CORNELL PROJECT
2Gen

Cultivating Resilience: Best Practices in Healthcare, Education, and Evaluation

December 2019

Executive Summary

The fall of 2019 marked the start of a partnership between Cornell Project 2Gen and the Orange County Resilience Project. The Project is led by Cornell Cooperative Extension Orange County and includes a wide range of community leaders across sectors like healthcare, mental health, and education. The Resilience Project seeks to increase awareness of Adverse Childhood Experiences (ACEs) and improve support for Orange County families. The partnership between Cornell and the Resilience Project brings research and evaluation expertise to bear on the Project's diverse and innovative efforts to address childhood toxic stress in Orange County. As part of this work, the Fall 2019 2Gen Scholars cohort researched best practices for cultivating resilience through a wide range of professional avenues: healthcare, education, and evaluation.

Healthcare: Talking with Orange County pediatricians, 2Gen Scholars found varying levels of knowledge regarding ACEs. They also discovered that many pediatricians are unaware of local behavioral services available for children exhibiting symptoms of toxic stress. Scholars recommend that professional development for Orange County doctors include education about ACEs and that a directory of resources should be compiled for pediatricians to reference when making referrals.

Education: 2Gen Scholars were impressed with the numerous steps Orange County's Port Jervis School District has already taken to become more trauma-informed. One of the district's programs, zero-hour physical education, is an understudied intervention with exciting potential. Existing case studies of the intervention look at schools in towns that differ from Port Jervis in important ways. Scholars recommended continued research on Port Jervis' program, as it offers an exciting opportunity to learn more about the intervention's effects in a different context from prior work.

Evaluation: 2Gen Scholars used data from the Orange County Measure of Awareness and Impact survey to analyze ACE awareness in Orange County. They found that following screenings of the film *Resilience*, community members were generally well-informed regarding ACEs' effects on children's health and behavior. Scholars recommend the Resilience Project track its progress in other ways, as well. Referencing the work of other coalitions, they provide examples of potential metrics and strategies for effectively communicating progress to stakeholders.

Cornell Project 2Gen looks forward to continuing to work with the Resilience Project to promote well-being for children and families in Orange County. To learn more about us and our work, visit http://www.2gen.bctr.cornell.edu/ or email us at project2gen@cornell.edu.

Table of Contents

ACE Awareness and Treatment Practices in Orange County

Over the course of the project we have been in contact with multiple pediatricians and researched a multitude of interventions used to treat and prevent ACEs across the country. Contact information was initially found through the Resilience Project Working Group excel sheet. Those contacts then connected us with other pediatricians both within and outside of their networks. Pediatricians were asked a variety of questions regarding their current ACE knowledge and their approach to treating trauma. Based on our research two main findings emerged:

1. Pediatricians have varying levels of knowledge regarding ACEs.

Some pediatricians were very knowledgeable about ACEs. These providers learned about ACEs through conferences and training sessions that they attended voluntarily. These providers were up to date on current ACE research and implemented certain aspects of trauma informed care into their own practice. Their main obstacle in treating and preventing ACEs was lack of time. Providers explained how they did not have enough time in each office visit to identify, treat and prevent all forms of trauma that patients may be exposed to. These providers tended to be previously involved in the Resilience Project. Although very knowledgeable about empirical research regarding ACEs, we did not communicate with any providers that have implemented universal ACE screening into their practice.

Other pediatricians were unaware of ACEs and their empirical basis. We suspect that this is again due to a shortage of time in physicians' workdays and the overwhelming amount of medical research that is available to providers. It is impossible for providers to keep up with all newly published medical journal articles. Many of these providers explained that they have always been treating trauma when they know patients are exposed to it. Most pediatricians were interested in ACE research and want to improve how they treat trauma. We did not communicate with any providers that implemented any practices to prevent ACEs in their practice.

2. Pediatricians are unaware of local resources that can refer patients to

Some pediatricians stated that their networks do not offer behavioral services. This means that pediatricians have to refer their patients outside of their network and often do not know what local services are available. The networks that do offer behavioral services often do not see patients under a certain age making it difficult for pediatricians to make a referral for young patients. Additionally, the cost of behavioral services is often an issue for parents and hinders childrens' access to treatment. Providers are also struggling to locate local behavioral services for parents such as parenting classes and therapy.

Our suggestions

Based on our findings, we suggest a network of resources is compiled and shared with pediatricians throughout Orange County. We propose that a document is created that is easy for providers to consult when looking to refer a patient somewhere for behavioral services. Information regarding insurance types accepted should be included and providers should be able to add resources to the document as they discover them.

We also believe that many physicians would benefit from additional education regarding ACES and have composed a document highlighting current ACE research and suggested a few easy, quick ways to include trauma informed care into their own practice.

Best Practices for Healthcare Providers in Orange County: Adverse Childhood Experiences

By **Rachel Milone** and **Rohit Agrawal** *Cornell University*

Cornell Cooperative extension of Orange County has partnered with Cornell Project 2Gen to evaluate different sectors across Orange County and suggest ways to incorporate ACE awareness and trauma-informed care into pre-existing entities. In healthcare, our goal has been to analyze pediatrician's approach to treating ACEs through interviews with providers and to suggest ways in which their practice can be improved.

WHAT ARE ADVERSE CHILDHOOD EXPERIENCES (ACEs)?

ACEs are potentially traumatic events that occur in a child's life before age 18 including:

ABUSE

- Emotional abuse
- Physical abuse
- Sexual abuse

HOUSEHOLD CHALLENGES

- Domestic abuse
- Substance misuse in the household
- Mental illness in the household
- Parental separation or divorce
- Incarcerated household member

NEGLECT

- Emotional neglect
- Physical neglect

All of which can have a detrimental, long-lasting impact on later life health and well-being.

What you can do:

Suggested best practices for healthcare providers that are both effective and time efficient.

- **Be ACE Aware**
  - By identifying trauma, you can provide targeted care to improve well-being, and prevent many of the long-term physical and mental health problems associated with ACE exposure. A variety of screening tools exist for identifying ACEs[1]; be sure to check with experts in trauma-informed care before using these tools.
- **Practice person-centered care**
  - Developing stronger relationships with patients can improve the effectiveness treatment. Particularly vulnerable patients may not receive consistent care or follow the advice of their provider because they do not feel comfortable and able to openly communicate.
- **Educate your patients**
  - Many patients are not aware of the negative long-term effects of toxic stress and could benefit from increased education. NPR offers an accessible introduction to ACEs[2].

[1] https://www.chcs.org/media/TA-Tool-Screening-for-ACEs-and-Trauma_020619.pdf
[2] https://www.npr.org/sections/health-shots/2015/03/02/387007941/take-the-ace-quiz-and-learn-what-it-does-and-doesnt-mean

Providers can also make families more aware of effective responses to toxic stress. Making clients aware of ways to self-regulate their flight-or-fight response to toxic stress will make them less susceptible to long-term health complications. The following table, taken from the Rhode Island Department of Health, provides a list of ways families can regulate the prevalence of toxic stress:[6]

Trauma-Specific Anticipatory Guidance		
What you will see	**Why it occurs**	**How Families can respond**
- Traumatized children will respond more quickly and more forcefully than other children to anything they think is a threat - Traumatized children are more likely to misread facial and non-verbal cues and think there is a threat where none is intended	- Areas of the brain responsible for recognizing and responding to threats are turned on. This is called hypertrophied. - Brain does not recognize that this new situation does not contain the same threats	- Do not take these behaviors personally - Helping the child understand your facial expression or the tone of your voice will help lessen the chance of the child's behavior escalating in situations that otherwise do not seem threatening
- Traumatized children need to be redirected or behavior may start to escalate	- Responding with aggression will trigger the child's brain back into threat mode - Logic centers shut down; fight, flight, or hide response takes over	- Avoid yelling and aggression - Lower the tone and intensity of your voice - Comedown to the child's eye level, gently take hold of the child's hand, and use simple, direct words. Give directions without using strong emotions.
- Children don't always know how to say what they are feeling. It can be hard for them to find words. Often they are not told that how they feel is okay.	- Emotion and language centers are not well connected. Memory centers that hold words are blocked.	- Tell the child it is okay to feel the way she feels and to show emotion - Give the child the words to label her emotions
- Traumatized children do not have the skills for self-regulation or for calming down once upset	- Children have had to constantly be watchful for danger. Parts of the brain that keep us alert stay turned on, but the parts of their brains used for self-regulation and calming have not grown with the child.	- Develop breathing techniques, relaxation skills, or exercise that the child can do when getting upset. Praise the child for expressing feelings or calming down. - Guide the child at first, then just remind the child to use his skills when you start to see the child getting upset
- Traumatized children will challenge the caretaker, often in ways that threaten placement	- Children come with negative beliefs and expectations about themselves (worthless, powerless) and about the caregiver (unreliable, rejecting) - Children often reenact or recreate old relationships with new people. They do this to get the same reactions in caretakers that they experienced with other adults because these lead to familiar reactions. - These patterns helped the child survive in the past, prove negative beliefs, help the child vent frustration, and give the child some sense of mastery	- Give messages that say the child is safe, wanted, capable, and worthwhile and that you as the caretaker are available, reliable, and responsive - Praise even neutral behavior - Be aware of your own emotional responses to the child's behavior - Correct when necessary in a calm unemotional tone - Repeat, repeat, repeat - Do not take these behaviors personally

3. Pediatricians can utilize more coordinated care by increasing their communication with mid-level practitioners and providing them with more roles. For example, nurses, as opposed to doctors, can screen clients for ACEs by spearheading the implementation of surveys or refer clients to online resources so doctors have more time to communicate with families and develop stronger relationships with them.

How can you learn more about the Resilience Project in Orange County?

Julika von Stackelberg is a parenting educator who has been very involved with the Resilience Project in Orange County. She can be contacted through the following email: jv426@cornell.edu

[6] Aguiar, Nicole. "Trauma-Specific Anticipatory Guidance." *Rhode Island Chapter of the American Academy of Pediatrics*, Health Resources and Services Administration of the U.S. Department of Health and Human Services, Dec. 2016, riaap.org/wp-content/uploads/2016/12/Toxic-Toolkit_FINAL_1-6-17.pdf.

Overview: Trauma-Sensitive Education in Port Jervis

Adverse Childhood Experiences (ACEs) play a huge role in a child's ability to learn. Around 60% of US kids are exposed to trauma, ultimately turning off kids' learning switch, leading to decreased reading ability and lower GPA. Children with ACEs see the world as a dangerous place, including school, and they start showing signs of aggression, defiance, and withdrawal. Because of this, trauma sensitive schools are essential for kids so they can have a safe space where children can build positive relationships with adults and children.

Trauma-sensitive schools can have a wide range of services that accommodate ACEs. Port Jervis School District, specifically, has gone above and beyond in terms of implementing programs to help kids with ACEs feel safe and cared for:

- Mental Health Education in School summit
    - Create diverse communities and acknowledge differences
    - Mental health mapping
    - Mental health youth first aid training
    - Conferences for all
    - Implement student voice into discussions
- Train teachers to reason why children are acting out (nexus to behavior) rather than simply punish them
- Health and Wellness Day
    - Since Port Jervis has the highest domestic violence in Orange County, Port Jervis started emphasizing inclusivity with interscholastic sports (variation of Special Olympics) so students with disabilities are able to play sports and they can feel included
    - Diverse literature with different textures of hair, homosexuality, non-traditional families so children can see themselves in the books they're reading
        - Port Jervis spent $2,000 on books to encourage reading and diverse books
- Kinesthetic Lab
    - A space where they can move and exercise since cognition between moving and learning yields to higher results
- Mindfulness Practices implemented within the curriculum
    - Yoga for kids
    - Helps de-escalate kids so they can be in a learning, calming environment

Spotlight on Zero-Hour Physical Education

The Center for Disease Control and Prevention (CDC) recommends that children ages 6-17 receive 60 minutes of moderate to vigorous physical activity every day.[7] Unfortunately, roughly one half of children in the country do not meet this minimum. Many studies have been conducted highlighting the necessity of implementing quality physical-education programs in elementary schools. A new approach called "zero-hour physical education" has been studied in numerous settings nationally, though far less extensively. To make a decision in implementing this, two cases should be observed.

A. Naperville, Illinois (Enhancing P.E. in Illinois: Naperville Central High School)[8, 9]
    1. Study description
        a) Town population: 147,682 (2017); school: 2,810 students.
        b) Demographics: **14% free/reduced lunch**, 67.3% White, 4% African American, 8.3% Hispanic, 16.2% Asian.
        c) P.E. classes include 20 minutes of cardio and emphasize the use of smaller-scale versions of popular sports, such as "4 on 4 soccer" so students are required to run more. Teachers are given heart-rate monitors and software to track activity.
    2. Results
        a) Literacy improvement was tracked throughout the year in students enrolled in regular PE and Learning Readiness PE (LRPE), which was an improved PE class for underperforming students scheduled immediately before math and English periods. In 2007, LRPE was conducted in both morning and afternoon, but in all other years it was conducted only in the morning. In 2006, 2006, 2009, and 2011, there was significantly more improvement in literacy with morning LRPE than with regular PE. **It is important to note that in 2007, the improvement in morning LRPE and afternoon LRPE was virtually the same.**
        b) Algebra improvement was tracked throughout the year. In 2006, students improved by 20% with the LRPE and only 5% with regular PE. In 2007 and 2009, the difference was significant but much smaller.

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[7] "Youth Physical Activity Guidelines." Centers for Disease Control and Prevention 29 May 2019, https://www.cdc.gov/healthyschools/physicalactivity/guidelines.htm.

[8] "Enhancing P.E. in Illinois: Naperville Central High School." Illinois Public Health Institute.

September 2013, http://iphionline.org/pdf/P.E._Case_Study_Naperville.pdf

[9] "Explore Naperville Central High School." Niche, 23 Oct. 2019, https://www.niche.com/k12/naperville-central-high-school-naperville-il/.

c) It is clear that scheduling high-quality PE before students' most challenging classes has benefits on their performance. However, this particular study noted that afternoon LRPE was equally as beneficial as morning LRPE.

B. Southeastern city (unnamed) (Phillips)[10]
   1. Study description
      a) Town population: 115,00; elementary school: 379 students.
      b) Demographics: **62% free/reduced lunch (similar to Port Jervis)**, 13% Hispanic, 24% African American, 49% White, 13% multiracial and multiethnic.
      c) Program occurred prior to the beginning of regular school day for 80 participants; activities included jump rope games, cone and ladder drills, team sport drills including basketball and soccer, rotating calisthenic stations, and obstacle course games to reach 60-80% of maximal heart rate.
   2. Results
      a) Study noted there was a "**significant difference in reading test scores** for the zero-hour physical activity intervention group ..."
      b) When analyzing improvement in math performance, the study "**did not find any significant differences** between the intervention and control group…"
      c) Study noticed fewer disciplinary issues with students and elevated mood.
      d) Study noticed significant benefits for students with ADHD.

[10] Phillips, Kristin L. "A Zero-Hour Physical Activity Program's Benefit on Academic Achievement in Elementary Aged School Children." Middle Tennessee State University, 2017.

Overview: ACE Awareness and Impacts in Orange County

Orange county is a county in New York City looking to start a program to increase ACE awareness in their community. Currently, they are screening a film for important stakeholders (i.e. teachers, doctors, social workers etc.) and collecting survey information to gauge the community's understanding of ACEs. As the survey team on this project, our goals are to help analyze and present the data Orange County has already collected as well as to recommend new ways to assess the community-level impact of ACE awareness and ACE-interventions.

So far, Orange County has organized the community café harvest event, during which the film *Resilience* has been shown. The event has generated discussions on ACEs and thoughts on what each community can do to improve the situation. In addition, Orange County has distributed the measure of awareness and impact survey and received answers from 54 participants representing various community groups in the county. The survey mainly gauges participants' understanding of ACES and their awareness of available resources that can be leveraged to buffer the effects of ACEs in their communities. The survey is detailed as it asks about specific ways each participant intends to make changes; however, it is easy for participants to get lost in details as some answers are personal rather than community-focused and goal-oriented.

A word cloud of responses to two questions asked at the community café: "What should we change?" and "What are you going to do now?"

Orange County Measure of Awareness and Impact Survey: Key Takeaways

Participants overall were well-informed on how well they know the impacts of ACEs on physical health (average score of 3.13 on a scale of 1-not at all to 4-very well), mental health (average score of 3.30 on a scale of 1-not at all to 4-very well), as well as child behaviors (average score of 3.15 on a scale of 1-not at all to 4-very well).

Resources participants are most aware of

- **Mental health facilities**: mentioned 15 times
- **Religious organizations**: mentioned 7 times
- **Food pantries**: mentioned 4 times
- **Cornell Cooperative Extension**: mentioned 4 times
- **Other services/facilities include:** library, school, parenting coalition, mobile outreach, family and youth services, etc.

Actions participants can take include:

- **Volunteer**: involved in the community, run groups for caregivers
- **Education**: positive parenting, social skills
- **Training**: social-emotional learning,
- **Screening**: screen for ACEs
- **Creative work**: book on art therapy for children,
- **Support**: home visiting program
- **Look for funding** to support projects
- **Sharing**: information on ACE, the film *Resilience*

Orange County Measure of Awareness and Impact Survey: Recommendations

Strengths of the survey

- Detail-focused
- Personal
- Relatable

Opportunities for growth

- Improve long-term planning for evaluation
- Use survey as a tool for pre-post evaluation or progress monitoring

Strategy

We have identified two coalition groups that have performed cross-site evaluations: ACEs Public-Private Partnership Initiative (APPI) in Washington State and Mobilizing Action for Resilient Communities (MARC). Strategies of these groups could be adopted by Orange County:

1. A new survey can be composed for long-term monitoring of progress and evaluation. "ACES and Resilience Collective Community Capacity Survey Instrument" from the Washington State APPI can be adopted for usage. This survey would be useful because it can be used as a regular monitoring tool to evaluate progress of each community group. More importantly, this survey can reflectively evaluate the performance of the coalition in supporting individual community groups (Sample questions are attached in figure 1 and 2)

2. Progress can also be mapped in a creative way to help the coalition understand the progress within each community. For example, a general structure of progress reporting is provided to each community group and each is required to send the report regularly (e.g. monthly). An example of progress tracking and reporting is attached in figure 3.

Figure 1. Sample questions to track progress of each community group

1. What is the name of your organization?
   - ❒ My organization's name is: _____ _____
   - ❒ I am not affiliated with an organization. (Please explain your individual involvement in efforts to address ACEs, resilience, and healthy child development.) _____ [GO TO →# 8]

2. What is your organization's relationship with the [COALITION]?
   - ❒ Staff (such as executive director or program coordinator)
   - ❒ Board member (such as a member of the executive, governing, network, consortium, or policy board)
   - ❒ General member (such as voting or non-voting members, member of a standing committee, team member, or community member who attends meetings or serves on a subcommittee)
   - ❒ Non-member partner, consultant, or collaborator
   - ❒ Other (please specify): _____

3. How familiar are you with the following concepts?

	Not at all familiar	A little familiar	Somewhat familiar	Very familiar	Extremely familiar
Adverse childhood experiences (ACEs)	❒	❒	❒	❒	❒
Resilience	❒	❒	❒	❒	❒

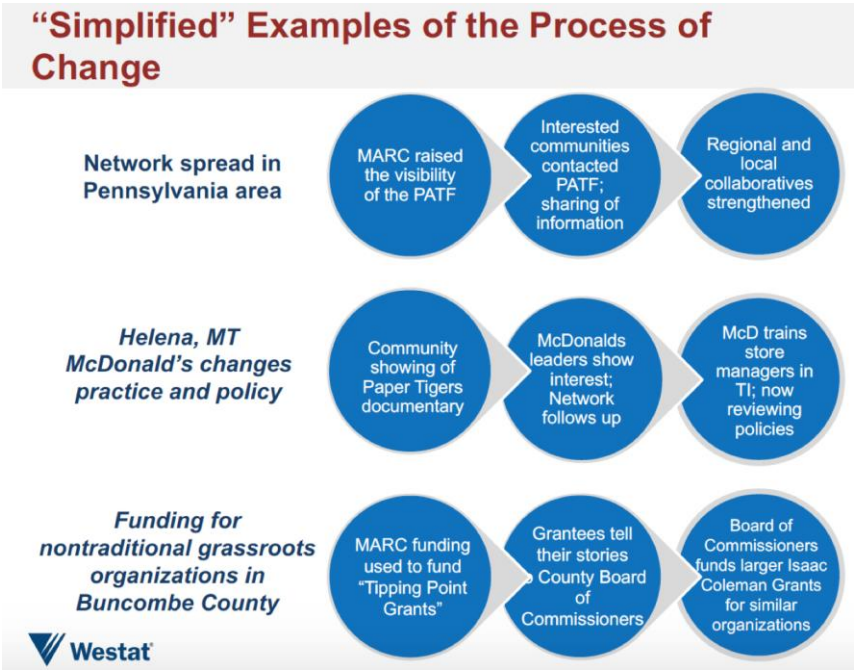
4. To what extent has your organization integrated adverse childhood experiences (ACEs) concepts into its work?
   - ❒ Not at all
   - ❒ A little
   - ❒ Somewhat
   - ❒ Quite a bit
   - ❒ A great deal

Figure 2. Sample questions to evaluate the performance of coalition

5. To what extent have [COALITION]'s efforts **influenced** your organization in the following areas?

	Not at all	A little	Somewhat	Quite a bit	A great deal	Not applicable
WITHIN ORGANIZATION						
a. **Improved the knowledge of staff** about ACEs, resilience, and healthy child development.	❒	❒	❒	❒	❒	❒
b. **Integrated** ACEs, resilience, and healthy child development **into organizational practices and procedures**.	❒	❒	❒	❒	❒	❒
OUTSIDE ORGANIZATION						
c. **Enhanced collaboration with other organizations in multiple sectors** (such as education, criminal justice, social services, or health) related to ACEs, resilience, and healthy child development.	❒	❒	❒	❒	❒	❒
d. **Facilitated community awareness** related to ACEs, resilience, and healthy child development.	❒	❒	❒	❒	❒	❒
e. **Improved policy advocacy efforts** related to ACEs, resilience, and healthy child development.	❒	❒	❒	❒	❒	❒

Figure 3. Example of tracking progress in each community group



Washington State's ACEs Public-Private Initiative (APPI), is a group of public, private and community organizations working together to address ACEs. They have done extensive studies to evaluate the impact of their ACE program, which can be found in the APPI Cross-site evaluation report. We recommend that Orange county should use similar methods.

At the time of this study, they had five APPI sites in the state working to address ACEs. Washington APPI did a feasibility analysis to see if they could detect impacts of site-specific ACE-related efforts at the county level. For each site, they examined trends in county-level ACE related outcomes from before and after the sites shifted to ACE-specific work. They also compared these trends to matched comparison counties in Washington state to see if the changes were related to the site's efforts or due to statewide policy.

The APPI identified 30 ACE indicators divided into 4 domains that represent both individual-level changes as well as community-level changes. They collected this data from various state-level data sources. These are all summarized in figures 4 and 5 below.

Currently, Orange County has only engaged in collecting subjective individual-level measurements that consist of surveys after a film screening. In order to understand the community-level impact of ACE awareness, we recommend that Orange County should start measuring the same outcomes that Washington state has. Washington state has done a good job of using both subjective (surveys) and objective (rates of hospitalizations, graduation rates etc.) methods of measuring ACES. While it may take a while to implement the surveys and get a good response rate, it is easy to access data concerning some of the objective measurements (arrest rates, graduation rates etc.). Furthermore, instead of comparing their trends on these 30 indicators with another county, we recommend that Orange County follow a pre-post format, looking at data within their own county over a few years. These changes will help Orange County have a good measurement method for both individual and community level impact of increased ACE awareness.

Figure 4. ACE indicators and data sources used by APPI (page 1)

Domain	ACE Indicator	Data Source
ACEs	ACE scores of adults in community	
Child Abuse prevention and family support	Indicators of family well-being ● The average score on family rewards for pro-social involvement scale ● Rate of hospitalizations due to injury/accident for adult women Indicators of child abuse prevention ● Rate of hospitalization due to injury/accident for children ● Rate of victims of child abuse/neglect accepted referrals ● Percentage of out-of-home cases exiting to reunification within 24 months	Behavioral Risk Factor Surveillance System (BRFSS) Community Outcome and Risk Evaluation Geographic Information System (CORE-GIS)
School climate and student success	Short-term indicators of student behavior ● Rates of unexcused absences ● Incidences of suspensions and expulsions from school Indicator of school support ● Average score on school rewards for prosocial behavior scale End-of-school student success outcomes ● Rates of high school cohort dropout ● High school extended graduation	Washington state's Office of the Superintendent of Public Instruction

Figure 4. ACE indicators and data sources used by APPI (page 2)

Domain	ACE Indicator	Data Source
Risk behavior reduction and youth development	Initiation of alcohol and marijuana use among 10th graders % students reporting ● Never having more than a sip or two of alcohol ● Never drinking alcohol regularly ● Never using marijuana Short-term indicators of substance abuse among 10th graders ● % students reporting never drinking alcohol, using marijuana or hashish or any other illegal drugs the past 30 days Arrests among youth and adults for ● Alcohol-related violations ● Drug-related violations ● Violent crimes Indicators of healthy youth development ● Youth quality of life ● % of 10th graders reporting they seriously considered/planned suicide ● Overall health as reported by adults ● Mental health as reported by adults	Washington State Healthy Youth Survey (HYS)
Community development	● Avg score on community rewards for prosocial involvement scale as reported by youth ● % adults who reported having their social and emotional needs met	HYS BRFFS

Figure 5. County-level APPI evaluation outcomes and corresponding population, data source, and years of available data (page 1)

Outcomes	Population	Data Source	Years of Available Data
School rewards for prosocial involvement [This scale consists of four items: 1. My teacher(s) notices when I am doing a good job and lets me know about it. 2. The school lets my parents know when I have done something well. 3. I feel safe at my school. 4. My teachers praise me when I work hard in school. Possible scale scores range from 1 to 4, with higher values indicating more rewards. The 2012 grade 10 Washington State mean is 2.50 with a standard error of 0.01.]	10th grade students	HYS	2002, 2004, 2006, 2008, 2010, 2012
End-of-school student outcomes			
High school cohort (cumulative) dropout	Students in grade 9	CORE-GIS	2006–2012
High school extended graduation [This indicator is defined as the percentage of students who graduate from high school; it includes on-time graduates as well as students who stay in school and take more than four years to complete their high school degree.]	High school students	CORE-GIS	2006–2012
Domain 3: Risk Behavior Reduction and Healthy Youth Development			
Substance use and involvement with justice system			
Never had more than a sip or two of alcohol	10th grade students	HYS	2002, 2004, 2006, 2008, 2010, 2012
Never drank alcohol regularly (at least once or twice a month)	10th grade students	HYS	2002, 2004, 2006, 2008, 2010, 2012
Never used marijuana	10th grade students	HYS	2002, 2004, 2006, 2008, 2010, 2012
Never drank alcohol in the past 30 Days	10th grade students	HYS	2002, 2004, 2006, 2008, 2010, 2012
Never used marijuana or hashish in the past 30 Days	10th grade students	HYS	2002, 2004, 2006, 2008, 2010, 2012
Never used illegal drugs (other than alcohol, tobacco, or marijuana) in the past 30 days	10th grade students	HYS	2004, 2006, 2008, 2010, 2012
Arrests for alcohol-related violations	Adolescents (ages 10–17)	CORE-GIS	1990–2012
	Adults (ages 18 and older)	CORE-GIS	1990–2012
Arrests for drug law violations	Adolescents (ages 10–17)	CORE-GIS	1990–2012
	Adults (ages 18 and older)	CORE-GIS	1990–2012
Arrests for violent crimes	Adolescents (Ages 10–17)	CORE-GIS	1990–2012
	Adults (ages 18 and older)	CORE-GIS	1990–2012

Figure 5. County-level APPI evaluation outcomes and corresponding population, data source, and years of available data (page 2)

Outcomes	Population	Data Source	Years of Available Data
Adverse Childhood Experiences (ACEs)			
Prevalence of ACEs in the community (0, 3 or more, 6 or more)	Adults (ages 18–54)	BRFSS	2009–2011
Domain 1: Child Abuse Prevention and Family Support			
Child Abuse Prevention			
Hospitalizations due to injury or accident	Children (ages birth to 17)	CORE-GIS	1990–2012
Alleged victims of child abuse and neglect in accepted referrals [This indicator refers to children (age birth–17) identified as alleged victims in reports to Child Protective Services that were accepted for further action. Children are counted more than once if they are reported as alleged victims more than once during the year. A "referral" is a report of suspected child abuse.]	Children (birth to 17)	CORE-GIS	1998–2012
Out-of-home cases exiting to reunification within 24 months	Out-of-home cases	POC Data Portal	2000–2012
Family well-being			
Hospitalizations due to injury or accident	Adult women (ages 18 and older)	CORE-GIS	1990–2012
Family rewards for prosocial involvement scale [This scale consists of four items: 1. My parents notice when I am doing a good job and let me know about it. 2. How often do your parents tell you they're proud of you for something you've done? 3. Do you enjoy spending time with your dad? 4. Do you enjoy spending time with your mom? Possible scale scores range from 1 to 4, with higher values indicating more family rewards. The 2012 grade 6 Washington State mean is 3.36 with a standard error of 0.01.]	6th grade students	HYS	2002, 2004, 2006, 2008, 2010, 2012
Domain 2: School Climate and Student Success			
Student behavior and school climate			
Unexcused Absences	Students (grades 1–8)	CORE-GIS	2004–2013
Total number of expulsions and suspensions	Students	Student Behavior Reports	2005–2013
Low commitment to school [This scale consists of five items: 1. How often do you feel the schoolwork you are assigned is meaningful and important? 2. How interesting are most of your courses to you? 3. How important do you think the things you are learning in school are going to be for you later in life? 4. Think back over the past year in school. How often did you: A. Enjoy being in school? B. Hate being in school? C. Try to do your best work in school? 5. During the last 4 weeks, how many whole days of school have you missed because you skipped or "cut"? Possible scale scores range from 1 to 5 with higher values indicating lower level of commitment to school. The 2012 grade 10 Washington State mean is 2.40 with a standard error of 0.01.]	10th grade students	HYS	2002, 2004, 2006, 2008, 2010, 2012

Figure 5. County-level APPI evaluation outcomes and corresponding population, data source, and years of available data (page 3)

Outcomes	Population	Data Source	Years of Available Data
Healthy youth development and health outcomes			
Youth quality of life scale [This scale consists of 11 items: 1. I feel I am getting along with my parents or guardians. 2. I look forward to the future. 3. I feel good about myself. 4. I am satisfied with the way my life is now. 5. I feel alone in my life. 6. Compared with others my age, my life is ... 7. There are adults in my life who really care about me. 8. In the last month, how often have you felt that: You were unable to control the important things in your life? 9. In the last month, how often have you felt that: You dealt successfully with irritating life hassles? 10. In the last month, how often have you felt that: You were effectively coping with important changes that were occurring in your life? 11. In the last month, how often have you felt that: You were on top of things? Possible scale scores range from 0 to 100, with higher values indicating a better quality of life. The 2012 grade 10 Washington State mean is 72.83 with a standard error of 0.16.]	10th grade students	HYS	2002, 2004, 2006, 2008, 2010, 2012
Seriously consider or plan of suicide in the last 12 months	10th grade students	HYS	2002, 2004, 2006, 2008, 2010, 2012
Overall “good” mental health	Adults (ages 18 and older)	BRFSS	1995–2012
"Good" or better overall health	Adults (ages 18 and older)	BRFSS	1995–2012
Domain 4: Community Development			
Community rewards for prosocial involvement scale [This scale consists of three items: 1. My neighbors notice when I am doing a good job and let me know. 2. There are people in my neighborhood or community/neighborhood who encourage me to do my best. 3. There are people in my neighborhood who are proud of me when I do something well. Possible scale scores range from 1 to 4, with higher values indicating more rewards. The 2012 grade 6 Washington State mean is 2.19 with a standard error of 0.01.]	6th grade students	HYS	2002, 2004, 2006, 2008, 2010, 2012
Usually or always meet social and emotional support needs	Adults (ages 18 and older)	BRFSS	2005–2012