

## ORIGINAL RESEARCH

## Integrating Adverse Childhood Experiences and Social Risks Screening in Adult Primary Care

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**Background:** In 2020, the state of California started financially incentivizing primary care practices to screen for adverse childhood events (ACEs). In its current Medicaid 1115 waiver, the state also has encouraged health care teams to screen for social risks (SR) – (eg, food, housing, and transportation insecurity). In this qualitative study, we explore community health center (CHC) staff and patient perspectives about opportunities and barriers to integrating adult screening for ACEs and SR.

**Methods:** We identified eligible California CHCs through Medicaid claims data on ACEs screening and/or participation in ACEs or SR-related learning collaboratives. Staff and/or patients in 12 clinics participated in semistructured interviews exploring opportunities and barriers to integrated ACEs and SR screening. Interviews were analyzed using a rapid qualitative data analysis approach.

**Results:** Thirty-nine clinic staff (including clinic leaders, allied health professionals, licensed clinicians) and 10 patients participated. While staff and patients often conceptually endorsed integrated ACEs and SR screening, they identified substantial practical barriers to integration. Barriers primarily related to different screening frequencies and workflows. Other barriers reflected broader primary care time constraints and workforce shortages. Participants shared multiple recommendations to improve screening programs, including strategies for combining ACEs and SR screening.

**Discussion:** California CHC staff and patients described several conceptual benefits of integrating ACEs and SR screening, but longstanding primary care challenges make it complicated to integrate these activities. Standardizing the integration of ACEs and SR screening will require institutional and structural shifts to overcome common barriers to providing whole person care. (J Am Board Fam Med 2025;00:000–000.)

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## Introduction

Adverse childhood experiences (ACEs), traumatic events that occur before age 18, are associated with unhealthy behaviors including illicit drug use, smoking, physical inactivity, suicide attempts, and

chronic conditions in adulthood, including depression, sexually transmitted infections, cancer, diabetes, as well as premature death.<sup>1–7</sup> Black and Latine people, those with Medicaid or no health insurance, lower educational attainment, and household income below \$25,000 have higher likelihood of experiencing 4 or more ACEs than other groups.<sup>8</sup> ACEs—which are deeply tied to structural racism and other forms of structural oppression—both stem from and exacerbate population-level health inequities.<sup>9</sup> Because of

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the well-documented associations between ACEs and health inequity, a growing number of organizations now recommend ACEs screening in primary care.<sup>10–12</sup> For example, California requires Medicaid and commercial insurance companies to reimburse clinicians for ACEs screening once during adulthood.<sup>13</sup> The goal of ACEs screening in health care settings is to both identify and respond to patients' experiences of trauma, and therefore ACEs screening is often implemented as part of broader efforts to provide trauma-informed care.<sup>14,15</sup>

A parallel and sometimes intersecting literature has emerged on social determinants of health (SDoH), an umbrella reference to the social, economic, and political conditions that influence health.<sup>16</sup> Like ACEs, these conditions are heavily shaped by both historic and ongoing structural racism in the US. For individuals, the downstream manifestations of SDoH include inequitable access to education, housing, and health care, which in turn shape health. In this article, we refer to individual-level adverse SDoH as social risks (SR).<sup>17</sup> As with childhood trauma, the impact of SR on physical and mental health is well-documented.<sup>18</sup> As a result, multiple professional organizations and payers now recommend a range of "social care" activities, which includes screening for SR (eg, food, housing, transportation insecurity) in health care settings as well as using health care resources to provide needed social services or to connect patients with social service clinicians. To facilitate these and other social care activities, SR screening tools have been developed by standards-setting organizations like the National Academy of Sciences, Engineering, and Medicine and the National Association of Community Health Centers, and incorporated into electronic health records (EHR).<sup>19,20</sup>

ACEs screening is intended to assess retrospective cumulative childhood exposures, whereas SR screening in adult health care focuses on recent or current living conditions. As a result, ACEs and SR practices and related research have largely been parallel rather than unified practices across the US. They are incentivized using different policies and funding sources and often conducted separately. While some ACEs screening tools focus on experiences of abuse and neglect,<sup>3</sup> others now include experiences that can be framed as social needs, including food insecurity, racial discrimination, and housing instability.<sup>21,22</sup> There are compelling conceptual arguments for integrating ACEs and SR

screening and subsequent intervention activities. One argument is that childhood trauma may shape whether and how adults access social services for current SR; conversely, the ability to access care for past or current trauma is often limited by socioeconomic barriers. Screening for ACEs and SR together might help health care teams provide supportive, whole person care. Integrated approaches also might increase efficiency and help overcome practical challenges related to time and workforce constraints that have prevented widespread uptake of both ACEs and SR screening.<sup>13</sup> Increased efficiency may be particularly important for primary care settings such as community health centers (CHCs).<sup>23,24</sup>

Before promoting integrated approaches, we undertook this study to explore the perspectives of clinic staff and patients on the benefits and drawbacks of integrating ACEs and SR screening for adults served in California CHCs, which serve populations with complex needs and share a commitment to caring for marginalized populations.<sup>25,26</sup> While staff can share their perspectives of administering ACEs and SR screenings, patients can provide their personal experiences with discussing ACEs and SR with their health care teams.

## Methods

We identified CHCs for this study using two approaches: 1) Through Medi-Cal claims data, we identified 31 CHC sites that had billed for ACEs screening with at least 200 adult patients. 2) As there is no equivalent claims data to identify CHCs routinely screening for SR, we identified 11 additional CHCs that had participated in ACEs or SR-related learning collaboratives, grants, or research. Of 42 sites contacted via e-mail, 12 agreed to take part in this research (seven identified from claims data, five from existing networks).

After initial contact with a clinic leader, clinic staff (eg, medical assistants, licensed clinicians, administrators) from participating CHCs were recruited via e-mail using snowball sampling. Eligible clinic staff were involved in ACEs and/or SR screening, follow-up, and/or administrative leadership for screening or follow-up activities. We specifically recruited clinic staff who were ACEs and/or SR screening "champions," meaning that they were substantially involved and supportive of screening programs. Most patients were recruited from four clinics in one CHC network (1 was recruited through patient snowball sampling). Patient recruitment flyers were posted in

clinics in English and Spanish where interested patients contacted the research team by e-mail or phone. Eligible patients were  $\geq 18$  years old and screened for ACEs and/or SR within the past three years.

### Data Collection

We conducted semistructured interviews with all study participants. Interview guides were informed by existing literature and reviewed by a national advisory group of 15 individuals with lived experience of SR and/or medical financial strain and experience advising on social care-related research. This group's suggestions were incorporated into revised interview guides in English and Spanish, which aimed to elicit 1) experiences with ACEs and SR screening; 2) potential value of integrating ACEs and SR screening; and 3) facilitators and challenges to integrated screening. Interview guides for clinic staff and patients included similar questions phrased to elicit perspectives from each group's experiences. Interviews lasted 30 to 60 minutes and were conducted virtually via Zoom or telephone between September 2022 and April 2023. All interviews were in English (no participants preferred Spanish).

### Data Analysis

Interviews were professionally transcribed and analyzed using a "rapid" qualitative framework analysis approach described in the implementation science literature and used in a range of prior health care studies.<sup>27–29</sup> In this framework analysis, data collection and analysis occurred simultaneously. Each interview was summarized in a template that included an overview of the response to each question, with illustrative quotes. The template from each interview was copied into an Excel spreadsheet matrix that included all interviews and all topics discussed.<sup>30,31</sup> Three authors (IG, DR, ATL) summarized interviews and completed the analysis matrix, then synthesized participant responses into domain-specific analytic memos (eg, barriers to integrating ACEs and SR screening). Preliminary findings of the analysis were discussed with the entire author team. The study was approved by the University of California, San Francisco Institutional Review Board.

## Results

### Clinics and Study Participants

We recruited 12 CHC sites to participate in interviews.<sup>32</sup> Participating clinics were all located in counties

where more than half of all households include adults with one or more ACEs ( $n = 12$  counties).<sup>33</sup> At the time the study began, all clinics reported systematically conducting ACEs screening in adult primary care. Four clinics reported formal screening for SR using a survey; in the remaining 8 clinics, no SR screening tool was routinely used.

We conducted interviews with 39 clinic staff members: 38.5% clinic leaders, 35.9% allied health professionals (including medical assistants, health educators, case managers, patient navigators), and 25.6% licensed primary care and mental health clinicians. Study participants worked at CHCs for an average of 5.3 years, were majority women (82.1%), Hispanic/Latine (43.6%) or White (33.3%), and over half spoke both English and Spanish (56.4%) (Table 1). We also conducted interviews with 10 patients from five clinics. Most patients were 18–44 years of age (80.0%), identified as White (60.0%), Non-Hispanic/Latine (60.0%), women (80.0%) (Table 2).

**Table 1. Clinic Staff Demographics ( $n = 39$ )**

	Mean	Std. Dev.
Years at Participating CHC	5.3	5.2
	Count	Percentage
Clinical roles		
Clinic leadership	15	38.5%
Allied health professionals	14	35.9%
Licensed clinicians	10	25.6%
Gender		
Woman	32	82.1%
Man	6	15.4%
Non-binary	1	2.6%
Race and ethnicity		
Asian or Pacific Islander	4	10.3%
Black or African American	3	7.7%
Hispanic/Latine	17	43.6%
Multi-racial	2	5.1%
White	13	33.3%
Languages spoken		
English and Spanish	22	56.4%
English only	8	20.5%
English, Spanish, and at least one other language	6	15.4%
English and one other language (excluding Spanish)	3	7.7%

*Note:* Sixty percent of clinic leaders were also licensed clinicians ( $n = 9$ ).

*Abbreviations:* CHC, Community health center.

**Table 2. Patient Demographics (n = 10)**

	Count	Percentage
Years receiving care at CHC		
Less than 1 year	3	30.0%
1 to 2 years	2	20.0%
3 years or more	4	40.0%
Unknown	1	10.0%
Age		
18 to 24	3	30.0%
25 to 44	5	50.0%
45 to 64	2	20.0%
Gender		
Woman	8	80.0%
Man	1	10.0%
Prefer not to answer	1	10.0%
Race		
Black or African American	1	10.0%
Multi-racial or other	2	20.0%
Prefer not to answer	1	10.0%
White	6	60.0%
Ethnicity		
Non-Hispanic/Latine	6	60.0%
Hispanic/Latine	3	30.0%
Prefer not to answer	1	10.0%
Highest level of education		
Some high school	1	10.0%
Graduated high school/GED	2	20.0%
Some college	4	40.0%
Graduated college or graduate degree	3	30.0%
Household income		
0 to 25K	4	40.0%
25K to 50K	4	40.0%
50K to 100k	1	10.0%
Unsure	1	10.0%

Abbreviation: CHC, Community health center.

Our three key findings were generally consistent across both clinic staff and patient participants. On the whole, study participants 1) identified ACEs and SR screening procedures that were not fully integrated; 2) supported the idea of integrating ACEs and SR screening; and 3) highlighted a practical advantage as well as substantial barriers to integration. Lastly, we share clinic staff and patient recommendations for potential integration of ACEs and SR screening.

### ***Existing ACEs and SR Screening Practices Vary Across Clinics and Are Rarely Integrated***

The first key finding was that staff and patients typically described ACEs and SR screening processes

that were not well integrated. Clinic workflows for both ACEs and SR screening varied across clinics. This included variation in what was screened for, how frequently screening was conducted, which staff members conducted the screening, and what happened after screening. Clinics used several different ACEs screening surveys. Eleven clinics utilized a deidentified screening, in which patients shared the number of ACEs that they experienced but did not specify which ones; one clinic used an ACEs survey where staff could see the individual ACEs each patient reported. ACEs surveys were often collected using paper format, with one clinic handing patients tablets with the ACEs survey. Results were entered in the EHR. Staff reported variable ACEs screening frequency, ranging from once a year to once in a lifetime. The workforce responsible for ACEs screening also differed across clinics. While most clinics relied on medical assistants, one had dedicated ACEs navigators whose full-time role focused on screening, patient education, and referrals. Finally, ACEs-related referral practices also differed across settings. Most clinics had on-site behavioral health clinicians. However, the criteria (eg, number of positive ACEs) for offering referrals to these services varied (see Appendix Table A1).

SR screening workflows also varied considerably across sites (Appendix Table A2). Four of the 12 clinics used standardized SR screening surveys (eg, PRAPARE<sup>19</sup> or checklists developed by clinic staff). One clinic had a SR survey built in the EHR, another clinic provided the option to self-screen with tablets, and paper formats were also used to formally collect SR. Eight clinics indicated that staff conducted informal conversations about SR with patients and did not use a standardized SR screening. Formal screening typically included multiple SR domains (eg, food, housing, and transportation insecurity), while staff who described informal conversations about SR said they individualized these conversations to their perceptions of patients' specific needs. The workforce responsible for SR screening or conversation also varied, including front desk personnel, medical assistants, clinicians, case managers, and ACEs navigators. Lastly, the types of resources and referrals offered following SR screening varied; some clinics provided on-site-specific resources (eg, onsite food pantries); others reported relying on community-based resource and referral platforms such as 211 to facilitate referrals to other agencies.



Among the four clinics that conducted *both* ACEs and SR screening, only one clinic's workflow involved integrating ACEs and SR screening. In that clinic, screening for both ACEs and SR were conducted by medical assistants in annual wellness visits. In the other three clinics with defined workflows for both ACEs and SR screening, the screenings were conducted by different staff members at varying frequencies. ACEs screening was conducted once in adulthood at all three sites, while all screened for SR repeatedly, at different intervals.

### ***Conceptual Benefits of and Drawbacks to ACEs and SR Screening Integration***

The second key finding was that most clinic staff and patients endorsed the idea of integrating of ACEs and SR screening. They noted that ACEs and SR are interconnected, and many people experience both (Table 3). One primary care clinician described, "It is impossible to take one out from the other" because traumatic events during childhood can influence SR in adulthood. Many clinic staff believed that integrated screening would provide a more holistic view of patients' needs, facilitating patient-centered care. One clinic staff member from a clinic screening for both ACEs and SR shared, "I feel that... it does open a gateway to be able to interact and understand your patients more and see where they are coming from, as well as for the patient, who realizes that the provider does care."

Some patients and staff suggested that integrated screening would increase patients' trust in the health care team. One patient participant stated that "opening the dialog... does create a sense of trust if asked appropriately." The participant went on to indicate that being connected with community resources and behavioral health providers helped them feel seen and heard by their health care team. Several patients expressed gratitude that their health care teams showed interest in their social and emotional well-being.

Many participants expressed concern that if screening for ACEs and SR were routinely integrated, the screening process might feel overwhelming to patients and staff. Multiple staff members described experiences in which the sensitive nature of ACEs screening questions triggered strong emotional responses from patients, and they were concerned that adding SR screening to the same conversation could exacerbate those feelings.

In rushed primary care visits, strong emotions tended to extend the length of visits, making it challenging for staff to attend to patient needs while keeping their next visits on time. A patient shared that combining screenings "would feel like... a job interview instead of a doctor's appointment." These concerns were raised by people who had not experienced integrated ACEs and SR screening and were doubtful about combining them.

### ***Practical Advantages and Barriers to ACEs and SR Screening Integration***

A third key finding was that participants highlighted a practical advantage for integrated screening, as well as substantial barriers to integration. Several staff and patients noted that integration could increase the efficiency of screening and subsequent intervention activities. They proposed that a combined questionnaire could be collected by one trauma-informed staff member and streamline postscreening conversations with clinicians since the resources provided to support people with ACEs and SR often overlapped. Despite the potential efficiencies, practical barriers dominated conversations about integration.

Commonly mentioned barriers related to screening frequency, primary care time constraints, and workforce challenges (see Table 4). Clinic staff and patients expressed concerns about the frequency of an integrated survey given that most clinics screened for ACEs once in adulthood but screened for SR more frequently. Several clinic staff and patients maintained that SR screening should occur more frequently, as patients might experience new economic challenges at any time and benefit from social services referrals or other resources. For this reason, one medical assistant suggested that limiting SR screening to once in a lifetime might result in missed opportunities to identify and address social needs.

Other barriers described reflected broader issues facing US primary care, including time constraints and workforce shortages. Participants noted that 10 to 15 minute current primary care visits were insufficient to cover physical and mental health screenings, discuss patients' concerns, complete ACEs and SR screening, and provide relevant follow-up. Some staff noted that with limited time, physical health issues often felt more urgent than ACEs or SR screening and follow-up. Several sites did not screen patients who spoke languages other than

**Table 3. Conceptual Benefits and Drawbacks of Integrating ACEs and SR Screening**

Topics	Description	Supporting Quotes
<b>Benefits</b>		
Interconnection between ACEs and SR	<ul style="list-style-type: none"> <li>• ACEs and SR are correlated.</li> <li>• Childhood trauma shapes current life stressors.</li> </ul>	<ul style="list-style-type: none"> <li>• “They all work so hand in hand with each other. It’s impossible to take one out from the other.” – primary care clinician</li> <li>• “The ACEs questionnaire, the original adult 10 question questionnaires, is just not, in and by itself, as useful as when we combine it with more social determinants of health questions. And even just the PEARLS tool that we use for kids is so much more helpful, because it has these additional categories that are really crucial for us to know about.” – clinic leader and primary care clinician</li> <li>• “I believe it’s absolutely necessary to have both. If you’re opening a wound and not addressing it. . . It’s not trauma informed, it’s not patient-centered. And I believe it defeats the purpose of the conversation. . . As we look at social determinants of health, these are things that people live, experience, work. All these conditions impacted their family from their childhood, impacted their teenage selves or adult selves, the kids that they’re raising and the families that they’re starting. If we’re talking about ending cycles of ACEs, it means giving them support.” – ACEs navigator</li> </ul>
Building Trust	<ul style="list-style-type: none"> <li>• ACEs and SR screening can have positive impact on patient-clinician relationships.</li> <li>• Screening may elicit trust and open communication.</li> </ul>	<ul style="list-style-type: none"> <li>• “I think it opens so many beautiful doors. I’ve never ever felt it hindered my connection with my patients. . . I would say 90% of the time it leads to an opening and. . . a deeper connection with the patient.” – primary care clinician</li> <li>• “I feel that it does open things up, it does open a gateway to be able to interact and understand your patients more and see where they’re coming from, as well as for the patient, who realizes that the provider does care.” – medical assistant</li> <li>• “I could see it definitely being triggering for some people. . . it perhaps creates a barrier between the provider and the patient. But I think at the end of the day, opening the dialogue and also, it does create a sense of trust if asked appropriately. And then with some sensitivity, knowing that they can trust their primary care provider.” – patient</li> </ul>
<b>Drawbacks</b>		
Overwhelming to patients and staff	<ul style="list-style-type: none"> <li>• ACEs screening can trigger emotional responses from patients – Addition of SR screening could overwhelm patients.</li> </ul>	<ul style="list-style-type: none"> <li>• “What I’m afraid would happen is that people would start to deny their economic needs that we could help with. . . Because they’re like, ‘Every time you ask me these questions, it re-traumatizes me. I don’t want to talk about this anymore.’ They’re like, ‘No, I’m fine. I have enough food.’ ‘No, I’m fine. I don’t need transportation.’” – primary care clinician</li> <li>• “I feel like the ACEs is very personal and if you ask those personal questions, sometimes it brings up bad memories. They tend to get emotional, it just brings up their past. . . And then if you turn around and you’re like, ‘Okay, well are you homeless? Are you, this?’ And then it’s kind of like, ‘No, I don’t want to talk about it.’ So like, ‘I’m done with the conversation, I don’t want to talk about anything else.’ So I feel like one thing at a time, instead of bombarding them with 20 million questions, I think would be better.” – medical assistant</li> <li>• “It would feel like. . . a job interview instead of a doctor’s appointment.” – patient</li> </ul>

*Abbreviations:* ACEs, Adverse childhood experiences; SR, Suicide risk.

English or Spanish. Clinics generally had staff who were fluent in English and Spanish but not all other languages spoken by their patients. Though they had access to professional interpreters via phone or video, they worried that using an interpreter would extend the visit length or were reluctant to discuss what they considered “sensitive topics” using an offsite interpreter.

Staff reported that the COVID-19 pandemic had worsened burnout, demanding clinic schedules, and staff turnover. A clinic leader concerned about staff burnout shared:

“We try to fill the gaps as much as we can. . . but we can’t be everything to all. . . We got to be your primary care provider, we got to be your mental health provider, we got to be your electric company, we got to be your taxi cab, we got to be your food bank, your grocery store, we got to be your landlord. That’s a lot.”

High staff turnover contributed to inadequate staffing, disrupted longitudinal patient-clinician relationships, and meant many staff were not trained in ACEs and SR screening and response. These staffing gaps undermined the potential

**Table 4. Practical Advantages and Barriers to Integrating ACEs and SR Screening**

Topics	Description	Supporting Quotes
Advantage		
Efficiency	<ul style="list-style-type: none"> <li>More effective and efficient to complete one integrated screening.</li> <li>Reduce discussion of overlapping topics.</li> <li>Offer more resources for referrals.</li> </ul>	<ul style="list-style-type: none"> <li>"I would say that the shorter the better, the quicker the better for everybody." – primary care clinician</li> <li>"We see a lot of patients a day. . . sometimes over 30 patients a day. . . So to be honest, yes [integrated screening] will be helpful, if it's shorter screening, or less time-consuming, especially for adult patients, they have a lot of comorbidities." – primary care clinician</li> <li>"That could definitely be harder for some people. If I had gotten all of that at the same time, I think that would've been fine. Especially if you're a new patient. . . it'd just kind of be nice to get that out of the way." – patient</li> </ul>
Barriers		
Screening Frequency	<ul style="list-style-type: none"> <li>Data collection frequency for ACEs and SR differs.</li> <li>ACEs screening are generally administered once a lifetime.</li> <li>SR screening varies (e.g., during new patient intake, every visit, or annually).</li> </ul>	<ul style="list-style-type: none"> <li>"We were talking about the frequency because it's like, 'Okay, do you do the social determinants, every visit every time or how do you do it?' With ACEs it's easy after the age of 18, you only do it once in a lifetime because it never changes. Right? So with social determinants that can change in a day. Right? You could lose your job." – clinic leader</li> <li>"I feel if we ask both of them together every year, we can probably miss out on an opportunity to help out somebody that's in need before the year hits." – medical assistant</li> </ul>
Time Constraints	<ul style="list-style-type: none"> <li>Brief visit time (10 to 15 minutes).</li> <li>Clinic staff have competing needs to address.</li> <li>Clinic staff may feel hesitant to "open a can of worms".</li> </ul>	<ul style="list-style-type: none"> <li>"I guess my input is that for it to happen at the same visit isn't totally necessary. Would both of that information be useful? Absolutely. I'm just not certain that getting all of that done in one swoop is totally advisable in terms of the timing." – primary care clinician</li> <li>"It's more conversation around what the patient is facing both in their past and their present, and an opportunity to intervene if we have the resources to do so. So I think it's a good idea. Whether it's feasible is the only piece that you would have to really think about, just because our visits are 15 minutes." – clinic leader and primary care clinician</li> <li>"There's just so many things that have to be done and it could become overwhelming for staff, the provider and the patient. . . So I think that's where we get less compliance because it's like, 'Now I have to do this, now I have to do that.' It's like some of them say, 'I don't even want to fill out this paperwork anymore. Why is there so much paperwork?'" – clinic leader</li> <li>"Those are delicate subjects, and they're delicate things that people go through in life. It's not just something that you can put somebody in a room and say, 'Oh, yeah, we'll do this for half an hour,' and then send them on their way." – patient</li> </ul>
Workforce-related Concerns	<ul style="list-style-type: none"> <li>High staff turnover and burnout impacts morale and results in fewer staff trained in ACEs/SR.</li> <li>Differences in clinic staff responsible for administering ACEs and SR screening (e.g., medical assistants, ACEs navigators, social workers, clinicians).</li> <li>Sustainability of grant-funded roles (e.g., ACEs navigator)</li> </ul>	<ul style="list-style-type: none"> <li>"I mean we try to fill the gaps as much as we can on the areas that we can, but the way that I look at it is that we can't be everything to all because it takes a village in some regards. And we got in this business being focused on this particular area and now it's kind of grown into, okay, we got to be your primary care provider, we got to be your mental health provider, we got to be your electric company, we got to be your taxi cab, we got to be your food bank, your grocery store, we got to be your landlord. That's a lot." – clinic leader</li> <li>"From front desk to MAs to medical clinicians, we had gone through an incredible rotation of clinicians. So that's a huge challenge. So whoever you train or whoever you have conversation about this, you have to retrain because we getting new clinicians and who knows, these new clinicians may be gone in a year or so." – clinic leader</li> </ul>

efficiencies of assigning designated staff members to providing integrated ACEs and SR screening.

### Screening Recommendations

Patients and clinic staff made several recommendations about ways to maximize the benefits of ACEs/SR screening and response given barriers. For example, some participants suggested CHCs offer

an integrated screening only during new patient intake, and then administer SR screening by itself at future visits. To tackle time constraints, some staff recommended that Medicaid reimburse for a dedicated extended visit in which trained staff members would conduct ACEs and SR screening, referral, and treatment planning. Some clinics requested patients arrive early to complete

screening forms or had tried sending them in advance, though they acknowledged that was not consistently successful.

Though the interviews were designed to elicit information on the facilitators and barriers to integrated ACEs and SR practices, study participants made multiple recommendations about strategies that are relevant to screening for either ACEs or SR separately or together (Table 5). These included the following: 1) Clinic staff should explain how ACEs and/or SR relate to current health to ensure patients understand the rationale behind screening. 2) Health care teams should consider the type of visit (eg, telehealth, well-woman examination) before ACEs screening to minimize potential retraumatization 3) Health care teams should plan to discuss screening results and offer relevant and accessible resources. 4) ACEs and SR-related resources should be made available to all patients regardless of whether screening is conducted (eg, posting clinic and community-based resources at the clinic).

## Discussion

Despite the increasing number of state and national initiatives encouraging ACEs and SR screening, little is known about opportunities and perceptions for integration. To our knowledge, this is the first study to explore the perspectives of CHC staff and patients on integrating ACEs and SR screening in adult primary care. Staff and patients generally appreciated the idea of connections between ACEs and SR and believed that

integrated screening by trained staff could encourage “whole person” discussions. Many suggested that these discussions would positively impact patient-clinical team relationships by building trust and opening communication and could facilitate interventions. Despite the conceptual benefits of integrated screening and intervention practices, clinic staff and patients emphasized multiple barriers to operationalizing integrated screening in adult primary care.

A key finding of this study is that the processes for each type of screening and related interventions varied substantially across participating clinics. The lack of standardization in these workflows reflects a major gap in the existing evidence about how, when, and by whom screening should be conducted, and what constitutes a meaningful clinical response to identified needs.<sup>34</sup> As primary care teams formalize their approaches to ACEs and SR, the specific points in clinical care where ACEs and SR-related practices might efficiently and meaningfully intersect may become more clear.

Participants underscored several practical considerations that should be considered if clinics are interested in addressing ACEs and SR in a more integrated way. While there is variability in clinical practice, screening for ACEs is generally done once during adulthood, while SR screenings are often more frequent since life circumstances can shift quickly. This difference in the screening frequency is aligned with payment incentives for screening. For example, incentives for ACEs screening in California are only provided once during adulthood,<sup>35</sup> while

**Table 5. Clinic Staff and Patient Recommendations to Improve ACEs and SR Screening Programs**

Recommendations	Description
Clinic staff should fully explain why both screenings are administered and how they relate to current health.	Although the majority of patients seen at study clinics completed the ACEs screening when there was hesitancy, staff observed that patients were more likely to complete the ACEs screening when staff had adequate time and training to provide context.
Healthcare teams should take the type of visit into consideration before administering ACEs surveys to minimize potential re-traumatization.	Clinic staff had differing approaches to what kinds of visits ACEs screening should be conducted. For example, many sites did not administer ACEs screening during telehealth visits. One medical assistant firmly suggested that ACEs screening should not be administered before a well-woman exam.
Clinicians should always discuss screening results and offer resources.	Many study participants highlighted the importance of discussing ACEs and SR screening results and offering referrals and resources accessible to patients at home. Many acknowledged that it takes time to accept or realize the impact of trauma. Some patients may initially decline referrals but may be interested later. One clinic staff member therefore recommended that referrals are always offered. Clinics should be clear about the availability of referrals and provide context for accessing resources with longer waiting periods.
ACEs and SR-related resources and referrals should be provided whether or not formal screening takes place.	A patient recommended posting SR resources on bulletin boards. This would allow patients to find community organizations or clinic resources (e.g., on-site food pantry) even when SR are not discussed in a visit.

*Abbreviations:* ACEs, Adverse childhood experiences; SR, Suicide risk.



Medicare now covers SR screening at annual well visits.<sup>36</sup> Several clinic staff and patients suggested initially screening for ACEs and SR together—potentially in new patient intakes or longer appointments—then subsequently offering SR screening alone at regular intervals. If integration is pursued, clinical teams will benefit from guidance on how to talk with adult patients about the relationship between ACEs and SR,<sup>32–34</sup> as ACEs are retrospective experiences from childhood while SR are current or recent experiences in adulthood. Notably, this differs for pediatric patients since there is a relatively small difference in the timing of past and current adversity in children’s lives. As a result, some pediatric settings have intentionally combined ACEs and SR screening and response.<sup>21,37–40</sup> (Over a million pediatric patients had been screened using the PEARLS tool—which combines ACEs and several SR-related questions—in California as of December 2022.)<sup>41</sup>

Other barriers to integrating ACEs and SR relate to fundamental access and capacity problems in safety-net primary care across the US. At participating clinics, most staff reported that they screened some patients but not all despite intentions of “universal” screening, because of time constraints, lack of longitudinal relationships with patients, or lack of language concordance between staff and patients. Since screening is often skipped for patients who speak languages other than English or Spanish, this raises concerns about equity in implementation of ACEs and SR screening, (combined or not) and underscores the need for primary care investments to recruit and sustain a multilingual and multicultural workforce and support consistent use of interpreters. The recent California CalAIM 1115 waiver links some ACEs and SR screening domains to eligibility for particular kinds of care (eg, history of ACEs and/or at least one complex social factor such as access to food or housing is part of eligibility for enhanced care management for adults with serious mental illness). This makes it even more critical to ensure infrastructure and resources are available for equitable assessments.<sup>42</sup>

A related barrier is that the brief time allocated for most primary care visits makes it very challenging to include screening and discussions about ACEs and SR.<sup>43,44</sup> Our findings mirror a growing literature that has found time constraints are common barriers to routine ACEs and SR screening as well as other elements of primary care.<sup>45–49</sup> The

Association of American Medical Colleges has predicted a shortage of up to 48,000 primary care clinicians nationally by 2034.<sup>50</sup> This is paralleled by a shortage of nurses, mental health clinicians, and support staff, and major gaps in the availability of multilingual health care workers. High levels of staff burnout are a cause *and* consequence of the workforce shortage—coupled with low compensation, lack of recognition, heavy workload,<sup>51</sup> isolation at work,<sup>52</sup> and negative perceptions of organizational culture.<sup>53</sup> The common, 10 to 15 minute primary care visit even for patients with complex needs is not only a barrier to ACEs and SR screening and intervention, but also a cause of the primary care workforce shortage. Extended visit time would support the use of interpreters, implementation of team-based primary care, and make whole person care more feasible.<sup>43,44,45–49,42</sup>

Some limitations should be considered when interpreting findings from this study. First, we sampled CHCs that reported routinely conducting ACEs screening or both ACEs and SR screening. We could not recruit CHCs in California that are routinely conducting SR without ACEs screening. This is likely a result of increased Medicaid coverage for ACEs screening. Second, we interviewed staff who were ACEs champions and supported ACEs screening programs, which may not reflect the diversity of opinions from staff. Finally, due to recruitment challenges, our patient sample was small. Almost all patients were from a single health system and were not representative of the larger population that participating CHCs serve.

## Conclusion

In California CHCs with ACEs screening programs in adult primary care, staff and patients generally supported the concept of integrating ACEs and SR screening. However, staff and patients alike described practical barriers to integration. Standardizing the integration of ACEs and SR screening will require institutional and structural shifts to overcome the practical barriers that prevent clinical teams from providing whole person care that addresses both past trauma and current life stressors. Some of these shifts are specific to ACEs and SR-related activities, for example, timing or frequency of the two screenings. Necessary changes also would involve reversing a trend of disinvestment in primary care. For instance, ACEs and SR screening integration would benefit

from increased resources for care continuity and team-based care, staff that reflect the communities served, and longer visits. Making these investments in primary care would allow whole person care to become standard practice, benefitting patients and clinicians alike.

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## Appendix

**Table A1. ACEs Screening Workflow and Variability among Clinics**

ACEs Screening Workflows	Description	Variability
Screening Frequency	Clinics varied on frequency of screening ranging from once a year to once a lifetime.	Most clinics conducted ACEs screening once in a lifetime. Few clinics collected ACEs once a year.
Workforce	Clinics varied on who administered the screening.	Most clinics had medical assistants distribute ACEs screening; one had dedicated ACEs navigators who distributed ACEs screening forms. Clinicians discussed the results of ACEs surveys with patients. Behavioral health clinicians sometimes readminister ACEs surveys for referred patients.
Screening type	Clinics varied in the type of ACEs survey they administered.	Most clinics used a de-identified screening; one used an identified survey. There was variation in the version of the ACEs survey administered (e.g., ACE-10 or ACE-8 plus “resiliency questions”).
Referrals	Clinic staff varied on the type of resources or referrals offered and the criteria for offering referrals.	Most clinics had access to on-site behavioral health care. The criteria for referrals were widely variable (e.g., no ACEs, 1 or more ACEs, or 4 or more ACEs).

*Abbreviation:* ACEs, Adverse childhood experiences.

**Table A2. SR Screening Workflow and Variability among Clinics**

SR Screening Workflows	Description	Variability
Method	Clinics varied on offering formal surveys (paper or digital) or informal conversations to discuss SR.	Most clinics had informal discussions about SR instead of formal screening. SR screening was conducted during new patient intake or regular office visits.
Screening type	Clinic staff varied on the type of SR they discussed.	There was variation in the types of SR discussed. Formal surveys included PRAPARE, Staying Healthy Assessment, and a clinic-specific checklist. Informal discussions were tailored to individual patients' SR or available referral resources.
Workforce	Clinics varied on who administered the screening.	There was wide variation in clinic staff administering formal surveys or informal conversations including front desk staff, MAs, clinicians, social workers, and ACEs navigators.
Referrals	Clinic staff varied in the type of resources they offered after SR screening.	There was high variability in the types of resources and referrals offered (e.g., collaboration with 211 San Diego's Community Information Exchange, Unite Us platform, on-site food banks).

*Abbreviations:* ACEs, Adverse childhood experiences; SR, Suicide risk; PRAPARE, Protocol for responding to and assessing patients' assets, risks, and experiences; MAS, Medical assistance services.