Screening For ACEs in Pediatric Practice

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In the August newsletter, we provided an overview of the definition and impact of adverse childhood experiences (ACEs) (http://aapca2.org/aces). In this article, we will explore the argument in favor of screening for ACEs in pediatric practice, and describe the process and results of a California state advisory group on screening for trauma.

The American Academy of Pediatrics (AAP) recommended screening for toxic stress (negative physiologic changes that can result from severe stressors like ACEs in the absence of sufficient protective factors) (Garner et al, 2012[1]). This recommendation, and the basic argument in favor of screening for ACEs, is that if we know that *adults* who have a history of ACEs are at increased risk of poor health and social outcomes, then there is the possibility that reducing the prevalence or impact of ACEs on *children* could reduce the likelihood of poor outcomes over the lifespan. In order to support the AAP recommendation and the argument in favor of screening for ACEs with evidence, research studies need to demonstrate that: 1) there are screening tools that accurately identify ACEs in pediatric patients, 2) there are interventions that will improve outcomes for children with ACEs, and 3) the potential harms of screening for ACEs are outweighed by the potential benefits. So, do we have that evidence, or do we need it before proceeding with implementing screening?

An exhaustive review of these questions is beyond the scope of this article, but here is a synopsis based upon related literature and clinical experience. There are a large number of tools that have been validated to screen for one or more ACEs (e.g. see review by Chung et al, 2016[2]). Of these, only a subset have demonstrated effectiveness in pediatric practice, and an even smaller subset have included all ten ACEs (see further discussion below). Regarding interventions that will improve outcomes for children with ACEs, there is good evidence that multi-component interventions that include parenting education, social service referrals, and social support can improve early childhood health outcomes (Marie-Mitchell A and Kostolansky R, 2019[3]). If the range of social determinants is expanded to include factors that increase risk of ACEs, such as poverty, then the evidence increases in support of the opportunity for pediatricians to improve child outcomes (Fierman et al, 2016[4]). As for potential harms, that is difficult to assess because harms are not often measured in screening studies. What we can say is that the majority of parents believe it is important for pediatricians to know about the presence or absence of ACEs in order to provide good care for their children (Koita et al, 2018[5]; Marie-Mitchell et al, 2019[6]).

In addition, the primary argument made by the National Pediatric Practice Community on ACEs is not about the weight of evidence, but about the importance of good clinical decision-making (http://www.centerforyouthwellness.org/healthcare-professionals/national-pediatric-practice-community/). For example, if you see a patient for well-child care and do not screen for domestic violence, you may assess weight status and spend your time counseling the family about healthy eating, which could be a waste of effort if the home environment is so unsafe that the kitchen is not used. Or if you see a boy for evaluation of possible attention deficit hyperactivity disorder and you do not know that his father is in prison, you may overlook helping him to cope with a factor that may explain part, or all, of his trouble in school. If you add to the

list of patient cases that could keep going, the robust literature on child attachment and brain development, then the importance of a pediatrician knowing about a child's social environment in order to make appropriate clinical decisions is well-substantiated.

In 2017 when California passed Assembly Bill 340 (Statues of 2017, Arambula), the key question was not whether to screen for trauma in pediatric practice, but how to go about screening. AB340 required the Department of Health Care Services (DHCS) to convene an advisory group to review tools and protocols for screening children for trauma as defined within the Early and Periodic Screening, Diagnosis and Treatment (EPSDT), a Medi-Cal benefit for individuals under age 21. "Trauma" was defined in this legislation as "an event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or threatening and that has lasting adverse effects on the individual's functioning and physical, social, emotional, or spiritual well-being." The AB340 advisory group met in person four times between April and November 2018, and in January 2019 submitted recommendations to Assembly member Arambula, Senator Pan, and then DHCS Director Kent. These recommendations were presented to the Assembly Budget Sub-Committee in February 2019.

The first discussions of the AB340 advisory group were about how to translate the definition of trauma provided in the assembly bill into a feasible process that could be used in pediatric practice. In other words, what specific exposures should be assessed? The advisory group agreed that there was a broad and robust literature around the potential effects of ACEs and other social determinants on health outcomes. Therefore, the agreed upon categories for trauma experience were: child abuse, child neglect, household dysfunction (specifically a household member with a mental health or substance use problem, domestic violence, incarcerated family member, and parental divorce or separation), and other social determinants known to be particularly influential, such as community violence, discrimination, and poverty. The category of "other social determinants" was intentionally not limited to a specific list due to recognition that the importance of different social determinants may vary by geographic regions and populations served.

The AB340 advisory group also discussed the distinction between screening tools and diagnostic assessments. In reference to AB340, a *screening tool* was described as a simple, inexpensive means to assess a large number of individuals for exposure to, or risk of exposure to, trauma. By contrast, a *diagnostic assessment* was a tool used to make a diagnosis and treatment plan for individuals with symptoms of trauma. Upon careful review of the text of AB340, the advisory group agreed that their task was to make recommendations about screening for trauma exposure, not diagnosing trauma-related symptoms or syndromes.

The AB340 advisory group conducted an extensive review and comparison of existing screening tools that were either described in the literature and/or being used by pediatricians. A variety of tools were found that screened for a subset of ACEs, such as the Safe Environment for Every Kid (SEEK) (Dubowitz et al, 2012[7]). However, the advisory group was searching for tools that included all ten ACEs defined in the original CDC study (Felitti et al, 1998[8]). The advisory group was also searching for tools that were feasible to use in pediatric practice, so that excluded the original ACE scale (since this is an adult retrospective report tool) and meant a focus on relatively brief self-report tools that could be used across the full spectrum of pediatric age groups. Given these criteria, the tools that were identified included the: a) Center for Youth

Wellness ACE-Questionnaire (Bucci et al, 2015[9]), b) Bay Area Research Consortium assessment (later renamed the "PEARLS") (Koita et al, 2018), c) Loma Linda University's Whole Child Assessment (WCA) (Marie-Mitchell et al, 2019), d) Childhood Trust Events Survey (Cincinnati Children's, 2017[10]), e) Yale-Vermont Adversity in Childhood Scale (Holbrook et al, 2014[11]), and f) Montefiore Clinical ACE-Q (Murphy et al, 2016[12]). All of these tools were in the process of evaluating data on validity and reliability. The PEARLS and the WCA were in use by pediatricians in California and had data in press that supported validity.

The AB340 advisory group also considered the Staying Healthy Assessment (SHA), which is an Individual Health Education Behavior Assessment (IHEBA) developed by California's DHCS. California providers are required to administer the SHA, or an approved alternative IHEBA, to all Medi-Cal beneficiaries. In its current form, the SHA did not meet the AB340 advisory group criteria for a pediatric trauma screening tool.

In January 2019, the AB340 advisory group recommended that Medi-Cal providers be given three options for screening pediatric populations for exposure to trauma: 1) the PEARLS, 2) the WCA, or 3) an alternative tool that meets the AB340 categories for trauma. The primary advantage of the PEARLS is that it is an independent tool about exposure to adversity, and was developed with input from a wide range of experts (Koita et al, 2018). All of the 17-19 questions focus on history of prior exposure to trauma. Also, all of the questions have yes/no responses, which makes it easy to calculate a Child-ACE score. There are two versions: caregiver report for age 0-11, and self-report for age 12-19. For more information about the PEARLS, see https://nppcaces.org/faqs/.

The second option recommended by the AB340 advisory group was the WCA, which is a comprehensive tool for well-child care that incorporates screening for adversity, while reducing paper work and streamlining workflow (Marie-Mitchell et al, 2019). The WCA is an approved alternative IHEBA for California providers so can be used instead of the SHA. There are age-appropriate versions of the WCA for 0-20 years old and all include 12-15 questions about exposure to and risk of adversity, as well as questions about symptoms of trauma. For more information about the WCA, see https://lluch.org/health-professionals/whole-child-assessment-wca.

The third recommendation of the AB340 advisory group was to allow pediatric providers to request use of an alternative tool that meets the AB340 categories for trauma. The advisory group felt strongly that it was important to have this third option, partly to support and encourage the continued evolution of scientific knowledge about screening for trauma, but also to support provider choice around workflow that fits best for their practice. This third option is parallel to the DHCS IHEBA policy that allows providers to request use of an alternative tool, if they prefer not to use the SHA.

In summary, the AB340 advisory group reviewed existing knowledge about screening for trauma in pediatric patients and recommended three options - a tool that focuses on exposure to trauma (PEARLS), a comprehensive tool that reduces paper work at well-child visits (WCA), and the option of an alternative tool that meets specific criteria. In March 2019, DHCS released for public comment a proposal to modify Proposition 56 to include reimbursement for trauma

screening. Specifically, DHCS proposed reimbursing pediatric providers for use of the PEARLS only, while reimbursing adult providers for use of any tool that they chose to screen for trauma. Several comments were submitted by the public requesting that DHCS revise their proposal to give pediatricians choice and align with the AB340 recommendations (https://www.acesconnection.com/g/california-aces-action/blog/dozens-of-stakeholders-representing-thousands-of-practitioners-send-public-comments-on-calif-aces-screening-plan). It remains to be seen whether the complete AB340 advisory group recommendations will be used to guide reimbursement for trauma screening by pediatricians in California.

Meanwhile, there are other barriers to screening for ACEs that need to be addressed. The most frequently mentioned barrier is how to find the time to add screening for ACEs to an already long list of topics to cover at well-child care. In our practice, we addressed this barrier by developing the WCA, which allowed us to streamline our workflow and prioritize counseling needs. A second frequently mentioned barrier is knowledge of what to do with positive screens. We have partly addressed this barrier by developing a community resource list, which is maintained through community and public health partnerships. However, a complete understanding of how to manage positive screens also means ongoing physician education and system adaptations, a process that we are continuing to work on. If you are considering implementing ACEs screening, we are interested in hearing from you about barriers your practice is facing. If you have already implemented ACEs screening, we are interested in learning more about what tools and practices have been useful for you. The primary goal of screening for ACEs is to improve the quality of pediatric care and prevent negative health outcomes, a laudable goal that will take the combined efforts of many.

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