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Universal Screening and Trauma Informed Care: Current Concerns and Future Directions

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There is a growing awareness of the prevalence and negative health effects associated with traumatic events, including childhood abuse and adversity, intimate partner violence, adult sexual assault, and exposure to combat and community violence. Health care systems have attempted to address this link by becoming trauma informed through universal trauma precautions and screening protocols. We review several clinical and methodological concerns associated with universal trauma screening in adult health care settings including: deciding which traumas to assess in which populations, integrating retrospective recall with current functioning to facilitate referrals, and guarding against adverse patient reactions and insurance discrimination. We outline potential implications for program development and future research including: adapting and refining screening tools, integrating patient preferences and privacy concerns into screening protocols, assessing resource limitations, and integrating public health advocacy into screening programs.

Public Significance Statement

As health care systems attempt to become trauma informed, many settings are screening patients of a history of traumatic events. We review several concerns associated with universal screening and outline a framework for successful program development.

Keywords: traumatic events, trauma informed care, adverse childhood events, public health screening programs

High-quality health care is not only focused on healing disease, it can also encourage entire communities to live healthier, more productive lives. With an increased focus on integrated care, the need to recognize the signs, impact, and implications of trauma and adversity is expanding beyond the psychological clinic and into a variety of medical settings (Vogel et al., 2012). The Substance Abuse and Mental Health Services Administration (2014) outlines that trauma informed organizations: (a) realize the impact of trauma and potential paths for recovery; (b) recognize the signs and symptoms of trauma in

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clients, families, staff, and others; (c) respond by fully integrating knowledge about trauma into policies, procedures, and practices; and (d) resist retraumatization (Center for Substance Abuse Treatment, 2014). Within primary medical care specifically, these principles have been integrated in various ways, including implementing universal screening for traumatic events. This article reviews potential concerns and challenges involved in universal screening for trauma in primary care settings and provides a theoretical framework for organizations implementing universal screening.

Defining Trauma and Adversity

An experience is considered traumatic if there is a "significant threat (physical, emotional, or psychological) to the safety of the victim or loved ones/ friends and is overwhelming and shocking" (Courtois et al., 2017). Trauma exposure among adult primary care patients is common, with approximately 80% reporting at least one potentially traumatic event in their lifetime (Kartha et al., 2008). Over 30% adults in a primary care setting reported experiencing a natural disaster, serious accident, and/or witnessing a serious injury or death and 7%-36% reported sexual assault at any age (Freedy et al., 2010). Adversity refers to a broader construct encompassing daily life struggles, persistent stress and extended hardship (Fletcher & Sarkar, 2013). Almost a quarter of American adults report experiencing housing insecurity and 43% report food insecurity (Kushel et al., 2006). Adversity in childhood may also play a role in current and future health outcomes; adverse childhood experiences (ACEs) refer to a collection of traumatic events and adverse situations in childhood (such as abuse and neglect, incarceration, and parental mental illness) that have been frequently associated with physical and mental health outcomes in adults (Glowa et al., 2016; Nurius et al., 2019; Raja et al., 2015).

Galvanized by the prevalence and burden of trauma and adversity, a growing number of institutions are implementing universal screening for trauma and adversity in adult primary care settings. Screening programs take three major forms: universal screening, targeted screening, and current functioning screening. The strengths and challenges associated with these programs can inform the development and implementation of trauma screening protocols in primary care (U.S. Preventive Services Task Force, 2018). Universal screening programs are those that call for screening all individuals within a specific setting. The efficacy of universal screening for psychological issues and outcomes has been shown in public schools to facilitate proper educational placement and inform remediation, and juvenile justice settings to detect suicidality, serious mental illness, and risk of reoffending (January et al., 2016; Vincent, 2011). It should be noted that even in these settings, where support services are more integrated than in primary care, successful screening implementation hinges on feasibility considerations including availability of staff time and resources (Dubowitz, 2014; Gardezy, 2019; Vincent, 2011).

In adult settings, while universal screening for interpersonal violence for women has received support, evidence for ACE screening in adults remains vague (Krist et al., 2019). A feasibility study using the ACEs instrument found high rates of trauma exposure (62%), but the program did not influence referral or follow-up plans (Glowa et al., 2016). Regardless, universal screening of adults with the ACEs instrument is growing. In January 2020; California Medicaid began compensating both child and adult providers who administered ACE screening as part of a statewide initiative to screen all patients for adverse childhood experiences (California Department of Health Care Services, 2019). In Pennsylvania, the Philadelphia ACE Task Force is working to create community buy-in for ACE screening and intervention programs (Pachter et al., 2017).

Targeted (secondary) screening programs refer to programs that screen only individuals at high risk for adverse outcomes. For example, Cancer Care Ontario implemented a routine mental behavioral health screening program for cancer patients due to the increased risk of psychological distress in this population (Dudgeon et al., 2012). Targeted screening programs may be most successful where primary care and behavioral health services are in an integrated care setting (Earls, 2018).

Current functioning screening programs use brief screeners to assess for symptoms of mental illness such as current depression and posttraumatic stress, rather than adverse event exposure. Although these protocols identify high-risk patients, they still contend with methodological issues. For depression, the U.S. Preventative Task Force (USPFT) highlighted the need for more accurate screening tools, treatments, and structural systems to address barriers (Siu et al., 2016). Moreover, even with the most widely used current functioning screener that has been validated for use in primary care settings—the patient health questionnaire (PHQ)—there remains debate about the clinical utility of cutoff scores (Mitchell et al., 2016).

Considerations Prior to Implementing Universal Trauma Screenings

Similar to other screening programs, health care systems must explore several issues prior to successful implementation of universal trauma screening. These considerations include: choosing an appropriate screening measure, deciding which patient to screen to minimize false positives, assessing the availability of referral resources, integrating retrospective recall with current functioning measures, planning for adverse reactions, and addressing potential insurance discrimination. We explore each of these issues in greater detail.

Which Trauma Exposures Should Be Assessed?

Screening can be done to assess past and present exposure to persistent adversity and traumatic events. As a result, although the ACE measure is frequently proposed as a tool for universal screening for adults in primary care, there are many other measures of trauma that have been used in large research studies, including measures of trauma throughout the life span (Wade et al., 2014). While childhood trauma may have particularly negative effects on mental and physical health (De Bellis & Zisk, 2014; Sugaya et al., 2012); assessing current exposure is also important in adult populations because certain events are likely to be traumatic regardless of age (Lacey & Minnis, 2020). For example, interpersonal trauma is related to more mental health sequelae than natural disasters and motor vehicle accidents (Contractor et al., 2018). Experiencing a serious illness was also found to be associated with posttraumatic stress disorder and depression in primary care (Freedy et al., 2010).

Further complicating the question of what to screen, is whether "dosage" of trauma and adversity warrants attention and if it can be used to make meaningful predictions. Approaches to screening that involve a tally or count up total trauma exposure are attempting to capture a cumulative risk. It is possible that an individual who has experienced a significant instance of sexual assault could be expected to exhibit greater adjustment difficulties than an individual experiencing several milder variants of childhood adversity. It is also unclear what "dosage" of lifetime trauma warrants further intervention, particularly because trauma screening alone does not measure factors that promote resilience like social support (G. Wu et al., 2013).

Should Screening Be Universal or Targeted?

Because the majority of individuals who experience past or current trauma and adversity will not experience significant mental illness, it is important that trauma-screening programs have specificity (Kessler et al., 2005). Research has demonstrated that a multiplicity of risk and resilience factors further influence whether exposure to trauma and adversity will be linked to negative physical and mental health outcomes (Brewin et al., 2000). People are more likely to be resilient when they experience single (vs. multiple) traumatic events, when they have a strong social support system, and when they are engaging in healthy coping strategies (e.g., exercise) versus unhealthy ones (e.g., smoking, alcohol use; Brewin et al., 2000). Moreover, that some individuals may experience resilience and posttraumatic growth, defined as a return to daily functioning and the ability to find meaning and purpose after a trauma, suggests that many factors may mitigate the long-term impact of trauma (X. Wu et al., 2019). Resilience scores have been found to moderate 36% of the relationship between childhood adversity and adult depression and some adversity (Poole et al., 2017). Further, there is evidence to suggest that a moderate levels of adversity may actually bolster mental health and adaptive coping skills (Poole et al., 2017; Seery et al., 2010).

How Can Retrospective Recall Affect Trauma Assessment?

The fallibility of retrospective recall is a potential pitfall when screening adults for trauma that occurred decades prior. Screening tools must be as behaviorally-anchored as possible in order to improve reliability. For example, as a part of a larger longitudinal study, Reuben et al. (2016) compared adult participants' self-reports of childhood trauma with chart notes and measures of adversity that were collected when those same participants who experienced fewer stressors in adulthood, and

those who scored higher on measures of agreeableness were less likely to retrospectively recall childhood trauma (even if there was documentation of these events), suggesting that current life circumstances and personality traits may influence the interpretation of adversity (Reuben et al., 2016). Thus, items screening protocols with items that reflect emotional state (e.g., feeling isolated by peers) versus more objective measures (e.g., physical assault by a peer), they may be reflective of a patient's current state of mind, in addition to or instead of their prior history (Baldwin et al., 2019). Moreover, test-retest reliability appears to be higher for questions related to family dysfunction (e.g., was a family member incarcerated?) than abuse (e.g., did a family member put you down; Zanotti et al., 2018). Because it is crucial to validate and believe survivors when they disclose, the screening instruments selected should reliably assess trauma exposure over the life span.

Do Universal Screenings Include Protocols for Adverse Reactions?

Mental behavioral health clinicians engage in exposure-based treatments with caution and planning. Prior to encouraging patients to disclose details of traumatic events, clinicians often assess a patient's support system, their current levels of drug and alcohol use, and their potential for harming themselves or others (Courtois et al., 2017; Zoellner et al., 2011). Although screening protocols in primary care do not assess the details of these experiences, a patient may feel compelled to talk more about their experiences with a primary care physician who is not trained to handle the disclosure, both in terms of time and expertise. Screening protocols must anticipate spontaneous, in-depth patient disclosures, which may not be therapeutic; in fact, they may do harm depending on how the patient copes afterward (Center for Substance Abuse Treatment, 2014).

Do Universal Screening Protocols Address the Potential of Insurance Discrimination?

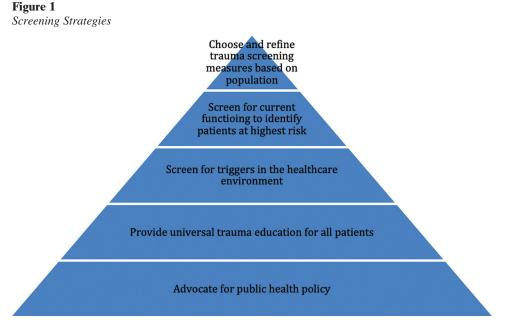
As of this writing, insurers are not able to deny insurance coverage to individuals based on preexisting conditions. However, if an ACE or trauma score becomes a part of a medical record, it is unclear if insurance companies will be able to charge individuals higher premiums, arguing that they are at higher risk for subsequent chronic health conditions. Because ACEs tend to be higher in minority populations and those of lower socioeconomic status (Sacks & Murphey, 2018), routine screening could conceivably lead to unexpected, negative consequences for populations who are the most vulnerable.

Future Directions in Screening Protocols

Based on issues raised in the mental health and public health literature, we have reviewed several concerns associated with universal screening of trauma and adversity in primary care. When considered systematically, these issues provide opportunities for tailored program development and research to improve the quality of trauma informed health care. Prior to implementing universal trauma screening, we present a theoretical framework that includes the following: adapting and refining screening tools, integrating patient preferences and privacy concerns, assessing resource limitations, and integrating public health advocacy into screening programs. Figure 1 provides guidance for how programs can utilize various levels of screening based on the needs of their patient population. Figure 2 summarizes the important concerns and potential programmatic solutions that may improve the quality of universal trauma screening programs.

Adapting Screening Measures and Protocols to Detect High-Risk Primary Care Patients

Programs must choose their screening tools carefully to reflect the needs of their patient population (see Figure 1). Once implemented, screening instruments can be further tailored to the population by examining which types of adversity cluster together. Measures may also include the developmental stage and severity of each trauma experience to better assess their impact on current functioning (Lacey & Minnis, 2020; McLaughlin, 2016). Health care settings may also want to consider *current functioning* screening that measures social support and ways of coping (e.g., overeating, smoking, substance use, high risk sexual behavior) as methods of identifying individuals in need of behavioral health specialists (Finkelhor, 2018). Doing so will reduce Type I screening errors—or false positives—and will decrease the likelihood that referral resources and agencies will be overly burdened by less serious cases. Trauma informed care also supports asking patients about their triggers that are specific to medical care if universal screening is not feasible. For



Note. Programs can utilize various strategies based on the needs of their patient population. See the online article for the color version of this figure.

example, questions could focus on if patients are uncomfortable in the supine position, dark exam room, being touched during the physical exam, and so forth (Schnur et al., 2017).

If universal screening is implemented, programs may find they need to perform secondary screening of current functioning prior to making referrals (see Figure 2). For example, a patient with a history of parental incarceration, food insecurity, and witnessing domestic violence may receive a high score on a universal screening. However, if the patient has a high level of current functioning and social support, they may not need a referral to behavioral health. A systematic review of 15 studies implementing ACE screenings in adults found insufficient evidence for a positive impact of screening on long-term provider-patient relationships, attendance, referral usage, or changes in clinical care (Ford et al., 2019), suggesting that universal screening may need to be integrated with assessment of current functioning.

Integrating Patient Preferences and Privacy Concerns Into Screening Protocols

An important part of successful screening involves clear policy at both the system and state

level that protects patients from harm if they disclose a trauma history (Fromson & Durborow, 2019). Prior to implementing universal screening, patients should be surveyed to see if they prefer to disclose trauma histories using computer versus inperson screenings. Studies on screening for domestic violence, for instance, suggests patients prefer computer screening (Cullen et al., 2019; Gottlieb et al., 2014). Providers must receive training on how to manage unanticipated, in-depth trauma disclosures that include balancing time constraints with empathetic listening and referrals (Figure 2; Raja et. al., 2020). This may prevent adverse reactions and increase patient comfort with screening. Furthermore, given the current uncertainties with the future of the health care system in the United States, it is extremely important that any screening data be stored outside of a medical record which will protect vulnerable populations from possible insurance discrimination (see Figure 2). This has been successfully done in relation to screening for intimate partner violence (Hudson, 2003). If it is not possible to protect this data from insurers, programs may decide to implement universal trauma education (see Figure 1). For example, all patients may benefit from information about how stress and adversity affect coping and health.

Figure 2

Screening Concerns and Solutions

Are you using self-report, retrospective reports of trauma and adversity?	• Consider screening for triggers in the healthcare environment and current functioning instead of (or in addition to) trauma screening.
Are patients and providers comfortable with screening protocols?	• Survey patients on their preferred method of screening and train providers on managing disclosure.
Will insurance companies have access to screening data?	• Provide universal trauma education and referrals to all patients without implenting universal screening.
Does your current behavioral health system have a wait list?	• Screen for current functioning to identify highest risk patients.
Do patients have financial, linguistic, geographic or cultural issues that impact their access to resources?	• Advocate for societal change to improve access to care.

Note. Programs planning for universal trauma screening can consider the following questions. See the online article for the color version of this figure.

Assessing the Availability of Resources

Future screening endeavors must also address the realities of resource limitations and cultural proficiency in their protocol implementations. For example, rural areas typically lack an adequate number of behavioral health providers (Kirby et al., 2019) and settings with large minority populations may have a shortage of ethnically and linguistically diverse providers (Gopalkrishnan, 2018; Office of Disease Prevention and Health Promotion, 2020). In addition, patients who are struggling with resource limitations such as poverty, lack of transportation, or lack of health insurance may not be able to access providers who have specialty training in trauma treatment (Kazlauskas, 2017). Universal screening protocols must seriously consider the larger social context and relative scarcity of resources in which these programs are being implemented (see Figure 2). Screening an individual and informing them that they are at heightened risk for physical and mental health issues, without having appropriate, accessible, and affordable resources in place may inadvertently increase patient anxiety and feelings of helplessness. Universal screening may be ethical only if implemented in settings where patients actually have access to the followup services they need. However, universal screening may be used to document the needs of underserved populations and can help create and evaluate programs for underresourced communities. In this case, patients should be made aware that the information is being collected for program development and planning, and may not result in immediate, individual-level referrals.

Integrating Public Health Advocacy

In addition to formulating a system for detection and response to trauma and adversity, a focus on prevention may be one of the most successful ways to improve population mental health (Figure 1; Centers for Disease Control and Prevention, 2019; Magruder et al., 2017). For example, public policies that include a living wage, affordable childcare, reduction in food insecurity and homelessness, and sensible limits on firearm ownership may actually impact levels of community and interpersonal violence throughout the life span (Figure 2; Magruder et al., 2015, 2017). Collaborations between local communities, academic researchers, policymakers, and providers may be essential to successful interventions to reduce trauma and advocate for those in need.

Conclusion

Introducing screening for trauma and adversity in adult primary care settings is a unique opportunity for collaboration between mental health, medical, and public health clinicians and researchers. Challenges in universal trauma screening include selecting and tailoring screening measures, deciding who needs secondary screening in systems with limited resources, and guarding against adverse reactions and insurance discrimination. Screening protocols may be strengthened by including measures of current functioning, potential health care triggers, and all screening protocols must be tailored to patient preferences and protect the confidentiality of a patient's trauma history. Finally, protocols will be reinforced by forming interprofessional collaborations including advocating for public health policies that may reduce the prevalence of trauma in families and communities.

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