal justice systems or who are expelled or drop out of school, bully or who are bullied, have a mental, emotional or behavioral problem or who have complex health needs also have ACEs.

ACEs co-occur and operate as a cumulative risk measure: The co-occurrence of different types of ACEs is high, such that is not possible, nor does the science support, examining each “type” of adversity separately when assessing risk—also, adding more types of ACEs may not increase prevalence

due to their co-occurrence. Rather, as a measure ACEs operates as a cumulative risk measure and it is the risk of experiencing the absence of safety and positive nurturance that are common to all ACEs. Adding many other types of ACEs to the measure may not capture more children or adults with ACEs due to the high co-occurrence across such experiences. Likewise, not including key ACEs also may not mean missing people in an overall estimate of prevalence, since they are likely to be identified based on other types of ACEs assessed.

It is important to move toward a non-event specific model for addressing childhood trauma. It is also not the case that a specific type of ACE necessarily has a systematically larger impact than another. There is a great deal of individual differences in impacts of ACEs often explained by the presence or absence of protective factors that can restore a sense of safety, self-agency and healing proximal to the ACE. Such support may be less likely to be forthcoming in cases of chronic daily exposure to ACEs – versus single, acute “events”. Studies do show that the chronic daily stress of emotional neglect or deprivation in having basic needs met may take a larger toll on brain development for children.

We can promote flourishing and protective factors, even amid adversity. While society must address the remedial causes of ACEs and childhood trauma, we can (and must) act now to optimize child and adult flourishing. There is a robust literature on adult flourishing, showing low overall rates of flourishing for US adults. More recent findings show low rates of flourishing for school-age US children as well. In fact, the proactive promotion of positive health factors (like hope, meaning, engagement in life, positive relationships, contribution to others) and health promoting factors (like family resilience, parent-child connection, parental coping, adult social and emotional support, positive self-care behaviors) are fundamental to the success of other remedial causes of ACEs, including to effectively engaging families and individuals in the design and use of community based family supports, healthy parenting and family healing approaches and establishing safe and stable housing and communities.

As shown in a recent Health Affairs article, children with multiple ACEs have nearly 400% greater odds of flourishing when their family nonetheless demonstrates resilience and whose parent invests in connecting with their child around “things that really matter”. We can promote family resilience amid adversity and doing so may be need to preceded reducing or eliminating ACEs. Like in the Harvard Mastery of Stress Study, another “in press” study we recently completed shows that the absence of safe and nurturing positive childhood experiences is equally or more predictive of adult mental and relationship health problems regardless of ACEs, such that adults with ACEs who also had PCEs were less likely to have mental or relational health problems. Findings from both studies and others like them argue for advancing a Health Outcomes of Positive Experiences (HOPE) approach that recognizes that health operates on a dual continuum and we can promote positive health even amid adversity. The CDC now leads the Essentials for Childhood effort that seeks to do just this. This effort –while modest in its funding --proactively promotes state and local policies and strategies to establish safe, stable, nurturing family relationships and environments for children. Given the high rates and accumulated trauma in families, communities and society, prevention first requires healing and promoting existing assets, strengths and the heroic resilience and wisdom those with ACEs can carry and that must be honored to support self, family and community driven healing and prevention.

Summary of common elements of trauma-informed approaches with evidence

In general, the absence of safe and nurturing relationships in childhood--and even in adulthood--manifest in an array of problems with regulating one’s nervous system, emotions and behavior, difficulties developing or maintaining a positive self-identity and challenges to develop or maintain positive and supportive relationships. Like an eddy in a river blocks the natural flow of water, trauma can stall healthy development with impacts across life. In addition to the physical diseases, like

coronary artery disease, hypertension, gastrointestinal illness and the strong association with depression, anxiety and other mental health problems, exposure to early life trauma can be a gateway to much worse and often self-imposed traumas. This includes alcohol and drug addiction, dysfunctional and abusive relationships, anorexia and suicide. They are also associated with criminal behaviors, employment and workplace difficulties and failed relationships and perpetuation of ACEs to one's own children. There is research showing that nearly all individuals with violent criminal records studied had multiple ACEs.

Yet, the drive for healing is strong and is catalyzed through ending the trauma and reducing stress, building self-awareness, self-compassion, resilience and relationship skills building. Proactive efforts for repairing the damage trauma brings to our brains, bodies, self-image, self-care, functioning in life and relationships encompass a "trauma informed approach". A simplified summary I use to characterize the main types of evidence-based modalities for healing and preventing trauma is (1) *Time In Approaches*; (2) *Time With Approaches*; and (3) *Time For Approaches*.

Below is a high-level summary to give the committee a better sense of some of the common elements of trauma informed approaches to preventing and healing trauma in service, organizational, community and personal contexts. Strategies and approaches include:

1. **Professional training and self-care** of the adults who care for and work with children, youth and other adults. It is critical for workers to gain personal insight, engage in healing their own trauma, promote positive health and gain the capacity to build trust and relationship so they can recognize and respond to clients with compassion and concrete supports. This impacts workforces of all federal agencies. We need to build a cross-cutting caring capacity.
2. **Organizational policies** that shift to a trauma-informed and responsive culture also are shown to promote awareness and prevent re-traumatization of its workers or those they serve.

The may include:

- a. Flexible and compassionate approaches to handling late or no-show clients or employees with trauma, knowing they have difficulties and may not trust the services being offered or struggle with self-care and/or self-agency and need supports. This may also include trauma responsive processes for individuals and families to apply for and gain services.
 - b. The elimination of school-expulsion policies and policies and programs to hold criminal offenders accountable while understanding how their trauma impacted their behavior and providing opportunities to heal. Trauma informed policing that shifts the aperture from “what’s wrong with them” to “what happened to them” is fundamentally important in all communities.
 - c. Youth diversion programs that choose healing and repair over prison.
 - d. Health care practices that delay provision of medications for mental, emotional and behavioral (MEB) symptoms in order to first assess and directly address the trauma that is often present, rather than only or first medicating children and individuals.

Most of the symptoms of trauma overlap with symptoms of MEB conditions.
3. **Community based partnerships:** Concerted efforts to support communities to engage in cross-sector collaborations, which may also involve first an extensive reconciliation and truth telling process to build the trust, reduce stigma and engage in coordinated efforts. We know that healing is fostered by revealing and honesty about past traumas—many of which are perpetuated by how our systems are organized. Storytelling itself can heal and reestablish engagement, trust and positive action and innovation. Communities need funding to support partnerships and flexibility to identify community-driven methods for healing and to support the close collaboration with service systems to change policies, design programs and evaluate

and improve the very systems that at one point may have inadvertently created and perpetuated trauma. Communities also need easy access to local data and support to understand and use this data effectively. Even accessing basic census data at the local level is fraught with barriers or is simply not available. A one-stop shopping data access point is needed. IRS regulations related to hospital community benefits standards could help focus attention on childhood trauma and requirements for healthy development and healing in all our communities. By doing so, hospitals may begin to address these topics in their required community needs assessments and use the information to promote the fostering of the core competencies for preventing and healing from childhood trauma in communities across the US.

4. **Care coordination and shared accountability:** Family based services are needed that recognize that family healing is required (e.g. it may be the father that needs the help to end the trauma experienced by a young person). Policy changes are needed to enable such family-based approaches in Medicaid and many other child and youth serving program, including foster care programs. In addition, coordination across systems is needed since families and children are nearly always served by multiple systems-- like foster care, schools, and health care. In this example, each of these systems need to collaborate to help youth in out-of-home placement participate in school by having their health issues supported properly (often involving the removal of medication) and to establish stability in their out-of-home placements. Never again should the treatment specialist I met recently be unable to speak about or address the mother's trauma and child's dysregulation simply because that is "not within his purview" and have not way to contact the three other home care workers working with the same family. Without "through any door" approaches to addressing the whole child

and whole family, we will fail to provide the healing and support we aim for. Such coordination may involve shared “one stop shopping” child, youth and family assessments, engagement of clients in reflecting upon and proactively identifying needs and priorities to create care plans that can be shared across different sectors and service professionals.

Methods for shared accountability and evaluation and shared benefits from collaboration are important to incentivize and enable innovative collaborations across sectors.

5. **Relationship-centered screening and assessments** that engage families and people in identifying their priorities and goals and that recognize their resilience, strengths and assets are essential to overcome the stigma and lack of engagement in supports offered. Such stigma and lack of engagement lead to underuse or non-use of supports offered and can lead to further shaming of those we seek to support when the real issue is lack of trust and supports not aligned with the real needs and priorities of individuals, families and communities. A California statewide effort resulted in specific recommendations to address these and other issues critical to ensuring community level engagement to address ACEs.
6. **Neuro-repair methods**; Trauma can lead to the pruning of brain synapses and cause damage that shows up as poor ability to focus, learn and regulate stress, emotions and/or behavior (like alcohol or drug addiction, which some NIH researchers now call “repetitive compulsive self-soothing”). In addition, negative beliefs about one’s self, life, others are often habitually reinforced through inner (conscious or unconscious) “self-talk” and can become embedded and hold nervous system dysregulation in place. There is evidence supporting approaches to address nervous systems dysregulation and to build capacity to regulate stress, emotions and behavior and formulate a positive and realistic view of self, others and life. Researchers over the past 40 years have identified many promising approaches. Some of these are summarized

in Bessel Von Der Kolk's book *The Body Keeps the Score*. Included first and foremost are methods to promote body awareness and regulation of breathing—to be able to expand the “window of tolerance” that promotes a healthy response to stress. Also important is movement with body awareness and regulation of breathing, like yoga. Also critical to promoting the self-awareness and self-regulation key to healing and health are practices that involve sitting silently with intentional awareness on one's breathing, body sensations and current thoughts and feelings. These mindfulness practices enjoy strong scientific evidence to assist in neuronal rewiring toward regulation and building capacity for other self-care practices, like exercise, healthy eating and engagement in learning. They may also contribute to reduction in body and brain inflammation and symptoms of autoimmune conditions and mental illnesses. Fostering parental coping using mindfulness-based methods can foster stronger parent-child connection and reduce impacts of ACEs on children. Much more is known about healing approaches and can be shared upon request.

7. **Relational Healing:** Group, peer-to-peer, family-to-family and similar programs that bring people together with the intention to support, learn and heal also show evidence of success and reflect the reality that “relational wounding requires relational healing”. Ultimately, restoring positive relationships and engagement in life are the hallmarks of healing.
8. **Trauma informed primary care and complex trauma treatment:** Many individuals who are “high flyers” in our health care and other systems suffer from unrecognized and untreated complex trauma. Take Mrs. Martin who symptoms of trauma were primarily physical and emotional and not mental or behavioral in nature. Her symptoms were exclusively physical – back pain, fibromyalgia, chronic fatigue syndrome, poor sleep, migraine headaches, gastrointestinal problems and skin problems. Taken together, eventually the accumulation of

these problems –each shown in research to be associated with childhood trauma-- landed her, regrettably and filled with shame, on SSDI and an inadvertent addiction to opioids--- long before the nation began to focus on this issue. After her successful in-patient treatment for complex trauma and pain (using many of the modalities outlined above), she was told to return to her primary care provider and explain that her symptoms were related to her childhood trauma and ask if he knew about trauma-informed care. If not, she was given specific resources to offer him so he could ask questions and help him learn. This provider had not only never heard of ACEs or trauma informed care, but was offended Mrs. Martin was “telling him how to practice medicine”. He denied renewal of her non-opioid medications recommended by her top-notch complex trauma and pain treatment program, shamed and accused her of using her childhood trauma as an excuse and dismissed her from his practice. She had to move away from her rural home town to find a doctor who would work with her and was not able to return to her old job. The re-traumatization is something she is still recovering from as she seeks to find her balance, restore hope and sense of purpose and contribution in life and hopes to work again one day and make use of her hard won Master’s Degree in Technical Communications and early child care, substance abuse treatment and trauma informed care trainings she has completed. The lack of trauma informed care, poor access to complex trauma services and lack of coordinate have real and devastating impacts on individuals like Mrs. Martin every single day.

9. **Biofeedback and neuro feedback to reframe patterned thoughts, emotions and behaviors:** Evidence exists for methods to provide biologic and neurologic feedback to individuals as they become aware of their nervous system dysregulation as well as the thoughts, feelings and images that can hold this dysregulation in place within them.

Biofeedback and neuro-feedback methods may help retrain patterned and unproductive mental, emotional and behavioral patterns, help people develop a more positive frame and result in repairing neural pathways pruned by the embodied impact of social and emotional trauma as a child. These approaches may require a trained practitioner and in some cases may be provided through online programs and self-care applications and tools.

10. **Other related approaches:** Numerous other approaches exist, each of which center around building awareness and retraining of the body's stress response and one's mental, emotional and behavioral adaptations to trauma are widespread. Evidence is also emerging to support nutritional approaches that support the brain and nervous system and may reduce inflammation and body symptoms related to sleep, digestion, headaches and the like. In addition, exercise and engagement in expressive arts, volunteer service strategies and many other programs exist and show healing effects.

The common denominator across all modalities is building self-awareness and self-care and developing some form of mindfulness and relationship-centered practices. We need support for research to learn what is working for whom, including use of "citizen science" methods support by a common assessment and evaluation approach to rapidly advance learning and translation of the science into practice.

Assessing outcomes of interventions is urgent, including outcomes related to positive health, school and/or work engagement and reductions in medical and other types of health care and social costs.

Our greatest public health opportunity requires a paradigm shift

Efforts to address the high prevalence and negative effects of childhood trauma on child and population health are needed and require a paradigm-shifting evolution in individual, organizational, and collective mindsets, policies, and practices. Shifts will emphasize the centrality of relationships and regulation of

emotion and stress to brain development as well as overall health. They will elevate relationship-centered methods to engage individuals, families, and communities in self-care related to ACEs, stress, trauma, and building the resilience and nurturing relationships science has revealed to be at the root of well-being. Progress to date in many communities, programs and sectors has resulted in a palpable hope for prevention, mitigation, and healing of individual, intergenerational, and community trauma associated with ACEs. Action fostered through this committee can meet that hope with reality.

I lived in Oregon during a time when talking about ACEs and relationship centered and mindfulness-based healing approaches was viewed as “disruptive” and inappropriate. Today, Oregon has one of the most robust and successful statewide efforts to address trauma—*Trauma Informed Oregon*. Yet, even with the paradigm shift seen in Oregon, federal policy changes and greater support is needed to foster a “through any door” trauma-informed response –even at the least to ensure federal programs are equally engaged and committed and support advancing the research and methods needed to continue to make progress.

Unlike in Oregon, in many states, knowledge about childhood trauma and ways to promote population health by addressing trauma is new. Just last month, in another state, out of a room of 600 early care, home visiting, special health care needs specialists and health system and education professionals, fewer than 30 raised their hand to my questions on whether they had ever heard of the ACEs study. The “ah ha’s” that occurred that day upon learning led to immediate changes in mindsets and perspective and, I hope, improvements. They also led to more questions requiring more education and learning. In depth programs lasting more than a day are needed for many leaders and professionals to learn and apply the healing-centered, trauma informed policies and practices we need.

Public education driven from the highest levels of leadership is important. Such education needs to recognized that “this is all of us” and to destigmatize or isolate the problem to certain populations. In

Wisconsin, public education materials for one of the Governor's trauma-informed care programs leads with "Every Interaction Creates a Reaction". This simple statement reflects the interpersonal neurobiology that governs all of our relationships (set forth in polyvagal and attachment theories) and speaks to the enduring need we all have to be able to detect safety in our environment and encounters. Reflecting well the science of stress regulation, this leading statement lets us know that seemingly simple, moment by moment interactions foster or disrupt a person's sense of safety and bodily stress response. In this way, we all matter –every moment. We can contribute to the well-being of each other (or not) simply by our conscious awareness and intention to care and allow this to show in how we regard one another and interact. This caring capacity is something that needs to be learned –it is not a moral attribute. Well-being can be learned.

Our greatest public health opportunity requires a policy response

We are fortunate today that many federal agencies, states, health care, education, social services, child welfare, justice, legal, housing, and business sectors already recognize the toll we have paid by not fostering healthy child development and addressing ACEs and the legacy of trauma in adults. Since a paradigm shift is called for, a cross-cutting policy response impacting all federal agencies is needed.

The jurisdiction of this committee is broad and the issue of childhood trauma and population health is relevant to your authority to investigate needs and opportunities to optimize and recommend collaboration, improvements or enhancements to federal programs like:

- Medicaid, EPSDT and the Integrated Care for Kids demonstration program,
- the Title V Block Grant,
- the Maternal, Infant and Early Child Home Visiting (MIECHV) program,
- the Child Abuse Prevention and Treatment Act (CAPTA),

- Medicare and SSDI programs, Indian Health Services and Veterans Administration services
- NIH, CDC and other research and data collection programs
- SAHMSA and ACF efforts in this area
- Housing, TANF, WIC and SNAP supports
- Education and early care/Head Start programs
- Health care accreditation standards, training requirements and program performance standards and evaluation requirements

In addition, the committee’s focus on national security, government operations, civil rights and civil liberties and economic and consumer policy are also relevant—even if the focus is to simply assess and ensure all federal workers learn about and are given opportunities to address trauma and promote well-being and that management and other guidelines themselves become trauma informed. See Attachment B for an overview of ways to measure the trauma informed status of organizations. Without such a focus many governmental workplaces may be what *Trauma Transformed* (a California effort) calls “trauma organized” versus “trauma informed” and over time to become “healing organized”.

Perhaps most obviously, a policy response addressing health care coverage, payment, incentives, performance measurement and coordination of care across the many systems individuals and families facing trauma interact with is critical. Below is a brief and lay-person’s summary of the type of policy approaches and opportunities to be considered:

1. Because the problem is widespread, we need a **population-wide approach**. This is all of us.
2. Because the wounding and the resolution is relational, we need to **build a caring capacity** and take the epidemic and legacy of childhood trauma and deterioration of positive health in the population as seriously as any other public health threat.

3. Because attention to this issue is more recent, we need an **era of experimentation** and the design and learning about emergent, community, family and person driven approaches using citizen science and community based research approaches.
4. Because healthy parenting is at the root of preventing and mitigating negative impacts of trauma and promoting positive health we need to **strengthen families**. We need to help provide economic supports to families in need, change social norms to support healthy parenting.
5. Because **children develop in the context of a community** and need help outside of their homes, we need to ensure quality early care and education, proactively promote and destigmatize engagement in learning about healthy parenting and healing trauma (for parents who carry their own trauma) and foster, support and evaluated strong school-based approaches such as those emerging in the Gladstone School District in Oregon and the Peace In Schools effort in Portland, Oregon and Tennessee's Building Strong Brains initiative.
6. Because health promotion and early intervention is the key, we must leverage well-child care visits to create a guideline-based, personalized and systems-integrated (**GPS**) **approach to EPSDT**—as well as pay for these services in ways that support proper whole child, whole family risk and well-being assessments and follow up responses for early intervention and treatment as needed. A national effort led by the Children's Hospital Association and AcademyHealth offers specific recommendations for promoting such a GPS model for EPSDT as well are strategies to advance payment models that promote well-being. Leveraging pediatric primary well-child care visits is an opportunity to promote healthy parenting, parent-child connection, parental coping and family resilience and is under-optimized today. A new CMS Integrated Care for Kids initiative could model innovations.

7. Because the absence of the negative, is not a positive, we need to assess and **promote positive health skills** –just removing ACEs will not necessarily promote the positive experiences children and we need to thrive.
8. Because old models of training and services are not trauma informed or healing and relationship centered, we need to **invest in capacity building** just like we invested in building new roadways –the social infrastructure needs to be built and maintained.
9. Because it is *not what is wrong with us, but what happened*, and *not what happened, but how we were impacted* and *not how we were impacted, but what can we do to heal*, we need to **make available to all people ways to learn about and get help** to employ the many self, family and community led healing methods available. Services must be safe and trauma-informed.
10. Because, as the American Academy of Pediatrics has stated, “No time in detention is healthy or safe for children.” we must find ways to **manage the immigration debate in ways that do not harm children.**
11. Because we know that criminal behavior has roots in trauma, we need to find ways to address the trauma the youth in our prison system have experienced and advance a national movement toward **youth diversion** from prison. Likewise, adults in prison can heal from the trauma the vast majority have experienced.
12. Because existing health care, social service, education and related programs are not yet trauma informed and efforts like the CDC’s *Essentials For Childhood*, the Child Abuse Prevention and Treatment Act (CAPTA) programs, EPSDT and others are not well funded or designed to facilitate attention to preventing and healing childhood trauma, it is a **time for greater investments** to build the foundation as we make shifts toward healing-centered

and trauma informed policies and programs.

In 2017, a national agenda was set forth to address ACEs and childhood trauma and promote child and family well-being emerged through a four year process involving multiple sectors and over 500 individuals across multiple sectors, including health care and health care systems, family and community leaders, child welfare, social services, education, state government, federal agencies and city and county public health. The high level priorities that emerged to frame a policy response included:

- (1) Translating the science of ACEs, resilience and nurturance;
- (2) Cultivating the conditions for collaboration across sectors;
- (3) Fueling initiatives to support innovation and real-time learning, and
- (4) Rewarding outcomes that support stable and nurturing relationships centered around individual, family and community self-care, prevention and healing.

A visual depiction of these priorities is provided in Attachment A.

Specific recommendations to leverage existing policies, programs and research platforms were also included in this agenda and are listed below. Further is included in Attachment A and the full publication. An adapted version of the national agenda for state action related to prevention of mental health and substance abuse problems can be found at www.prop64road.org.

A. Priority opportunities to leverage existing policy driven systems, structures and innovation platforms

1. Prioritize EPSDT and prevention
2. Focus hospital community benefits strategies
3. Establish enabling organization, payment, and performance measurement models
4. Advance and test Medicaid policy implementation
5. Track and evaluate legislation to assess impact and translation

B. Priority opportunities to leverage existing and evolving practice transformation efforts

1. Leverage medical home, behavioral health integration and social determinants of health “movement”
2. Enable, activate, and support child, youth, and family engagement
3. Build effective peer/family to peer/family support capacity
4. Empower community-based services and resource brokers
5. Leverage existing commitments and focus areas in child and family health

C. Leverage existing research and data platforms, resources, and opportunities

1. Optimize existing federal surveys and data
2. Optimize state surveys
3. Liberate available data
4. Build crowdsourcing, citizen science, and N of 1 methods
5. Integrate common elements research modules for longitudinal studies
6. Link to collaborative learning and research networks

Specific comments on filling key data and measurement gaps

Population based, clinical, programmatic and research data are fundamental to positive change, to ensure continuous learning and ensuring our investments are leading to the progress we need. For example, if

the years of research and work did not take place to enable ACEs, child flourishing and family resilience to be included in the NSCH, we would not know about the important links between these factors and child health outcomes, like chronic illness and school readiness and engagement. States would not have data to inform their decisions and the flurry of attention to this issue may have been staffed. We still would not know.

Types of gaps in measurement and available data include:

1. conceptual/topical gaps (e.g. ACEs, resilience, protective factors, symptoms of trauma and positive health and engagement),
2. gaps in data available across relevant units of analysis (national, state, local, program level),
3. gaps for key populations (youth, elderly, all adults, minority populations),
4. gaps in access to and support for the effective use of data for research, policy or practice
5. gaps in platforms allowing routine and personalized data collection and sharing at local and service settings.

It is recommended that current measurement and data gaps be filled and that existing resources are fully leveraged and optimized, including federally sponsored surveys and data and existing federal research and evaluation programs. IT based platforms that support local and service level data collection and reporting should also be advanced. Greater support to ensure access to use of available national and state level data is also needed. Finally, specific efforts to use common metrics and assessment methods and programs to integrate data findings and outcomes across these efforts are recommended to support learning and continuous improvement. Below is more detail regarding these recommendations.

Filling gaps in measures across populations, geographic and other units of analysis and on key concepts/topics

As noted, while ACEs are measured on the National Survey of Children's Health, similar national and across state data are not available for adults. Some states have periodically collected data on ACEs (and some on resilience factors and positive childhood experiences) through the CDC-led Behavioral Risk Factor Surveillance Survey. However, this data is not routine nor nationally representative. Youth reported data is also not available, nor are samples sizes sufficient on the NSCH to enable robust analysis for certain populations (e.g. native American) or for states on a yearly basis using the NSCH. No data is available for the US territories.

The recommendations set forth here reflect a national Maternal and Child Health Measurement Research Network (MCH-MRN) agenda, for which gaps in measurement noted above have been assessed and documented. (www.mch-measurement.org). An analysis conducted through the MCH MRN resulted in a maternal and child health measure compendium that categorizes over 1,000 maternal and child health measures currently used in 11 national maternal and child health programs by topical areas. Through this analysis, important gaps in measurement were found for positive health, social-emotional development and functioning, family health and relationship factors, and early and middle childhood all of which impact child and adult trauma. To summarize, the four topical areas that should be included in federal data systems and funded research on human health are:

1. **Adverse Childhood Experiences (ACEs) as a measure of risk.** As possible, additional biologic, psychosocial and behavioral markers of the toxic stress and trauma associated with ACEs should also be included, but do not replace assessment of ACEs as a specific factor leading to the toxic stress and trauma.

2. **Positive Childhood Experiences (PCEs) and protective factors**, with an emphasis on relational safety and nurturance within the family, school and community environment.
3. **Indicators of positive health and flourishing.** This includes assessing children’s developmental capacities to pursue interests and goals, develop a sense of meaning and engagement, pursue and maintain positive relationships and develop a sense of competence, contribution and overall enjoyment and satisfaction with life. Measuring child flourishing is important on its own. Existing metrics on child flourishing show low rates for US children. Also, without this information we will not know what promotes flourishing, which is often not present even in the absence of any diagnosed illness, and visa-versa. Measurement of flourishing for adults is also important since rates of flourishing are low for adults in the US.
4. **Engagement of patients, families and children are essential factors** to the effective design, receptivity to and impact of interventions in schools, health care, workplaces, social services and the like. Engagement is also required to effectively identify patient, family and child risks, strengths and health. As such, including measures of engagement as well as using measurement methods that engage patients, families and children (examples can be provided) is important. This is even more essential since neurobiological sciences show that effective interventions for healing biologic impacts of toxic stress innately require the mental and emotional engagement of individuals and families. As some say, “we cannot rewire another person’s brain or heart for them”. Yet, in healing developmental trauma, such rewiring is precisely what is required. Engagement is required. The RYSE youth center in Richmond, CA offers a successful model for youth engaging youth in community-based action and healing with a motto that “the future of our city lies in the hands of our youth.”

There are additional gaps in measures methods to help organizations and individual practitioners to assess trauma informed care and outcomes of such care. See Attachment B for an overview of Trauma Informed Organizations and Care (TIOC) measures summarized through the MCH MRN Technical Working Group on positive and relational health. As can be seen, many gaps exist, especially as it relates to measuring outcomes of TIC.

Finally, recommended are advances in measurement methods and data related to assessing costs associated with ACEs, trauma and potential savings or benefits derived through trauma-responsive and healing-centered approaches to address ACEs and promote positive health at the individual, family and community levels.

Filling gaps in data access, use and local area data collection platforms

In a recently published Health Affairs article, the National Committee on Vital and Health Statistics (NCVHS) introduced the “Well-Being in the Nation (WIN) Measurement Framework: Measures for Improving Health, Well-Being and Equity Across Sectors.” The WIN framework aims to provide simple, timely, actionable measures that can be used across sectors at all levels, including the granular (e.g. sub-county). The metrics included in the framework are responsive to the needs of local communities and organizations, and while measures of child and adolescents ACEs from the NSCH are included, further metrics for actionable data surrounding trauma and well-being are required and being considered for inclusion in the expanded set of measures. In particular, available data around child, adolescent and adult trauma and well-being are needed at the local level. While the NSCH provides national and state data on risks for trauma (e.g. ACEs), local area estimates are not yet readily accessible for research, policy, and practice.

In order to leverage possibilities to identify, prevent and mitigate the widespread impact of childhood trauma on the population we need to further expedite and expanding the use of existing ACEs, positive health, resilience, and related data for research, policy, and practice and removing barriers to using available data and facilitate easy and “lay person” access to data findings to support national, state, and local efforts in a real-time context. While resources like the HRSA supported Data Resource Center for Child and Adolescent Health (www.childhealthdata.org) are available for the NSCH, this resource is limited to provision of online data findings and does not support effective use of the NSCH to support community partnerships and programs and policy decision making. In addition, similar resources do not exist for other available federal datasets. As such, support for utilization of available data is recommended and will include hands on technical assistance, training, and education to increase valid use of data and support action from the use of data.

In addition to the liberation of available data and promotion of actionable data across sectors, trauma and well-being measures and data should be aligned across systems and programs and driven by individuals and families directly. Alignment and placing the power of providing and protecting personal data into the hands of individuals and families would reduce both the burden of measurement and redundant assessments done by multiple programs and engage those we seek to support. For example, a parent of a child located within multiple services (i.e. welfare, mental health, etc.) should be able to share information about ACEs, trauma, resilience and protective factors one time and choose who to share this information with, rather than multiple times and without ownership of or feedback on the data they provide. Methods to integrate such person-centered data into EHR systems should be supported to allow such engagement-based shared data. More information on approaches for doing so are available.

Closing Thoughts: Committing to our greatest public health opportunity

I believe that building awareness about and addressing childhood trauma by proactively promoting healing and safe, stable and nurturing relationships and environments is our greatest public health opportunity and need. In this work, *we are the medicine* and “through any door” health care, education, social services, businesses and community wide public health methods to build awareness, eliminate stigma and shame and create a trauma informed workforce and society can and should begin now. We can act quickly to remove systems barriers to cross-sector collaboration, to build capacity among public service, human service, education and other professionals and provide the data and research needed as the transformation we are already in continues. Supporting community-based efforts through policy changes that enable collaboration across sectors, that support research to supply missing evidence on interventions and measurement and evaluation methods and data access is critical. Even for communities already established in their commitment-- such as the hundreds of communities a part of the ACEs Connection platform, those involved through the Change In Mind Institute and Butte Thrives—which seeks to advance a trauma-informed approach to healing in Paradise, California—require federal support in these ways. National learning collaborative to further identify successful models and continuously refine policy requirements and impact could catalyze progress.

Despite the many communities already engaged, most are not. It is critical to build public awareness to motivate actions. All people can benefit from understanding that our early life experiences impact who we are now, that learning about our experiences is key to healing their negative impacts and that our daily interactions and how we treat one another have tremendous power to foster stress and re-traumatize or to promote healing and the capacity for creativity, learning, engagement, collaboration, focus and persistence to create a strong and healthy life and society. Reconciling our current structures, systems, beliefs and assumptions to align with the evidence and truth about the important role of stress,

emotions and relationships to health and society is essential. No sector or area of government is immune to needing to pay attention to this important topic.

To conclude, the science of human development, childhood trauma, resilience and flourishing are leading to a new science of thriving where lived experiences-both negative and positive- are recognized as a key driver of healthy brain and socioemotional development and well-being across life. In this new science of thriving we have new tools for preventing and mitigating the impact of the trauma and toxic stress that can arise from ACEs. We need to use them, evolve them and conduct rapid cycle research to drive innovation and implementation.

We live in a time when our science, lived experience and now our policies will meet to catalyze an epidemic of well-being that will place the US in the top rather than the bottom few of developed nations in measures of well-being and life satisfaction. I am grateful to be a part of your leadership toward creating a well-being nation. Again, it is an honor to provide testimony and I sincerely hope the information provided meets the needs of the committee in its important deliberations regarding the prevention and healing of childhood trauma and its effects on the health and well-being of the nation. I appreciate the opportunity to discuss this very important national issue and would be happy to answer your questions

Improbable People

Christina Bethell, 2011

Improbable people
Always lay low
They take short sips
And never throw fits
There are things
That only they know

Like, love is real
Yet hard to feel
When the screen was so blank
And only God to thank
For that night light hung on the soul

Research would say
They shouldn't be this way
Love sprung out
Their improbable out-spout
Until eventually, even they run dry

Improbably then
The real journey begins
Held down with a howl
An in-spout installed
Pain rising up to be skimmed

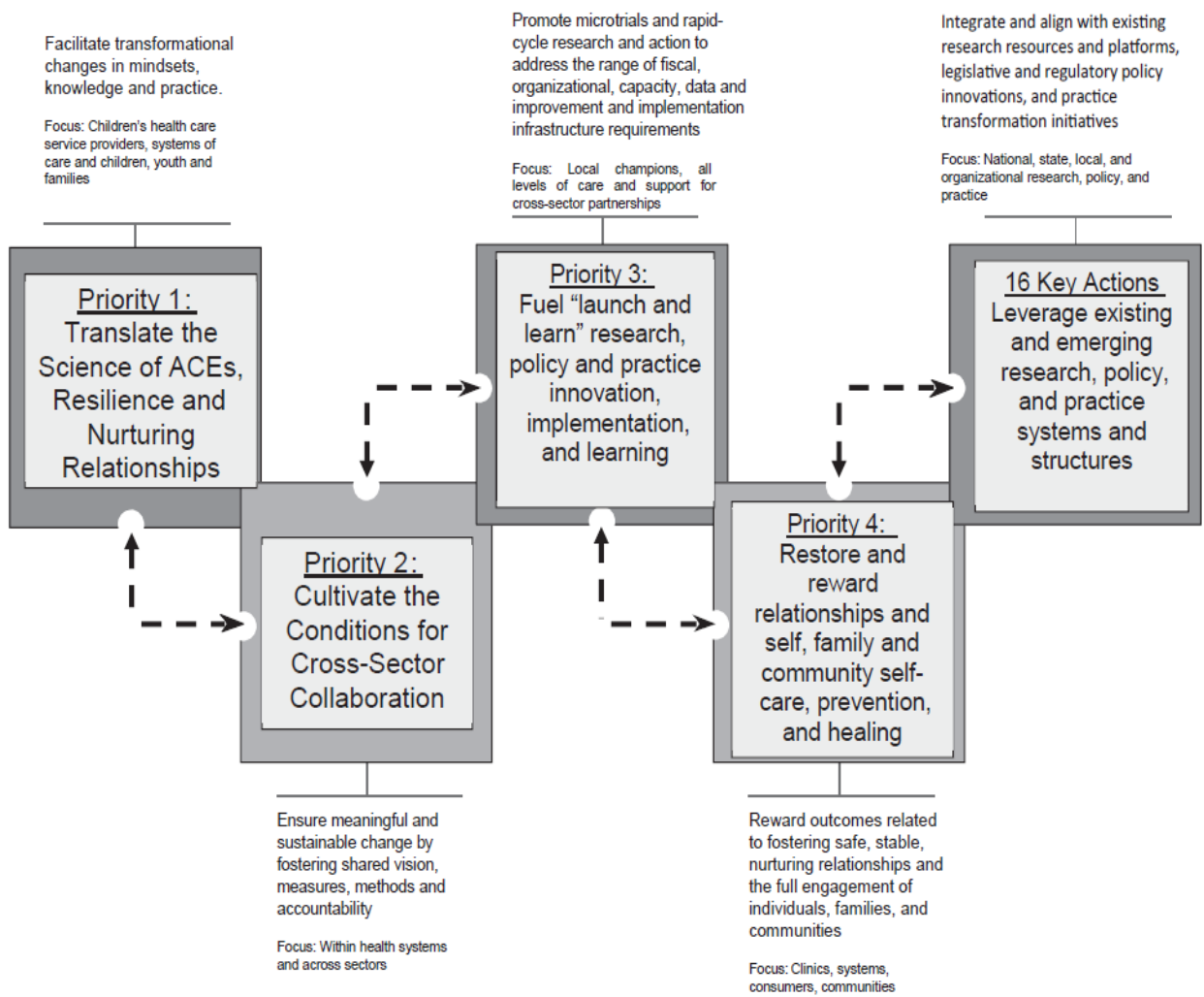
So they start having fits
And taking long sips
And people smile wide
God beams with pride

Held strong in the love
That they grew
From that place
That already knew
These, the improbable few

May we work together to make the improbable few the improbable many!

Attachment A: Excerpts from the Prioritizing Possibilities national agenda to address ACEs and promote child and family well-being. See [https://www.academicpedsjnl.net/article/S1876-2859\(17\)30354-6/pdf](https://www.academicpedsjnl.net/article/S1876-2859(17)30354-6/pdf).

A.1: Visual depiction of priorities for a policy response



A.2. Specific recommendations to leverage existing policies, programs and research platforms.

A. Priority opportunities to leverage existing policy driven systems, structures and innovation platforms

1. **Prioritize EPSDT and prevention:** advance approaches to integrate ACEs, healthy parenting, and positive health development topics into federal and state EPSDT standards, policies, and initiatives in alignment with Bright Futures guidelines. Integrate care across settings.

2. **Focus hospital community benefits strategies:** integrate ACEs and positive health topics into hospital community benefits standards and community needs assessments partnership efforts. Make available local area data on ACEs, resilience, protective factors, and other social determinants. Enable easy access to methods and metrics to monitor effects on child and family health, and utilization and costs of care at the community level.

3. **Establish enabling organization, payment, and performance measurement models:** advance trauma-informed and positive health-oriented payment reform, accountability measurement, and integrated systems efforts in existing and emerging practice innovation models. Design, test, and evaluate models and promote shared measurement related to ACEs and positive health promotion across range of child health programs

4. **Advance and test Medicaid policy implementation:** develop and demonstrate models for addressing ACEs, promoting resilience, and healthy parenting in the context

of addressing other social determinants of health in Medicaid. Ensure common approaches for evaluation and metrics are integrated throughout innovation efforts to show effect, and scale methods as they evolve. Foster innovation in: 1) eligibility, whole-child risk assessment and enrollment, 2) benefits, coverage, and coding, 3) contracting, costs, and performance measurement, 4) capacity, continuing education requirements, and credentialing, and 5) communication and coordination.

5. Track and evaluate legislation to assess impact and translation: formulate recommendations for, and track and evaluate effects of specific federal, state, and local legislation, regulations, and related actions to address ACEs. Ensure ACEs and childhood trauma is considered in health policies.

B. Priority opportunities to leverage existing and evolving practice transformation efforts

1. Leverage medical/health home and social determinants of health “movement”: leverage existing primary care medical home demonstrations and efforts to address social determinants of health in pediatric practices, hospitals, and other settings. Integrate ACEs into other screening, assessment, and education efforts using a relationship-centered approach. Test methods addressing Medicaid innovations at the practice implementation level, ensuring evaluation for cost benefits and cost-effectiveness.

2. Enable, activate, and support child, youth, and family engagement: evaluate and advance efforts to engage children, youth, and families in driving measurement and improvement efforts. Optimize face to face time in health care encounters to enable

relationship-centered education and support through the use of pre-visit education and engagement tools and strategies.

3. Build effective peer/family to peer/family support capacity: design and evaluate use of nontraditional “providers” like peer to peer, family to family, and other community health workers.

4. Empower community-based services and resource brokers: create and evaluate effect of “through any door” models for educating and engaging parents, youth, and families and leveraging existing and emergent community-based services and resources related to trauma, healing, and resilience. Innovate around effective methods to educate and engage families as partners.

5. Leverage existing commitments and focus areas in child and family health: integrate trauma and resilience-informed knowledge, policies, and practices into existing initiatives, including early childhood systems, childhood obesity, school health, and social and emotional learning. Focus on spread of best practices for parenting and trauma-informed education, coaching, and trauma healing and resilience building interventions.

C. Leverage existing research and data platforms, resources, and opportunities

1. Optimize existing federal surveys and data: coordinate and optimize national, state, and local research, policy, and practice innovation efforts using relevant data from the federal surveys that can inform, monitor, and build knowledge on ACEs prevention and positive health development. Establish targeted follow-back and longitudinal studies to understand variations

and effect of health care and related policies. Include/maintain inclusion of ACEs and resilience variables in the NSCH and into NHIS and MEPS to promote medical expenditures effects studies.

2. **Optimize state surveys:** facilitate efforts to enhance availability and access to ACEs, resilience, and positive health-related data on children, youth, and families in state-led surveys like the Behavioral Risk Factor Surveillance Survey, the Youth Risk Behavior Surveillance Survey, and the Pregnancy Risk Assessment Monitoring System.

3. **Liberate available data:** expedite and expand the use of existing ACEs, resilience, and related data for research, policy, and practice to remove barriers to using available data and facilitate easy and “lay person” access to data findings to support national, state, and local efforts in a real time context. Ensure technical assistance, training, and education is provided to ensure valid use of data and curate “data in action” efforts to engender action.

4. **Build crowdsourcing, citizen science, and N of 1 methods:** take advantage of newer NIH policies to allow data collected through crowdsourcing and citizen science methods that engage individuals and communities in self-led learning and healing around ACEs, resilience, and flourishing. Formulate and establish methods to engage individuals, families, and communities in real time and self-led learning and healing related to the prevention and mitigation of effects of ACEs. Explore launching direct to public e-summits to fast-track public education and engagement about ACEs and testing of self-care practices to assess feasibility, effectiveness, and success factors. Focus on the spread of evidence-based and promising parenting and trauma-informed education, coaching, and trauma healing and resilience-building interventions appropriate for interactive, self-guided learning platforms, and integration into existing

community-based self-help programs addressing substance abuse, mental health, parenting education, weight management, and physical fitness.

5. Integrate common elements research modules for longitudinal studies: construct common elements research and common metrics evaluation modules for ready use in existing or emerging longitudinal studies related to enable a focus on prevention and mitigation of the effects of ACEs and promotion of safe, stable, nurturing relationships, positive health, and well-being. Formulate research questions and measurement and analytic methods to append to/integrate into existing longitudinal and birth cohort studies to address key questions about prevention, risk, and mitigation of effects associated with ACEs as well as to test alternative measurement, prevention, and healing methods. Embed common methods, metrics, and coordinate analysis across deployments of research modules to facilitate learning and build knowledge.

6. Link to collaborative learning and research networks: advance ACEs, resilience, and positive health-related research aims and methods into existing and emerging learning and research networks sponsored by public and private sector agencies, such as the numerous Collaborative Innovation and Improvement Networks and the child health-focused National Improvement Partnership Network.

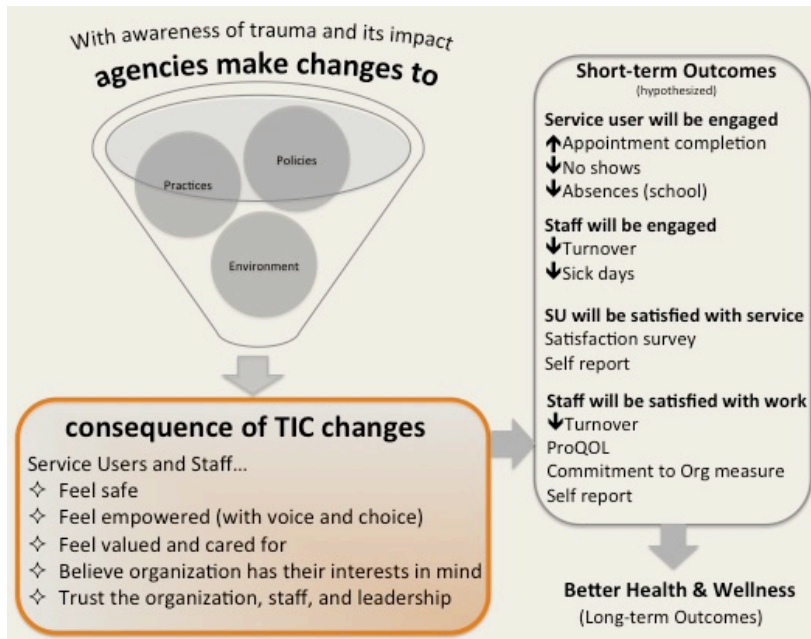
Trauma Informed Care (TIC) Technical Working Group

What is TIC and Why is it Needed?

Over the past two decades, the high prevalence of psychological trauma in the population has become well understood. Trauma has been linked to numerous adverse physical and behavioral health conditions, many of them chronic, contributing to poor quality of life and shorter life span.

Service providers can find it difficult to know how to respond effectively to trauma survivor's needs and encourage engagement in preventive care and needed services. Consequently, professionals across many fields are turning to trauma informed care (TIC) for guidance.

TIC is an approach to service delivery that expects organizational policy, practice, and environment reflect an understanding of the impact of adversity for service recipients and staff. The goal of TIC is to create services and settings that are safe, transparent, empowering, and person-centered. Creating a trauma-informed culture requires understanding the experience of service recipients and staff and making organizational changes in support of the TIC values.



Why is a TIC Measure Needed?

There isn't a fidelity measure for TIC or a manual to guide implementation. TIC must be adapted for each setting and situation—which makes standardized measurement challenging. Unfortunately, most instruments measuring TIC focus on the *what* and *how* of implementation. Instead, what the field needs is a criterion measure, or north star. In other words, what is the consequence of being trauma informed? How will we know we've arrived?

What are the goals of the TIC TWG?

1. Create an operational definition of TIC that is relevant for both service recipients and staff and can be used to guide measurement,
2. Validate the TIC values that are most meaningful to service recipients and staff,
3. Develop and test a set of consequence-based questions that reflect the experience of TIC for service recipients and staff.

What current measures exist?

In the field of trauma and TIC, a number of instruments have been created to address TIC either as part of implementation toolkits or as stand-alone surveys. These instruments vary in focus, quality, and availability. Many of these instruments are somewhat or entirely focused on assessing the *what* and *how* of TIC implementation, e.g. Are participants and staff expected to act in a non-abusive manner? Only a few have been psychometrically validated (e.g. The ARTIC, TICS, and TICOMETER). Furthermore, several of them are proprietary and are not available through open source (e.g. the ARTIC, the TICOMETER). Many of the instruments are very specific to a particular field such as domestic violence, or education. However, of the available instruments, there appear to be **five that assess the consequences of TIC**.

- Creating Cultures of Trauma Informed Care (CCTIC; 16 consequence based items),
- Developing Trauma Informed Organizations (20 consequence based items),
- The Trauma Informed Climate Scale (15 consequence based items),
- The Trauma Informed Practices Scale (22 consequence based items),
- The Attitudes Related to Trauma Informed Care Scale (5 consequence based items).

Within the MCH-MRN compendium

There are no available measures that assess TIC.

Across these measure sets, a number collect information about the prevalence and type of adversity experienced by children and families, or the health and well being outcomes associated with trauma. Access and quality of service is also provided by some existing measures; however, these measures are unable to address the consequences of TIC.

Other Related Measures

The following measures assess quality of care and are used in healthcare or other settings:

- Trust in Physician Scale
- The Health Care Relationship (HCR) Trust Scale
- Consultation and Relational Empathy (CARE) Measure
- Adult Resilience Measure (ARM)

These measures provide inspiration for a TIC consequence measure as many of them assess similar constructs. Despite the similarities, these measures are not customized for trauma survivors.

Aligning with MCH-MRN's Starting Point Strategic Agenda

Recognizing trauma and advancing trauma informed services and policies is a key focus for all priority measurement areas. A consequence-based tool (or suite of tools) is needed that can assess the degree to which organizations demonstrate TIC for their employees/service providers as well as in service settings with clients, etc. Such a measure is not currently in use among MCHB programs creating a conceptual gap. This work is central to most of the existing TWGs and related to the positive health and ACEs TWG most closely. In addition to benefitting the field in general, this measure would have relevance to MCHB programs that are working to address the impact of trauma for service recipients and staff and advance TIC.

Who Should be Involved?

1. Partner initiatives in MCH health care measurement?
2. Consumer and family organizations?
3. Individuals and groups who have developed TIC instruments?
4. Organizations involved in the analysis, use and reporting of MCH health metrics?
5. Professional associations representing key stakeholder groups?