Addressing Adverse Childhood Experiences in Primary Care: Challenges and Considerations

Howard Dubowitz, MD, MS,[a] David Finkelhor, PhD,[b] Adam Zolotor, MD,[c] Jennifer Kleven, MD, MPH,[d] Neal Davis, MD[e]

abstract

This article draws attention to the overlapping literature on social determinants of health and adverse childhood experiences, and the growing clinical interest in addressing them to promote children's and parents' health and well-being. We address important considerations and suggest solutions for leaders and practitioners in primary care to address social determinants of health/adverse childhood experiences. Priorities include: begin with a few prevalent conditions for which there are helpful resources; focus on conditions that are current or recent and where parents may be more apt to engage in services; focus initially on families with children aged <6 given the frequency of well-child visits and the especially strong relationships between primary care professionals and parents during this period; ensure training of primary care professionals and staff to help them play this role competently and comfortably; and have good referral processes to facilitate additional evaluation or help.

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[a]Department of Pediatrics, University of Maryland School of Medicine, Baltimore, Maryland; [b]Department of Sociology, University of New Hampshire, Durham, New Hampshire; [c]Department of Family Medicine, University of North Carolina School of Medicine, Chapel Hill, North Carolina; [d]Department of Pediatrics, Gundersen Health System, La Crosse, Wisconsin; and [e]Pediatric Community Based Care, Intermountain Primary Children's Hospital, Salt Lake City, Utah

Drs Dubowitz, Finkelhor, Zolotar, Kleven, and Davis conceptualized this article, drafted the initial manuscript, reviewed and revised the manuscript, approved the final manuscript as submitted, and agree to be accountable for all aspects of the work.

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The article reviews knowledge regarding screening for and addressing social determinants of health or adverse childhood experiences and offers recommendations for practice.

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Address correspondence to Howard Dubowitz, MD, MS, Department of Pediatrics, University of Maryland School of Medicine, 520 W Lombard St, Baltimore, MD 21201. E-mail: hdubowitz@som.umaryland.edu

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Recognition of the critical roles family, community, and society play in the health and development of children has been a pillar of pediatric and family medicine.[1,2] Primary care professionals (PCPs) help parents navigate the challenges of raising children with advice on an array of issues including feeding, toilet training, and child safety. Increasingly, both social and biological sciences highlight the impact of the social environment[3] and childhood trauma on health and well-being.[4–6] This understanding coupled with the commitment to prevention and support for families leads to mounting interest in better addressing social determinants of health (SDH) and adverse childhood experiences (ACEs). The American Academy of Pediatrics (AAP) urged in a 2012 policy statement that pediatricians play leadership roles in addressing the enduring effects of early life adversity on child health and development.[4] More recently, the AAP Screening Technical Assistance & Resource (STAR) Center developed materials "to improve the health, wellness, and development of children through practice and system-based interventions to increase rates of early childhood screening, counseling, referral, and follow-up for developmental milestones, perinatal depression, and SDH."[7] Marie-Mitchell and Kosotlansky conducted a valuable systematic review of trials to improve outcomes associated with ACEs.[8] Sokol and colleagues did a similar review of screening children for SDH.[9] This state-of the-art article is based on clinical experience and the literature regarding conceptual and practical challenges in addressing SDH/ACEs. Our goal is to guide primary care leaders, managers, and practitioners to better address ACEs and SDHs and improve child and family outcomes.

SDH AND ACES

ACEs and SDH are conceptually similar, despite developing as separate fields of inquiry, advocacy, policy, and practice. Their definitions vary while including a variety of environmental exposures that threaten children's health, development, well-being, and safety.[4,10] The Centers for Disease Control and Prevention (CDC) defines ACEs as "potentially traumatic events that occur in childhood, and aspects of the child's environment that can undermine their sense of safety, stability, and bonding."[11] They define SDH as "conditions in the places where people live, learn, work, and play that affect a wide range of health and quality-of-life risks and outcomes."[12] Lists of potential ACEs and SDH vary (Table 1). The family and home environment are the critical social context, especially for young children. Exposure to domestic violence (DV), for example, is clearly both part of their social context and likely traumatic, and an example where ACEs and SDH overlap. Other issues, such as access to education or health care, more typically are construed as SDH. Although ACEs and SDH somewhat overlap, PCPs have been encouraged to screen for both. In practice, the core task is to prioritize which of the many possible SDH/ACEs to address, regardless of varying taxonomies.

TABLE 1 Examples of Adverse Childhood Experiences (ACEs) and Social Determinants of Health (SDH)

ACEs[10]	SDH[11]
Physical abuse by caregiver	Social and community context
Neglect by caregiver	Economic stability
Domestic violence	Education access and quality
Family member substance misuse	Health care access and quality
Family member mental health problems	Neighborhood and built environment
Parental incarceration	

THE MOVE TOWARD ADDRESSING SDH/ACES

For over a century, pediatricians have held high ideals for primary care to be comprehensive, but practice has often been narrowly focused.[1] With renewed interest in SDH/ACEs, how can primary care be modified to realize this broad vision? The Centers for Disease Control and Prevention, Centers for Medicare and Medicaid Services, health systems, and professional organizations increasingly highlight the important role that SDH/ACEs play in people's overall health.[13,14] Growing evidence of this relationship has led government payers, private insurance companies, and health care systems to consider ways to address problems facing many families.[15] Nevertheless, some question the appropriateness of primary care accepting this evolving role, particularly in the context of time and fiscal constraints.[16] Good practice for identifying, assessing, and addressing SDH/ACEs, as well as the effectiveness of interventions, remain subjects of debate.[17,18]

THE SCIENTIFIC FOUNDATION FOR ADDRESSING SDH/ACES

Exposure to ACEs in childhood has been associated with multiple long-term health consequences, including heart disease, diabetes, obesity, and depression.[4,19] The risks increase with the number of ACEs, and the linkage is thought to be in part via high levels of stress hormones in childhood and adolescence.[4,19–21] The substantial evidence of the economic and societal impact of ACEs provides justification to both prevent these experiences and to intervene if they have occurred.

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The science underpinning approaches to SDH/ACEs remains preliminary: which problems to prioritize, how far back in time to cover, when to screen, how to phrase questions, and how to treat. For example, although multiple screening tools exist, few have been rigorously evaluated for usability, reliability, and comparative effectiveness.[18,22] Priorities and resources vary; a screener that works well in one community may be less suitable elsewhere. Ideally, empirical evidence would demonstrate that screening for SDH/ACEs and resultant interventions lead to long-term improvements in health. Unfortunately, there are many links and many years in that chain of causal events. Despite uncertainties, applying the best available science, while continuing to evaluate, learn, and refine the evidence to better address SDH/ACEs, is a realistic strategy.

DEVELOPMENTS IN SUPPORT OF ADDRESSING SDH/ACES

As the US health care system grapples with high costs and varying quality, and as payment moves from fee for service to fee for value, PCPs must consider their role in helping address SDH/ACEs. Ideally, advocacy, education, clinical tools, payment reform, referral platforms, and integration of care management and behavioral health with medical services are needed to improve children's social environment and health; such innovations should improve the value of care.

As health care financing has evolved, incentives for quality have been combined with managing costs in a variety of payment methods known as "fee for value." The spectrum of fee for value structures starts with incentives for quality and cost control, moves toward shared risk and shared reward, and, in its most robust form, involves fully capitated payments with embedded quality metrics.[23] The trend toward value-based care has accelerated over recent decades, with increasing national penetration.[24] Some payers or health systems use addressing SDH/ACEs as a quality metric or as an end in and of itself.[25] However, as health care delivery moves toward full capitation and responsibility for total cost of care, PCPs will need to innovate to keep patients as healthy as possible. Programs that address SDH/ACEs, such as transportation limitations and food insecurity, do exist,[26] but more approaches need to be evaluated.[15]

Other promising developments in primary care are embedded (ie, within a practice) care management and integrated behavioral health (IBH). These sometimes overlap depending on the expertise, clinical skills, training, and reimbursement mechanisms in a particular practice. Licensed clinical social workers often provide both IBH and care management.

Although care management and IBH are increasingly viewed as essential and cost effective,[27–29] challenges remain. A practice must be of sufficient size to support extra personnel. In addition, payment systems vary for such services, and practices often differentiate which services are available for whom based on payment source. The coronavirus disease 2019 pandemic fostered the increased use of telehealth; this could expand to help address these issues. Video visits and use of community hubs can be effective[30–33] and can enable professionals to efficiently cover several practices. Importantly, such models can help limit the costs of providing such care.

Lack of staff and expertise illustrates the conundrum facing PCPs as they aim to offer broad, supportive care within the current health care environment. That said, the role in primary care is often one of triage and facilitating additional evaluation and/or help when needed. In this sense, helping address SDH/ACEs is akin to addressing many medical problems. The following sections focus on important practical aspects of addressing SDH/ACEs.

WHAT LIFECYCLE PERIOD TO TARGET?

Screening may target family conditions, parent or child experiences (current and/or past), or a combination (Table 2). Although past experiences can have long-lasting impacts, current or recent problems tend to have more current effects, may be easier to address, and parents may be more amenable to accept help.[34,35] Both parents and children typically are affected by problems such as parental substance use and food insecurity. We thus recommend prioritizing SDH/ACEs that are current or recent.

AT WHAT DEVELOPMENTAL STAGE TO SCREEN?

SDH/ACEs can affect children of any age (Table 2). However, an argument exists for prioritizing early childhood, a period when children have the most frequent visits for health care and their families' relationships with PCPs may be the most influential. Early childhood is also an especially critical time in children's development.[36] Nonetheless, many SDH/ACEs remain relevant throughout childhood, although the prevalence of some SDH/ACEs varies across different developmental periods. Another consideration is that it is already standard practice to screen adolescents directly for several SDH/ACEs. We suggest prioritizing screening for parents of young children (aged 0–5), but PCPs may

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TABLE 2 Suggestions for Screening for SDH/ACEs

Issue	Suggested Solution
What lifecycle period to target?	Focus on recent and current problems.
Whom to screen?	Prioritize parents of young children (eg, ages 0–5).
Universal versus selective screening	Universal (eg, parents of all young children).
Broad versus focused screening	Prioritize a few SDH/ACEs to address.
What to screen for?	Parental depression, severe stress, unhealthy drug use, domestic violence, harsh punishment, food insecurity.
Selecting a screener	Use an evidence-informed screener that fits the practice. The AAP STAR center has a list.[7]
When to screen?	Select several well-child visits.
Responding to positive screens	Acknowledge parent's disclosure.
	Use evidence-informed approach.If possible, work with a behavioral health professional (eg, social worker).
Reimbursement	Use CPT code 96161, check with local insurers.
Training for PCPs	Prepare PCPs to play this role.
	See AAP STAR Center, SEEK Website.
Motivational interviewing (MI)	Incorporate principles of MI.
Protective factors/strengths	Identify family strengths and resources to facilitate engagement.
Informal support for families	Foster and strengthen informal supports.
Parent handouts	Provide handouts as an adjunct to conversation.
	Customize with information on local resources.
Facilitating referrals	Plan and assess the practice's system to ensure referrals succeed.
Use of technology	Use software to facilitate screening, assessment, parent education and follow-up.

CPT, Current Procedural Terminology; SEEK, Safe Environment for Every Kid.

reasonably choose to extend this to families with older children.

HOW COMPREHENSIVELY TO SCREEN?

Universal Versus Selective Screening

Decisions about whom to screen are sometimes based on whether there are known higher-risk populations to prioritize or whether there are subgroups for whom the interventions are more available or more efficacious (Table 2). There may be ethical problems to screening based solely on demographic factors that are associated with risk unless there is very strong evidence. Until evidence is developed, it seems preferable to screen more broadly (eg, parents of all children aged 0–5).

Broad Versus Focused Screening

Many practices have adapted the Kaiser Permanente model, screening for 10 or more adversities.[37,38] Such a broad approach comports with the findings about "dose-related" impact (ie, a greater number of adversities is associated with poorer outcomes),[39] thus identifying the most exposed and possibly most affected children. It remains uncertain, however, what to do with the high-exposure families, given that there is no generic high-exposure intervention. It is likely more useful to instead identify and address specific problems the family prioritizes. However, we acknowledge that some families have multiple problems that may challenge a comprehensive approach.

Broad approaches may have other drawbacks. Screening for more problems requires more PCP training, more time to address them, identifying more resources, and more referrals facilitated, as well as efforts to ensure these occur. An important consideration is the paucity of evidence for screening for some problems, such as current or recent child abuse. In addition, some problems, such as emotional maltreatment, are quite complex and difficult to readily identify; PCPs may feel ill-equipped to assess and respond. Other problems, such as inadequate housing, may be especially challenging to address, considering the scarcity of resources in many regions. Given the preliminary state of the science, it is our judgment that it is prudent to start addressing a few prioritized SDH/ACEs.

WHAT TO SCREEN FOR?

Selecting Which SDH/ACEs to Prioritize

Commonly accepted criteria for screening include:

1. the condition must be prevalent or of significant public health importance;
2. a sensitive and acceptable screening tool that is easy and inexpensive to administer with little risk must be available;[36] and
3. effective interventions must be available (Table 2).

Many problems are widely prevalent and are clearly connected to health (eg, parental substance use).[40] In contrast, other problems may be rare in some communities. Without systematic surveillance, however, the prevalence of problems is often uncertain. Recent studies comparing the impact of ACEs found that the most trauma-related symptoms

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manifested among the children and teens who were exposed to parental emotional abuse, DV, and parental mental health problems.[41] ACEs such as parental incarceration appeared less toxic. Other problems that are relatively prevalent and toxic included bullying, parental stress, and food insecurity. Some of these SDH/ACEs have evidence-informed interventions that are generally available, such as treatment of depression, parental stress, substance use, and food insecurity.[42–44] These and the above considerations point to the advantage of prioritizing a limited number of problems with readily available interventions to help meet critical needs of the population served. The following SDH/ACEs have a relatively strong evidence base and may serve as useful targets to address:

- Parental depression. Its negative impact has been amply demonstrated, validated screening tools exist, and evidence-based interventions are generally accessible.[44–47]
- Severe parental stress. The problem is common. Evidence-informed parenting programs exist in many communities.[48–51]
- Unhealthy drug use. This problem, too, is prevalent. Treatment can be effective,[40] and there is support from the U.S. Preventive Services Task Force for screening adults.[52]
- Domestic violence. This is a toxic and relatively prevalent adversity. Widely used screens and evidence-informed intervention programs exist.[53–56]
- Harsh punishment. The potential harm associated with these practices is well established. An array of parent training and disciplinary interventions are available.[57,58]
- Food insecurity. This problem is prevalent in low-income communities. The interventions are relatively straightforward. Evidence exists that screening can increase access to programs such as the Supplemental Nutrition Assistance Program and the Special Supplemental Nutrition Program for Women, Infants, and Children.[42,59–61]

HOW TO SCREEN?

Identify an Evidence-Informed Screening Questionnaire

It is optimal to use a validated questionnaire with good sensitivity and specificity, as well as predictive values (Table 2). Research has focused on screening for individual problems, such as depression,[62–64] food insecurity,[42,65,66] DV,[67,68] substance use,[69,70] and discipline challenges.[71] Of note, screeners targeting multiple problems have not been validated in their specific formats, although some component questions may be validated. Related considerations in selecting a screener include the ease of administration, scoring, and interpretation, which is critical in a busy practice. Some screeners are brief and simple to interpret; others are longer with multiple response options. The screener should be easily understood (ie, at no more than an eighth grade reading level) and available in locally used languages. Acceptability to providers and parents is also important. The introduction can help convey its purpose in an empathic tone; building upon PCPs' longstanding concern for children's well-being offers a familiar context for screening. The AAP STAR Center lists several available screeners,[72] and systematic reviews provide valuable critiques.[8,9]

When to Screen?

One consideration is whether to focus only on well-child visits or also "sick" visits for addressing SDH/ACEs. Parents of an ill child may be anxious and reluctant to delve into psychosocial problems at that time. Alternatively, some opt to seize all opportunities and screen at sick and even emergency visits. Optimal timing and frequency for SDH/ACEs screening have not been established. Screening repeatedly over time does seem warranted given that conditions change, including perhaps parents' readiness to disclose problems.

HOW TO ADDRESS IDENTIFIED PROBLEMS?

Response to Positive Screens

PCPs need to specifically acknowledge when parents disclose SDH/ACEs on forms.[73,74] Otherwise, parents may doubt the seriousness of the inquiry. It is helpful to briefly reflect the sensitive information a parent has shared, together with an expression of empathy and a wish to help.

Use of an Evidence-Informed Approach to Address SDH/ACEs

Clearly, screening is only a first step. PCPs need also to be prepared to briefly assess and initially address identified problems; often this is with help from a behavioral health colleague in the practice. Many problems are best addressed by community resources, requiring good referral processes in primary care practices. Reviews cited earlier describe several options, as does the AAP STAR Center.[7–9] One example of an evidence-informed model is the Safe Environment for Every Kid (SEEK), involving training of PCPs in brief interventions incorporating principles of motivational interviewing, screening for targeted problems, assessment tools, parent handouts, and behavioral health or care management if possible, in conjunction with referrals to community resources. This model has been shown to decrease reports

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to child protective services, medical neglect, harsh punishment, and immunization delay.[75,76]

Implementing an Efficient Approach to Addressing SDH/ACEs

An important concern PCPs face is the limited time to address many issues in a brief well-child visit. Though studies show that it is possible to improve preventive services in clinical settings,[77,78] adding elements to primary care requires more time, eliminating some aspects of the visit, or sharing responsibilities with team members. Models for improving efficiency include parent self-administered screening, EHR-based screening, integrated behavioral health care, and/or care managers.[79]

Reimbursement is Another Important Consideration

Generally, reimbursement for well-child visits is relatively modest and may be a disincentive to expanding the scope of care and the time required. The Current Procedural Terminology code 96161 covers care provided to parents during well-child visits and 96060 covers psychosocial screening that pertains to a child's health[80]; reimbursement for these codes, however, tends to be minimal. An exception is California's program aiming to halve the rate of ACEs by 2030; practices receive $29 each time a family is screened at well-child visits.[81] Furthermore, the National Committee for Quality Assurance has criteria for practices to qualify as a "Patient-Centered Medical Home."[82] By providing comprehensive care, including helping address SDH/ACEs, this designation can lead to enhanced reimbursement. In addition, as health care reimbursement shifts toward value-based care, the incentive at the practice level will be for healthier patients, not more units of service, which should help support this work. Advocacy to bolster reasonable reimbursement for more comprehensive care is critical to encourage attention to SDH/ACEs.

Facilitate Training and Support for PCPs and Staff

It is easy to deploy screeners; it is less easy to ensure appropriate responses. Many pediatric PCPs have not been trained to address problems such as DV or parental substance use disorders.[83,84] PCPs and staff need training and support to play this role competently and comfortably. High-quality online training to efficiently assess and address these problems is increasingly available.[7,85] "One-off" training, however, seldom suffices[86]; it should be ongoing. In addition to formal training, ongoing clinical involvement and collaboration with behavioral health professionals increase PCP competence and confidence.[87]

Incorporate Principles of Motivational Interviewing

The medical model has long involved professionals instructing patients and parents on what to do. This often does not work. MI offers a different approach to improve health outcomes in adults[88] and youth (Table 2).[89,90] It begins with recognizing that parents, youth, and many children aged >6 may have their own view of an issue and whether and how to address it. MI begins by assessing their stance and working with them to develop a plan. In this way, they largely "own" the plan and are more likely to adhere to it.

Identify and Use Protective Factors/ Strengths

Identifying and working with parent or child strengths or protective factors may help buffer the impact of stressors and contribute to health and resilience (Table 2).[91,92] Protective factors may be "internal" to a family, such as a parent's wish for their child to be healthy or a child's goal to be a good soccer player. Other protective factors are "external" to the immediate family, such as extended family support, home visitation or after-school programs, community health workers, mental health resources, food pantries, or the care provided by caring PCPs. Deliberately identifying and incorporating protective factors into one's clinical approach can strengthen the professional–parent relationship and support families in overcoming adversities, thereby promoting resilience. However, systematic research on screening for and utilizing protective factors is preliminary.[93,94] Rather, these can be identified via observation and during an assessment, such as a parent's concern for their child's health or their constructive approach to challenging behaviors.

Consider Informal Support for Parents

In addressing SDH/ACEs, professionals often think solely of professional services, but most people often receive help informally, from family, friends, Internet sites and support groups.[95] PCPs can play a useful role in fostering such support (eg, promoting a father's involvement in his child's health care). Various recommendations have been made about how to identify and promote child and family resilience.[96] Applying principles of MI in the context of a trusting relationship may enhance engagement with needed resources. In addition, the caring attitude that a PCP conveys may itself provide valuable emotional support.[97,98] Understanding a family's psychosocial issues may also help manage medical problems. With this broader perspective, PCPs usually have something meaningful to offer.

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Parent handouts with easily understood information on targeted problems and, ideally, with customized information on local resources are valuable adjuncts to what is communicated in person. This information may be conveyed, with parental permission, electronically via a parent's portal or text messages with links to services. In addition, posters and educational videos in waiting areas can introduce families to the importance of SDH/ACEs.

Facilitating Referrals

Referrals are often not made or completed.[99] Barriers include logistical challenges, such as time availability, scheduling and keeping an appointment, ambivalence about addressing a problem, insufficient resources, criteria for qualifying for the service, and other barriers (eg, phone service, transportation, language, and limited hours). Some parents may think obtaining help is stigmatizing or anticipate cultural insensitivity or judgments. PCPs therefore need to have good referral processes (Table 2).[100] Helpful components include having referral information readily available, written protocols on when referrals should be made, a tracking system for monitoring referral completion and, when possible, formal agreements with local agencies.[100–102] Ideally, practices have relationships with community agencies and a clear understanding of the information needed for the referral. In addition, with parental permission, a two-way exchange of key information can be helpful. Clinical experience suggests that a "warm hand-off" to a social worker or care manager, a personal introduction, helps instill confidence in someone ambivalent about a referral.[103] Similarly, when PCPs express confidence in an intervention, parents are more apt to adopt a positive stance.

Using Technology to Help Address SDH/ACEs

EHRs have transformed health care. Addressing SDH/ACEs using technology integrated into standard workflows and the EHR is optimal. For example, a parent can receive a link to a screener in advance, complete it at their convenience, and the PCP has the responses at the start of the visit. In addition, the monitor can serve as a teleprompter, guiding an assessment and planning. Software can efficiently facilitate auto-documentation, referral, and sharing information and parent handouts via a portal, with parental agreement. Given that federal legislation facilitates parents' access to their child's EHR, tact is needed when documenting DV discretely to avoid endangerment (eg, "discussed family conflict").

CONCLUSIONS

In summary, SDH/ACEs clearly influence the health, development, well-being, and safety of children and their families. Helping address these problems should be a fundamental part of pediatric primary care. Yet, questions and challenges remain. No one or best way exists to achieve this vision. Among our most important suggestions: start with a small number of prioritized SDH/ACEs (Table 2). Choose them based on their prevalence, seriousness, and the availability of evidence-informed resources in the care network or community. Prioritize screening for families of children aged <6. Ensure adequate training and preparation of PCPs to help them respond competently to positive screens. Have good referral processes to facilitate successful transitions. Technological advances can facilitate implementation. It is our hope that pediatricians can apply the solutions suggested in this article to select an approach to addressing SDH/ACEs that best fits their practice and the children and families they serve.

ABBREVIATIONS

AAP: American Academy of Pediatrics
ACE: adverse childhood experience
DV: domestic violence
EHR: electronic health record
IBH: integrated behavioral health
MI: motivational interviewing
PCP: primary care professional
SDH: social determinants of health
STAR: Screening Technical Assistance & Resource

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