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## Development of a screening and brief intervention process for symptoms of psychological trauma among primary care patients of two American Indian and Alaska Native health systems

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### Abstract

American Indian and Alaska Native (AI/AN) people experience high rates of acute, chronic, and intergenerational trauma. Traumatic experiences often increase the risk of both medical and behavioral health problems making primary care settings opportune places to screen for trauma exposure or symptomology. The objective of this study was to determine considerations and recommendations provided by patients, health care providers, health care administrators, and tribal leaders in the development of an adult trauma screening, brief intervention, and referral for treatment process to pilot at two large AI/AN primary care systems. A qualitative and iterative data collection and analysis process was undertaken using a community-based participatory research approach guided by a cross-site steering committee. Twenty-four leaders and providers participated in individual interviews and 13 patients participated in four focus groups. Data were thematically analyzed to select a trauma screening instrument, develop a screening process, and develop brief intervention materials. The nature of traumas experienced in the AI/AN community, the need to develop trusting patient-provider relationships, and the human resources available at each site drove the screening, brief intervention and referral process decisions for a future trauma screening pilot in these health systems.

### Introduction

American Indian (AI) and Alaska Native (AN) people experience disproportionately higher rates of acute, chronic, and intergenerational trauma than their non-AI/AN counterparts,<sup>1–4</sup> with adverse impacts on physical and behavioral health.<sup>1,5–9</sup> Although mortality rates are in a general decline,<sup>10</sup> AI/AN people continue to experience elevated rates of unintentional injury including drowning,<sup>11</sup> and motor-vehicle and pedestrian deaths<sup>12,13</sup> among adults, and accidental suffocation and strangulation,<sup>14</sup> dog bites,<sup>15</sup> and burn injuries<sup>16</sup> among children. Moreover, AI/AN people also continue to experience high rates of lifetime interpersonal violence among women<sup>9,17–21</sup> and reports of a history of child abuse and neglect.<sup>22–24</sup> Since the frequency of traumatic events is significantly elevated, there is an

increased likelihood that an AI/AN individual will experience multiple traumas compared to national samples.<sup>21,25–28</sup>

Multiple lifetime traumas have additive risks of developing behavioral health disorders such as Posttraumatic Stress Disorder (PTSD). Beals and colleagues<sup>27</sup> found that three or more traumatic events increased the risk of lifetime PTSD more than four times compared to AIs experiencing only one event. Previous research indicated experiencing 10 traumatic events increased the risk eight times.<sup>28</sup> Trauma, even when not meeting criteria for PTSD, is associated with alcohol, drug, mood, anxiety, somatoform, and borderline personality disorders.<sup>1,5,29–31</sup> Trauma, especially childhood trauma, is also associated with poorer health in adulthood<sup>32</sup> and a host of long-standing physical issues including tobacco use and lung cancer,<sup>33,34</sup> cardiovascular disease,<sup>35</sup> diabetes,<sup>31,36,37</sup> irritable bowel syndrome,<sup>30</sup> bodily pain,<sup>38,39</sup> frequent headaches,<sup>40</sup> and sleep disorders.

Given the relationship of traumatic experiences to both medical and behavioral health problems, primary care settings represent opportune places to screen for trauma exposure or symptomology. Because primary care is typically the first point of contact for behavioral health symptoms for many AI/AN people (even more so than for non-AI/AN people),<sup>41–43</sup> trauma screening and trauma-focused intervention in the primary care setting is a logical step towards ameliorating persistent physical/behavioral health disparities among AI/AN people. However, in order to be maximally effective, screening and intervention processes should fit the needs and preferences of key stakeholders to be sustainable within a healthcare system yet this research and practice gap has been unexplored. This is the first study to identify recommendations of patients, health care providers, health care administrators, and tribal leaders to develop an adult trauma screening, brief intervention, and referral for treatment (T-SBIRT) process to pilot at two large yet distinct AI/AN primary healthcare systems. Beyond informing clinical practice within pilot sites and other AI/AN healthcare systems, what is learned could also inform other healthcare systems serving racially and ethnically diverse populations who may experience higher risks for PTSD yet remain largely untreated.<sup>44</sup>

## Methods

We used a community-based participatory research (CBPR) approach to develop a screening, brief intervention, and referral process for trauma among AI/AN adults receiving services in two AI/AN primary care settings: Southcentral Foundation (SCF) in Anchorage, Alaska and Cherokee Nation Health Services (CNHS) in Tahlequah, Oklahoma. Coordination between the two sites occurred through the Centers for American Indian and Alaska Native Health (CAIANH) at the University of Colorado Denver.

## Setting

SCF and CNHS currently conduct behavioral health screening in primary care for depression and substance use disorders. The Cherokee Nation operates a network of 8 health centers and 1 hospital in the tribe's jurisdictional boundaries (7,000 square miles across 14 counties in northeastern Oklahoma), serving more than 130,000 AI patients. The Cherokee Nation Health Services operates the W.W. Hastings Hospital in Tahlequah, which provides primary

care and behavioral health services. SCF is an AN non-profit health care organization that provides a wide range of health services to over 65,000 AN/AIs from 231 federally recognized tribes in the Anchorage Service Unit. The Anchorage Service Unit is a geographical area stretching 140,137 square miles across south central Alaska, extending from the Canadian border on the east to the entire Aleutian Chain and Pribilof Islands on the west, although most SCF patients live near Anchorage. SCF operates the Anchorage Native Primary Care Center (ANPCC), which provides primary care and behavioral health services. Depression and substance abuse screening is conducted by trained Certified Medical Assistants (CMA) at SCF and by nurses at CN prior to provider visits. Both systems have Behavioral Health Consultants (BHCs) integrated into medical clinics to provide brief intervention and referral to treatment upon positive depression or substance abuse screening.

### Steering committee

Each stage of the research process was guided by a steering committee comprised of key stakeholders from each study site. Steering committee membership included two or more clinical providers, at least one administrative leader from each site, as well as research staff. Roughly half of the steering committee members were also patients at the study sites; and over half of the steering committee members had health research experience.

In-person steering committee meetings occurred at rotating site locations in Anchorage, AK, Tahlequah, OK and at the coordinating center's location in Aurora, CO. In our work with the steering committee, we first established guiding principles to ensure alignment with CBPR principles throughout the project. Resultant principles included intent to 1) build on the strengths of AI/AN cultures and communities; 2) use a collaborative, inclusive investigative approach; and 3) do no harm and use research as a positive change agent. We then used an iterative research process commonly used in CBPR projects with the following five distinct steps: 1) identification of cycle goals, 2) measure/materials development, 3) data collection, 4) data management and analysis, and 5) interpretation of results. The steering committee provided direction to the study Principal Investigator on recruitment approaches and materials, and interview and focus group questions (Table 1), and used the information obtained through this process to design the T-SBIRT intervention and pilot study. The steering committee also guided the dissemination of project findings to community and tribal health organization stakeholders.

The steering committee identified three stakeholder groups for primary data collection: health care providers in primary care and behavioral health clinics, administrative/clinical/tribal leaders overseeing those clinics, and their patients. Despite a preference for focus groups as data collection methodology given the opportunities for peer-to-peer interaction and to explore areas of divergence and convergence, the steering committee selected one-hour semi-structured individual interviews for the provider and leader samples given challenges in finding a common time for a two-hour focus group amidst busy and variable schedules. Focus groups were selected for the patient sample.

## Participant recruitment

Participant recruitment occurred in January 2013. Purposive sampling was conducted for both focus groups and individual interviews. The patient sample inclusion criteria were age 18 years old or older, self-reported AI and/or AN heritage, and self-reported eligibility for primary care services at either SCF or CNHS, with no additional exclusion criteria. The health care provider sample inclusion criteria were primary care provider or outpatient behavioral health clinicians currently employed at either SCF or CNHS, with no additional exclusion criteria. The clinical/administrative/tribal leader sample inclusion criteria were current staff at either SCF or CNHS with responsibility to make leadership decisions regarding the process and/or policies surrounding the provision of primary care, with no additional exclusion criteria.

Patients were recruited in primary care clinic lobbies at each tribal health organization (W.W. Hastings Hospital and ANPCC) to participate in focus groups. Interested patients were contacted by telephone by research staff to confirm interest in the study and to schedule participation in a focus group. For individual interviews, the steering committee identified names of potential participants consisting of clinical, administrative, and tribal leadership at each site to invite for participation. Identified clinical, administrative, and tribal leadership staff were then directly contacted by research staff in-person and over the telephone to determine interest in the study and to schedule an interview appointment.

## Data collection

To reflect key guiding principles of the steering committee, focus group and interview questions focused on aspects of strength and resiliency as well as questions on trauma experienced in the AI/AN communities served by SCF and CNHS. Moderator guide/interview questions (Table 1) were asked of each participant by trained qualitative researchers (VH, LM, LD, DD, DN, BB). Data collection was conducted using the same enrollment and qualitative data collection process at both sites with one member of the research team (LM) observing data collection at both sites to ensure consistency across sites. All participants gave verbal informed consent prior to participation in either focus group or interview. All focus groups and individual interviews were audio recorded and transcribed verbatim by a professional transcription service. Immediately following data collection, a gift card in the amount of \$20 per hour of participation was provided to the patient participants to compensate for their time; no compensation was provided to clinical, administrative or tribal leadership. The Alaska Area Institutional Review Board, the Cherokee Nation Institutional Review Board, and the Colorado Multiple Institutional Review Board all approved the project protocol prior to data collection.

An iterative data collection process provided opportunity for participants to identify and to react to a set of trauma screening, trauma detection, and treatment referral options. The first round of data collection in February-April 2013 was formative; we solicited dialogue about trauma among AI/AN people and the currently available services to identify and treat individuals that have symptoms related to traumatic experiences. The second round of data collection in October-November 2013 built upon the first round; we reviewed T-SBIRT

program options that the steering committee developed based on the results of this earlier phase of data collection.

Throughout the project, the definition of trauma developed by the steering committee and provided to participants was, “By trauma, we mean events like a serious car accident, an earthquake or other natural disaster, or ongoing events like physical abuse, serious illness, or loss of your home or job.” Two distinct categories of screening instruments - event based or symptom based - were described to participants with examples of instruments for each type of screening tool. The Traumatic History Screen (THS)<sup>45</sup> focused on the incidence of traumatic events in a checklist format. The Primary Care PTSD Screen (PC-PTSD)<sup>46,47</sup> and the New York PTSD Risk Score (NYPRS)<sup>48</sup> emphasized symptoms or reactions to traumatic events.

Three hypothetical screening process scenarios were described to the participants with the screening instrument presented to a patient at different points in a primary care encounter: 1) self-administered screener during appointment check-in, 2) nurse or CMA administered screener during the intake portion of the clinical exam, and 3) provider administered screener during the clinical exam. Finally, participants were asked to respond to informational brief intervention material content and a process for implementing the brief intervention.

## Data analyses

Data analysis was coordinated by staff (LM) at the study’s University of Colorado coordinating center to ensure consistency in data analysis across sites. Data from each round of data collection were analyzed using a thematic network approach<sup>49</sup> to identify common views across the different participant groups, views within a project site, and views common across sites. Researchers from both sites and the coordinating center co-coded one transcript to determine agreement on *a priori* codes based on question constructs. Three coders used NVivo 9 (QSR International) to code transcripts, with coders meeting to discuss coding and later developing summaries from coded transcripts. Given the small sample size and research question of interest, we chose not to collect information about nor differentiate results by participant age or sex.

Concepts within the coding schema were clustered into unified themes presented in Tables 2–4. In the first round of data collection, we identified four broad trauma-related themes: 1) nature of trauma in AI/AN communities; 2) barriers to healing from trauma; 3) trauma screening concerns; and 4) screening and brief intervention preferences (Table 2). In the second round of data collection we identified preferences for a trauma screening instrument and screening process (Table 3); and four themes for development of the brief intervention materials and process—1) normalization, 2) simplicity, 3) education/resource sharing and 4) resiliency (Table 4).

## Results

Across the two sites, a total of 24 leaders and providers participated in 24 individual interviews and 13 patients participated in 4 focus groups. All 37 participants were involved

in the first round of data collection; however, in the second round of data collection, three leaders and providers across the sites had separated employment and two patients chose not to participate. Thus, 33 individuals participated in the second round of data collection. Patients in focus groups provided responses that were largely internally consistent within the sample as were leader interview responses. Provider interview responses had more variation. Differences between sample responses by site are described below.

### **Nature of trauma in AI/AN communities**

The most commonly mentioned traumatic experiences at both sites were physical, emotional, sexual, and verbal abuse. Participants also spoke of trauma as conditions endemic to poverty (i.e. homelessness, unemployment, child neglect), physical injury due to car accidents or other accidents, conditions resulting from substance abuse/use, family breakdown (i.e. divorce, incarceration, foster care), and death and grief.

Participants in all sampling categories noted that experiencing traumatic events reduces one's capacity to function effectively in daily life and mentioned the ongoing impacts of trauma on health, well-being, and quality of life of individuals and families. Participants also noted that health care and other social systems struggled with the greater demands that comes with serving a population with high rates of trauma. One provider cited results from the Adverse Childhood Experiences (ACE) study<sup>49</sup> to explain later health effects of past traumatic experiences.

### **Barriers to healing from trauma**

Across both sites, participants noted a lack of existing resources and timely treatment for those currently experiencing trauma or with trauma histories. Participants noted that the financial resources of both individuals with trauma histories and the healthcare systems that serve them were limited. A shortage of healthcare providers trained to treat trauma was frequently cited as a structural barrier to treatment resulting in long waitlists for behavioral health or psychiatric treatment.

Patients at both sites reported stigma of mental illness as a key barrier to the receipt of timely, effective treatment. People who have experienced past trauma may be reluctant to expose themselves to labeling and the shame that may be associated with a mental health diagnosis. One SCF patient stated, "we were not taught to say anything or report it. Or if you do report it, it's gonna look bad on the family, so don't say anything. You don't wanna bring shame to the family." These barriers were noted to perhaps be particularly salient among men as one provider explained, "Being male, you suck it up, walk it off, those sorta things. You're not allowed to express that, and so I think especially if you wanna get into kinda the stereotypical male, they're supposed to be the warrior, the strong person that's there to protect the family."

### **Screening concerns**

Participants at both sites emphasized the need for deliberate planning and communication in order to administer the T-SBIRT in the primary care setting. Participants consistently identified the need for patient, health system staff, and primary care provider education and

buy-in prior to embarking on a screening program. Participants were universally apprehensive that the implementation of trauma screening would uncover a volume of individuals with positive screening results thereby overwhelming already overburdened behavioral health systems. Administrative leaders and providers at both sites noted the disproportionate trauma prevalence rates within the AI/AN population. Providers noted that harm that could come to patients that were unprepared or ill-supported to address personal trauma histories given a backlog in referrals to behavioral health services within a health system. SCF providers indicated that while embedded BHCs were available for immediate support of patients, they were concerned about the impact a greater number of patients identified as in need of their services might have on their workload.

Administrative leaders in both settings noted that providing education to patients was essential in helping community members understand the intent of the screening questions from the point of view of the tribally managed healthcare system. Many patient and provider participants wondered how to effectively handle patient reactions to the screening questions such as triggering of adverse reactions in individuals who had experienced past traumatic events. Others expressed unease with patients sharing traumatic experiences that may require more lengthy interactions than is possible through a primary care visit. Worries about the burden placed on providers were also evident.

Providers at CNHS expressed concern about provider ability to meet caseload demands. Establishing the logistics for a uniform, system-wide response prior to starting the screening program was seen as an essential step at CNHS given more limited integrated behavioral health support in primary care. “We would need to have individuals who can immediately, in a safe manner, begin to address and meet the person where they’re at,” clarified a CNHS provider, adding, “there’s a danger in opening up a, this can of worms. We can do more harm than good.”

Patients, providers, and leaders at both sites were generally supportive of universal trauma screening in primary care settings as all stakeholder groups recognized the high occurrence of traumatic events within the health system population. However, patients at both sites highlighted trust issues with the healthcare system and healthcare providers. Because of these issues, they were concerned that patients may not feel comfortable divulging trauma history information to anyone but their primary care provider. One patient stated, “I know when I went in, I didn’t feel comfortable telling the nurse my story. I wanted to wait until my doctor [came in].”

### **Screening and brief intervention preferences**

Participants at both sites described a preference for having multifaceted community-based resources shared in the brief intervention. An SCF provider described using less psychotherapy and more “life coaching” during the brief intervention stating patients may need:

“...someone who could help them develop their strengths, set goals. I feel like there’s so many families that have been kinda disrupted by trauma. A lot just don’t



have that kind of structure behind them and like a way to look at life and how to proceed. Taking care of themselves and [their] responsibilities.”

Culturally-aware approaches that take advantage of community resources were also suggested in the brief intervention and as options for referral for treatment. Participants emphasized the need for community-wide education about trauma and its negative health impacts as a key to reducing stigma, as one leader stated: “...everyone now I think is fully aware of both the human and the economic cost associated with tobacco. So we need to do that now, I think, for trauma.”

**Screening instrument preferences**—The events-based THS and symptom-based PC-PTSD were preferred by approximately an equal number of participants, while fewer preferred the symptoms-based NYPRS. Simplicity and directness were valued in the preferred screening instruments. One leader, when referring to the THS, noted, “it’s clear, it’s concise, it’s concrete.” However, those who preferred the PC-PTSD did so because it focused on treatable symptoms rather than a past event. For example, one leader explained,

“It gives you kind of meat and potatoes to work with. So to start working with ok, somebody’s having nightmares, or they’re feeling very on edge all the time, it gives you something to work with in terms of being able to see change and impact where the person could actually feel better”.

Based on the sum of feedback provided, and in particular the clinical applicability of the screening results, the steering committee chose the PC-PTSD for use in pilot project.

### Screening process considerations

Regardless of screening instrument preference, participants at both sites were adamant that the screening instrument be administered by an individual trained on how and where to ask the screening questions as well as what to do if a patient has an adverse reaction to the questions. Sensitivity, respect, and the emotional safety of the patient were also commonly noted concerns in the screening process (Table 3). Most participants recognized the scenario in which the patient completes a self-administered screener in the public patient waiting area as most expedient for clinic operations. However, concerns were also noted; most prevalent being a lack of privacy in the public waiting area. Additional concerns arose about this method of screening as it would involve administrative support staff working with patients to complete the screener. Participants were concerned that administrative support staff might not understand the screening instrument questions, or may lack relevant training and experience to address a patient’s needs if an adverse reaction were to occur while completing the screener.

Similarly, some participants were concerned about having a nurse or CMA administer the screener as they may lack behavioral health training to adequately address patients who potentially may experience intense reactions triggered by the trauma screening questions. Additional concerns about nurses or CMAs conducting the screening was that it would add to an already heavy workload. Aside from these barriers, many participants felt a face-to-face interaction by an interested nurse or CMA was likely to elicit more frequent and honest responses from patients than a self-administered paper-pencil questionnaire.



The majority of participants were concerned that having the primary care provider administer the screener would add to an already-demanding clinical encounter, yet, this scenario was the most favored among all types of participants at both sites. The potential for both high quality screening that would be most comfortable for patients and would lead most smoothly to clinical interventions outweighed these concerns. One leader stated, “I think the huge advantage, which maybe outweighs all that, is that you’re building on the relationship with the provider. The provider conceptually, on a clinical level as well as a social/emotional level, gets what the screener’s trying to get at, and probably would get more rich information from [it]”.

Based on the feedback from participants regarding the three different types of screening scenarios, the steering committee decided to pilot a nurse (CNHS) or embedded BHC (SCF) administering the screening tool. At CNHS, nurses were chosen to administer the screening tool to reduce primary care provider burden and the lack of sufficient numbers of BHCs to conduct screening. At SCF, BHC staff were chosen to administer the screening tool rather than providers since their role within the primary care team already included similar behavioral health screening activities such as behavioral health screening among children and adolescents and among pregnant women.

### **Brief feedback, intervention, and follow-up preferences**

When considering the brief intervention material (brochure) and process, the following five themes emerged: 1) attempt to normalize the occurrence of traumatic events, 2) ensure the simplicity of the message and materials, 3) provide education about how trauma affects both mental and physical health, 4) assess and reinforcement of patient resiliency, and 5) establish respectful patient-provider relationship (Table 4).

The most common requests around brief intervention content involved the normalization of trauma. In the words of one leader, “I think it’s important that people recognize that these reactions are just part of being human, and part of the body’s response. And so it’s not a weakness or anything else.” Moreover, using non-stigmatizing language in the brief intervention encounter and brochure was important to many participants across the sites to encourage normalization.

Participants also requested that simple, straightforward statements be used in the brief intervention brochure. Most participants cited the importance of tailoring feedback to the individual and keeping the intervention session brief (i.e. occurring within a 20 minute session). Alternatively, some participants were concerned that a 20-minute encounter maybe too brief to cover essential primary care encounter content as well as a behavioral health screening and a brief intervention.

Participants recommended including education about how trauma can affect physical health and quality of life in the feedback portion of the brief intervention. Many suggested the content of the brief intervention material include positive coping strategies that may relieve symptoms of trauma (e.g., regular exercise, eating well) and the provision of community resources. Many participants recommended sharing information about resources available

on-site at the clinics and at-large in their respective AI/AN communities for both short and long-term care.

Participants also emphasized the importance of assessing patient support networks and their existing coping mechanisms in the brief intervention. Participants noted that addressing basic needs such as housing and nutrition first would be crucial. Without a safe, stable living environment, addressing trauma symptoms with any kind of intervention would be difficult at best. In addition, sociocultural considerations were paramount in many comments about the intervention process including the following from a provider,

“Probably just the need for privacy and sensitivity to the difficulty some of the patients will have with talking about some of these. And then just making sure that it’s not judgmental. That a lot of the patients that we work with come from backgrounds that are pretty deprived. That are pretty disadvantaged, from a socioeconomic perspective. And bearing that in mind – that a lot of times, these people had to deal with things that we as providers might not think of as normal.”

Finally, participants noted the importance of establishing respectful, trusting relationships with patients during the intervention.

### Referral to treatment considerations

Participants at both sites mentioned the need to identify and formalize organizational processes to complete primary care based referrals to behavioral health treatment following the brief intervention. Considering the stakeholder feedback provided on the brief intervention encounter, the steering committee developed brochure content to be customized at each project site location which included resource information on community treatment and referral options to be used following the screening and brief intervention. Brief intervention and referral to treatment was provided by BHCs at SCF and by the primary care provider at CNHS.

### Discussion

Trauma-related health histories and diagnostic assessment of trauma are not regularly completed in medical care settings despite the fact that many people with trauma seek physical, emotional, and behavioral health care through primary care clinics. Moreover, people with trauma make up to four times as many physician visits as people without trauma.<sup>50</sup> Among adults presenting for health care, some populations such as women who were abused as children were more likely than women without childhood abuse to describe their current health as fair to poor; to have increased behavioral health, pain, and general medical disorders; and to report somatic complaints.<sup>32</sup> Trauma is associated with alcohol, drug, mood, anxiety, somatoform, and borderline personality disorders.<sup>1,2,5,29,30</sup> Trauma and PTSD are also related to a host of physical health issues including cardiovascular disease,<sup>31,35</sup> bodily pain,<sup>7,30,39</sup> irritable bowel syndrome,<sup>30</sup> and diabetes.<sup>36,37,51</sup> Despite a well-documented impact of current and past trauma on current health, screening within primary care for past trauma and ongoing PTSD remains uncommon. Our results suggest that trauma screening, brief intervention, and referral for treatment among AI/AN adult primary care practices is feasible and offers suggestions to health care practices considering

implementation of trauma screening procedures. Stigma for seeking care for behavioral health concerns continues to be strong among racial and ethnic PTSD needs in primary care and is one way health care systems can reduce stigma and other barriers to behavioral health care.<sup>44</sup>

Designing the detection and initial management of trauma in ways that were acceptable and sustainable at SCF's Anchorage Native Primary Care Clinics' and at CNHS' outpatient services at the W.W. Hastings Hospital differed based on available clinical and human resources at each site. Many of our decisions about screening instruments and processes by which to conduct the screening were directly impacted by the CBPR approach. For example, our literature review identified over 20 different PTSD or Trauma Exposure screening instruments. Both the engagement of the steering committee and feedback from community members via interviews and focus groups led directly to our selection of the PC-PTSD measure. Moreover, careful planning around choice of the most appropriate clinical staff to conduct the screening was informed by community concerns about provider workload, patient privacy and safety, clinical workflow, and access to timely intervention for those in need. Engaging in the CBPR process also allowed us to develop an intervention more grounded in local realities while also having a greater potential for dissemination given the important site differences. The most salient example of this was our decision to use different clinical staff to pose the screening questions to patients at each site based on staffing realities – specifically nurses at CNHS and BHCs at SCF.

This study supports the T-SBIRT model<sup>52,53</sup> as a public health approach to the delivery of trauma support services for AI/AN adults in primary care settings. The flexibility of the approach along with a screening instrument targeting symptoms of trauma rather than specific traumatic events is a unique contribution to both behavioral health and primary care. Overall, training in trauma related diagnosis, and treatment for primary care providers and support staff has been inadequate nationally as has training on cultural awareness and on trauma informed care clinical skills--skills which are imperative in providing quality and competent patient care.

Although study participants were recruited from among two of the largest health systems serving AI/AN people, these collective responses cannot be considered wholly representative of the preferences and needs of all AI/AN people and the health systems that serve them. Additional engagement with other AI/AN health care systems and the tribal communities they serve is strongly recommended as needs in these communities vary and feasibility in under resourced settings should be evaluated. We did not collect demographic information from participants; however, we do know that the majority of participants at both sites were female, thus the views of males may not have been well represented. The patient focus group sample was limited to participants who were predominately English-speaking given the difficulties with translation in group settings. Furthermore, some patients may not have volunteered due to discomfort talking about trauma in a group setting.

This study had several notable strengths. Through a CBPR process which included a cross-site steering committee, we were able to develop a screening, brief intervention, and referral process for trauma among AI/AN adults, a hard to reach population. The project was

conducted at two sites, both of which had complex health systems serving large AI/AN populations. Our research also suggests that AI/AN adult patients and the staff and leadership of the health systems that serve AI/AN people are interested and willing to screen for trauma in the primary care setting, a finding that we verified through iterative interviews with key stakeholders.

## Implications for Behavioral Health

The T-SBIRT model was found at two of the largest health systems serving AI/AN adults to be a viable model for primary care based screening, brief intervention and referral to treatment for trauma. The PC-PTSD measure was found to be responsive to primary care provider and patient symptom-based conversations. The use of skilled primary care-based staff to engage patients in the T-SBIRT process mitigated commonly identified concerns about sensitivity, respect, and emotional safety and was a notable strength of the proposed process. Brief intervention components of importance included normalizing the occurrence of lifetime traumatic events, and providing simple messages focused on how trauma affects both mental and physical health. These components are best received while reinforcing patient resiliency within a respectful patient-provider relationship. Tribal leaders and health care providers implementing adult trauma screening, brief intervention, and referral processes with AI/AN populations should engage their patient, provider, and leadership stakeholders to determine the role and importance of these components when developing trauma informed practices. Similarly, health care systems serving other diverse populations should use similar approaches to design ways to effectively and respectfully address trauma within their respective systems.

## References

1. Beals J, Manson SM, Whitesell NR, et al. Prevalence of DSM-IV disorders and attendant help-seeking in 2 American Indian reservation populations. *Archives of General Psychiatry*. 2005; 62(1): 99–108. [PubMed: 15630077]
2. Manson SM, Beals J, Klein SA, et al. Social epidemiology of trauma among 2 American Indian reservation populations. *American Journal of Public Health*. 2005; 95(5):851–859. [PubMed: 15855465]
3. Walls ML, Whitbeck LB. Distress among Indigenous North Americans: Generalized and culturally relevant stressors. *Society and Mental Health*. 2011; 1(2):124–136. [PubMed: 22368789]
4. Yellow Horse Brave Heart M, DeBruyn LM. The American Indian holocaust: Healing historical unresolved grief. *American Indian and Alaska Native Mental Health Research*. 1998; 8(2):56–78. [PubMed: 9842066]
5. Beals J, Novins DK, Whitesell NR, et al. Prevalence of mental disorders and utilization of mental health services in two American Indian reservation populations: Mental health disparities in a national context. *American Journal of Psychiatry*. 2005; 162(9):1723–1732. [PubMed: 16135633]
6. Boyd-Ball AJ, Manson SM, Noonan C, et al. Traumatic events and alcohol use disorders among American Indian adolescents and young adults. *Journal of Traumatic Stress*. 2006; 19(6):937–947. [PubMed: 17195969]
7. Buchwald D, Goldberg J, Noonan C, et al. Relationship between post-traumatic stress disorder and pain in two American Indian tribes. *Pain Medicine*. 2005; 6(1):72–79. [PubMed: 15669952]
8. Ehlers CL, Gizer IR, Gilder DA, et al. Measuring historical trauma in an American Indian community sample: Contributions of substance dependence, affective disorder, conduct disorder and PTSD. *Drug and Alcohol Dependence*. 2013; 133(1):180–187. [PubMed: 23791028]

9. Ehlers CL, Gizer IR, Gilder DA, et al. Lifetime history of traumatic events in an American Indian community sample: Heritability and relation to substance dependence, affective disorder, conduct disorder and PTSD. *Journal of Psychiatric Research*. 2013; 47(2):155–161. [PubMed: 23102628]
10. Day GE, Provost E, Lanier AP. Alaska Native mortality rates and trends. *Public Health Reports*. 2009; 124(1):54–64. [PubMed: 19413028]
11. Strayer HD, Lucas DL, Hull-Jilly DC, et al. Drowning in Alaska: Progress and persistent problems. *International Journal of Circumpolar Health*. 2010; 69(3):253–264. [PubMed: 20519089]
12. Pollack KM, Frattaroli S, Young JL, et al. Motor vehicle deaths among American Indian and Alaska Native populations. *Epidemiologic Reviews*. 2012; 34(1):73–88. [PubMed: 22088912]
13. Centers for Disease Control and Prevention. Motor vehicle traffic-related pedestrian deaths - United States, 2001–2010. *MMWR. Morbidity and Mortality Weekly Report*. 2013; 62(15):277–282. [PubMed: 23594683]
14. Carlberg MM, Shapiro-Mendoza CK, Goodman M. Maternal and infant characteristics associated with accidental suffocation and strangulation in bed in US infants. *Maternal and Child Health Journal*. 2012; 16(8):1594–1601. [PubMed: 21769585]
15. Castrodale L. Hospitalizations resulting from dog bite injuries -- Alaska, 1991–2002. *International Journal of Circumpolar Health*. 2007; 66(4):320–327. [PubMed: 18018845]
16. Edelman LS, Cook LJ, Saffle JR. Burn injury in Utah: Demographic and geographic risks. *Journal of Burn Care and Research*. 2010; 31(3):375–384. [PubMed: 20375697]
17. Malcoe LH, Duran BM, Montgomery JM. Socioeconomic disparities in intimate partner violence against Native American women: A cross-sectional study. *BMC Medicine*. 2004; 2:20. [PubMed: 15157273]
18. Duran B, Oetzel J, Parker T, et al. Intimate partner violence and alcohol, drug, and mental disorders among American Indian women in primary care. *American Indian and Alaska Native Mental Health Research*. 2009; 16(2):11–27. [PubMed: 19639543]
19. Evans-Campbell T, Lindhorst T, Huang B, et al. Interpersonal violence in the lives of urban American Indian and Alaska Native women: Implications for health, mental health, and help-seeking. *American Journal of Public Health*. 2006; 96(8):1416–1422. [PubMed: 16809604]
20. Wood DS, Magen RH. Intimate partner violence against Athabaskan women residing in interior Alaska: Results of a victimization survey. *Violence Against Women*. 2009; 15(4):497–507. [PubMed: 19282519]
21. Manson SM, Beals J, Klein SA, et al. Social epidemiology of trauma among 2 American Indian reservation populations. *American Journal of Public Health*. 2005; 95(5):851–859. [PubMed: 15855465]
22. Duran B, Malcoe LH, Sanders M, et al. Child maltreatment prevalence and mental disorders outcomes among American Indian women in primary care. *Child Abuse and Neglect*. 2004; 28(2):131–145. [PubMed: 15003398]
23. Libby AM, Orton HD, Novins DK, et al. Childhood physical and sexual abuse and subsequent depressive and anxiety disorders for two American Indian tribes. *Psychological Medicine*. 2005; 35(3):329–340. [PubMed: 15841869]
24. Saylor K, Daliparthi N. Violence against Native women in substance abuse treatment. *American Indian and Alaska Native Mental Health Research*. 2006; 13(1):32–51. [PubMed: 17602396]
25. Bassett D, Buchwald D, Manson S. Posttraumatic stress disorder and symptoms among American Indians and Alaska Natives: a review of the literature. *Social Psychiatry and Psychiatric Epidemiology*. 2014; 49(3):417–433. [PubMed: 24022752]
26. Beals J, Belcourt-Dittloff A, Garrouette EM, et al. Trauma and conditional risk of posttraumatic stress disorder in two American Indian reservation communities. *Social Psychiatry and Psychiatric Epidemiology*. 2013; 48(6):895–905. [PubMed: 23135256]
27. Beals J, Manson SM, Croy C, et al. Lifetime prevalence of posttraumatic stress disorder in two American Indian reservation populations. *Journal of Traumatic Stress*. 2013; 26(4):512–520. [PubMed: 23900893]
28. Robin RW, Chester B. Prevalence and characteristics of trauma and posttraumatic stress disorder in a Southwestern American Indian community. *American Journal of Psychiatry*. 1997; 154(11):1582. [PubMed: 9356568]

29. Jiang L, Beals J, Whitesell NR, et al. Association between diabetes and mental disorders in two American Indian reservation communities. *Diabetes Care*. 2007; 30(9):2228–2229. [PubMed: 17563347]
30. Liebschutz J, Saitz R, Brower V, et al. PTSD in urban primary care: High prevalence and low physician recognition. *Journal of General Internal Medicine*. 2007; 22(6):719–726. [PubMed: 17503105]
31. Sawchuk C, Roy-Byrne P, Goldberg J, et al. The relationship between post-traumatic stress disorder, depression and cardiovascular disease in an American Indian tribe. *Psychological Medicine*. 2005; 35(12):1785–1794. [PubMed: 16300692]
32. Walker EA, Gelfand A, Katon WJ, et al. Adult health status of women with histories of childhood abuse and neglect. *American Journal of Medicine*. 1999; 107(4):332–339. [PubMed: 10527034]
33. Brown DW, Anda RF, Felitti VJ, et al. Adverse childhood experiences are associated with the risk of lung cancer: A prospective cohort study. *BMC Public Health*. 2010; 10:20. [PubMed: 20085623]
34. Ford ES, Anda RF, Edwards VJ, et al. Adverse childhood experiences and smoking status in five states. *Preventive Medicine*. 2011; 53(3):188–193. [PubMed: 21726575]
35. Boscarino JA. A prospective study of PTSD and early-age heart disease mortality among Vietnam veterans: Implications for surveillance and prevention. *Psychosomatic Medicine*. 2008; 70(6):668–676. [PubMed: 18596248]
36. Jiang L, Beals J, Whitesell NR, et al. Stress burden and diabetes in two American Indian reservation communities. *Diabetes Care*. 2008; 31(3):427–429. [PubMed: 18070997]
37. Weisberg RB, Bruce SE, Machan JT, et al. Nonpsychiatric illness among primary care patients with trauma histories and posttraumatic stress disorder. *Psychiatric Services*. 2002; 53(7):848–854. [PubMed: 12096168]
38. Buchwald D, Goldberg J, Noonan C, et al. Relationship between post-traumatic stress disorder and pain in two American Indian tribes. *Pain Medicine*. 2005; 6(1):72–79. [PubMed: 15669952]
39. Nakell L. Adult post-traumatic stress disorder: Screening and treating in primary care. *Primary Care*. 2007; 34(3):593–610. vii. [PubMed: 17868761]
40. Anda R, Tietjen G, Schulman E, et al. Adverse childhood experiences and frequent headaches in adults. *Headache*. 2010; 50(9):1473–1481. [PubMed: 20958295]
41. Duran B, Sanders M, Skipper B, et al. Prevalence and correlates of mental disorders among Native American women in primary care. *American Journal of Public Health*. 2004; 94(1):71–77. [PubMed: 14713701]
42. Parker T, May PA, Maviglia MA, et al. PRIME-MD: Its utility in detecting mental disorders in American Indians. *International Journal of Psychiatry in Medicine*. 1997; 27(2):107–128. [PubMed: 9565718]
43. Regier DA, Narrow WE, Rae DS, et al. The de facto US mental and addictive disorders service system: Epidemiologic catchment area prospective 1-year prevalence rates of disorders and services. *Archives of General Psychiatry*. 1993; 50(2):85–94. [PubMed: 8427558]
44. Roberts AL, Gilman SE, Breslau J, et al. Race/ethnic differences in exposure to traumatic events, development of post-traumatic stress disorder, and treatment-seeking for post-traumatic stress disorder in the United States. *Psychological Medicine*. 2011; 41(1):71–83. [PubMed: 20346193]
45. Carlson EB, Smith SR, Palmieri PA, et al. Development and validation of a brief self-report measure of trauma exposure: The Trauma History Screen. *Psychological Assessment*. 2011; 23(2):463–477. [PubMed: 21517189]
46. Ouimette P, Wade M, Prins A, et al. Identifying PTSD in primary care: Comparison of the Primary Care-PTSD screen (PC-PTSD) and the General Health Questionnaire-12 (GHQ). *Journal of Anxiety Disorders*. 2008; 22(2):337–343. [PubMed: 17383853]
47. van Dam D, Ehrling T, Vedel E, et al. Validation of the Primary Care Posttraumatic Stress Disorder screening questionnaire (PC-PTSD) in civilian substance use disorder patients. *Journal of Substance Abuse Treatment*. 2010; 39(2):105–113. [PubMed: 20598826]
48. Boscarino JA, Kirchner HL, Hoffman SN, et al. A brief screening tool for assessing psychological trauma in clinical practice: Development and validation of the New York PTSD Risk Score. *General Hospital Psychiatry*. 2011; 33(5):489–500. [PubMed: 21777981]



49. Attride-Stirling J. Thematic networks: An analytic tool for qualitative research. *Qualitative Research*. 2001; 1(3):385–405.
50. Ballenger JC, Davidson JR, Lecrubier Y, et al. Consensus statement on posttraumatic stress disorder from the International Consensus Group on Depression and Anxiety. *Journal of Clinical Psychiatry*. 2000; 61(Suppl 5):60–66. [PubMed: 10761680]
51. Sawchuk CN, Roy-Byrne P, Goldberg J, et al. The relationship between post-traumatic stress disorder, depression and cardiovascular disease in an American Indian tribe. *Psychological Medicine*. 2005; 35(12):1785–1794. [PubMed: 16300692]
52. Agerwala SM, McCance-Katz EF. Integrating screening, brief intervention, and referral to treatment (SBIRT) into clinical practice settings: A brief review. *Journal of Psychoactive Drugs*. 2012; 44(4):307–317. [PubMed: 23210379]
53. Madras BK, Compton WA, Avula D, et al. Screening, brief interventions, referral to treatment (SBIRT) for illicit drug and alcohol use at multiple healthcare sites: Comparison at intake and 6 months later. *Drug and Alcohol Dependence*. 2009; 99(1–3):280–295. [PubMed: 18929451]



**Table 1**

## Data Collection Framework

Questions	Patients <sup>a</sup>	Leaders <sup>b</sup>	Providers <sup>b</sup>
Impact of trauma on community <sup>c</sup>			
What are some of the strengths in your community? What are some of the challenges in your community? How do these strengths and challenges impact health?	X		
What are the most common traumatic experiences in the community/the community you serve?	X	X	X
How do people in your community deal with traumatic experiences? How do you think traumatic experiences impact the health of your patients? Could you tell me about patients you see who have coped well with traumatic experiences?	X	X	X
How should the health clinics support people who've experienced trauma? What is your vision for how the clinics should support people who've experienced trauma?	X	X	X
Trauma screening question <sup>c</sup>			
How do you feel about people being asked about traumatic experiences when they visit the primary care clinics?	X	X	X
How might this information be meaningful in primary care? How might this information help make health care more effective? What should we keep in mind as we consider doing this in order to keep it helpful rather than harmful?	X	X	X
When you think about traumatic experiences, what other examples come to mind that we may potentially hear about when screening?	X	X	
What resources currently exist to make screening and intervention for trauma work in primary care?		X	X
What additional resources would be needed to make screening and intervention for trauma work in primary care?		X	X
What changes in the health system would be needed to facilitate this process?		X	X
If an effective process can be developed, how high a priority would screening and intervention for trauma in primary care be?		X	
Developing the screening plan <sup>d</sup>			
[After reviewing the Trauma History Screen instrument; the Primary Care PTSD Screen and the New York PTSD Risk Score with the participant] What is your first impression about this screening questionnaire? What do you like? What do you not like? How comfortable would you be answering these questions?	X	X	X
[After selecting a screening tool from the Developing a plan for screening section] Which screening questionnaire should be used? Why? Are there any cultural considerations that should be kept in mind? Are there other considerations that should be kept in mind? How often should the screening occur?	X	X	X
Developing a plan for screening <sup>d</sup>			
[After reviewing different screening procedure options where the screener is presented at appointment check in; where the nurse asks the screening questions in the exam room; where the provider asks the questions in the exam room; and at SCF where the behavioral health consultant asks the questions in the exam room ] Looking at this potential way of screening in the clinics, what are your thoughts on how this would work for the people served here? What do you like? What do you not like?	X	X	X
Now that you have looked at these different ways of screening in the clinics, which would you recommend? Why?	X	X	X
Are there any cultural considerations that should be kept in mind? Are there other considerations that should be kept in mind?	X	X	X
What are your thoughts about having this information in your medical record?	X		
Brief feedback/brief intervention			
[After reviewing a brief feedback trifold brochure example] What key elements should the primary care provider include in the brief feedback for people who have a negative screening result? How about for those who screen positive?		X	X

Questions	Patients <sup>a</sup>	Leaders <sup>b</sup>	Providers <sup>b</sup>
[After reviewing a brief feedback trifold brochure example] If you were given something like this handout, how might it be useful? Is there a better way of sharing this information?	X		
What do you like about the brochure/handout? What do you not like? What is missing?	X	X	X
[After describing the content of a brief intervention] Let's say we have 60 minutes to talk to someone about trauma and health, what would you want people to know? For people that might want or need more than a brief intervention, what would you like to see offered?		X	X
[After describing the content of a brief intervention] Let's say someone on your healthcare team talks to you during your clinic visit about trauma and health. What would you want to know? Who on your health care team would you feel most comfortable with? If you needed more than a brief intervention, what would you like to see offered?	X		
How does what we discussed today address the needs of individuals with a history of trauma? How does it not address their needs?	X	X	X
What concerns might you have if this is offered? What benefits might this have? Do you have any other thoughts that you would like to share with us?	X	X	X

<sup>a</sup>Data collected via focus group

<sup>b</sup>Data collected via individual interview

<sup>c</sup>First round of data collection

<sup>d</sup>Second round of data collection

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Table 2

Factors influencing screening, brief intervention and referral for treatment of trauma in order of most frequent citation

Theme	Subtheme/belief	Sample quote
Nature of trauma in AI/AN communities	Ongoing impacts on health and well-being of individuals and families	<i>"I know because I grew up in an alcoholic home, and also domestic violence in the home, and I got beat also, and it's just like, it's just keeps going. Because that's what you learn. That's what you learn as a child."</i> <sup>c</sup>
	Reduced capacity to function effectively in daily life	<i>"[Trauma] creates disorder in their life, and then it spills over into other areas of their life, so it makes it harder for them to care for their children and have healthy relationships."</i> <sup>a</sup>
	Impact on society	<i>"Lost productivity... they don't do as well in school, they generally don't pursue school quite as much, they generally have a lot of health and behavioral health issues."</i> <sup>b</sup>
Barriers to healing from trauma	Lack of resources and timely intervention	<i>"I will tell you that the wait time is sometimes catastrophic. They end up back for me because they've already gone off the edge again."</i> <sup>a</sup>
	Problems with follow-up	<i>"I don't think there's a real structured way for people to get follow up after they've had traumatic events. I'm not sure that there's – I can see how it would be very easy for people to slip through the cracks."</i> <sup>a</sup>
	Stigmatization and barriers to reporting	<i>"The issue that I have with the clinics, like I said, is that label that they put on your back. I've been dealing with this label since 2008, when it started showing up on my papers. And they've already got their mind made up that what kinda treatment I'm gonna get because of a diagnosis that someone put in [my record]."</i> <sup>c</sup>
Screening concerns	Education and buy-in needed	<i>"It's almost like it requires a major sort of health campaign, where you spend a good chunk of time educating the community that this happens to people. And then when they come to the clinic, you ask them about that. Maybe that, those wheels start turning."</i> <sup>a</sup>
	"Opening a can of worms"	<i>"So there is, I would say, an audience of people who can tolerate this. And then we have to be careful. There will be people who can't. And for those people, we could – I mean, the danger is high. We could have them relapse."</i> <sup>b</sup>
	Logistics	<i>"So I'm wondering where this is going to be asked, how it's going to be asked, is it gonna be in a rush before I see the doctor, so I'm getting shoveled down the hallway and saying oh, so you ever experienced anything [LAUGHTER] traumatic, or is it gonna be after I see the doctor in a time and a place where I, if I need to talk for a5 minutes or b0 minutes, that's gonna be available to me."</i> <sup>b</sup>
	Trust	<i>"I was abused when I was a kid. So I don't trust many people. I don't wanna talk to people about my situation."</i> <sup>c</sup>
	Immensity of problem	<i>"I think that there's a dilemma here, and the dilemma is the sheer volume. When you were mentioning doing the – piloting the tool, the screening tool, I'm thinking well how are you gonna handle it if 80% or 70% of the people who come endorse yes."</i> <sup>a</sup>
Screening and intervention preferences	Increased and multi-faceted resources	<i>"How do I help people come together, let's say in a drumming circle, and do some drumming. Or singing. Or meditating. Or massage therapy. Or trauma-informed yoga. And know that that's all appropriate treatment for someone's history. And it's all integrating stuff in addition to this."</i> <sup>a</sup>
	Community-based, culturally-aware approaches	<i>"So that what's utilized is the community. All the community of peoples. So that we're all in it together then. And so the</i>

Theme	Subtheme/belief	Sample quote
		<i>community that I'm thinking of in the behavioral health world is you drop below the master level psychologists and psychiatrists and utilize everybody who can be a part of us getting well.</i> <sup>b</sup>
	Education for patients, staff, and community	<i>"I think getting medical providers comfortable with the idea that asking someone how their background has impacted them. Getting medical providers comfortable with those types of conversations is a huge issue. More than I would've thought even two years ago. I think having providers who are comfortable when someone is expressing intense emotion without feeling like they have to shut it down or stop it, or give them some piece of paper that's got some intervention on it. I think we've gotta rethink that."</i> <sup>b</sup>
	Reduction of Stigma	<i>"I think there needs to be an understanding for each individual case. 'Cause not everybody's the same. And not being treated as if you're a drug seeker."</i> <sup>c</sup>

<sup>a</sup>Provider

<sup>b</sup>Leader

<sup>c</sup>Patient

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**Table 3**

Trauma screening instrument and screening process preferences

	Sample quotes	
	Positive	Less positive
Screening instrument preferences		
Traumatic History Screen (THS)	<i>"Very useful. Can move quickly through it."</i> <sup>a</sup>	<i>"Questions should not be asked by a person not trained in behavioral health."</i> <sup>c</sup>
Primary Care PTSD Screen (PC-PTSD)	<i>"It gives you the words to help you explain how you're feeling."</i> <sup>c</sup>	<i>"Sometimes people don't realize they're having symptoms."</i> <sup>b</sup>
New York PTSD Risk Score (NYPRS)	<i>"These questions are a little more descriptive, a little more wordy, but I think a little more sensitive than the other examples."</i> <sup>a</sup>	<i>"Too many words – sometimes I don't read that well."</i> <sup>c</sup>
Screening scenario preferences		
Self-administered screening completed in waiting room	<i>"It seems like probably the most expedited way to get it done. It's gonna be easier for the staff, but if the patient is filling it out ... it might not be as effective as if the nurse or a provider's asking the questions."</i> <sup>b</sup>	<i>"Doesn't allow patient to ask questions, though since they're alone in waiting room."</i> <sup>b</sup>
Nurse administered screening completed in exam room	<i>"I like this better because I have a reading problem and have to ask the nurses to read it to me anyway."</i> <sup>c</sup>	<i>"The issue I think about is, often we have the least skilled people doing the screening. We have a front end staff (CMAs, Nurses) that has a list of questions that they ask. And periodically, I've walked by and I've just listened to people ask the questions. And, I'm thinking, I would never say yes to that in this context. Without a relationship with the person."</i> <sup>a</sup>
Provider administered screening in exam room	<i>"Well, there are plusses and minuses with this. The plusses are that it would help establish the relationship between the provider and the customer owner. The downside is that the providers are also already extremely busy."</i> <sup>b</sup>	<i>"Good - except when your doctor quits. It might be hard for provider to take the time."</i> <sup>c</sup>

<sup>a</sup> Provider<sup>b</sup> Leader<sup>c</sup> Patient

**Table 4**

## Preferences related to brief intervention/brief feedback

Theme	Brief intervention material	Brief intervention feedback
Normalize	<i>"A normalization of the experience, because for many people there'll be feelings of shame or weakness, or what have you."<sup>a</sup></i>	<i>"I'd want to provide them with reassurance that it's really common, and that this is a safe place to share information about their past and what symptoms they might be having."<sup>a</sup></i>
Keep it simple	<i>"I like brochures. I like this little one, not a – I mean, I like the size. [And it's] simple. And I like that it's bulletized – you know, I don't want chapters."<sup>a</sup></i>	<i>"Twenty minutes may not be enough time."<sup>a</sup></i>
Educate/provide strategies for identification and healing	<i>"A traumatic event can affect you mentally, physically, emotionally, as well as spiritually. I would add that."<sup>a</sup></i>	<i>"If everybody is able to get a BHC in the room, that would be possible and maybe the BHC could share their resources and how to cope, coping mechanisms... or [information about] organization they could call, phone numbers they can call where they could maybe – like we have in Magellan."<sup>b</sup></i>
Assess resiliency	<i>"You need to get an idea of where they are. 'Cause a lot of the resiliency of the person. Because if people have a lot of support around them, studies have shown they're very resilient. Whereas if you have no support, you're not so resilient. And so there needs to be – I think the BHC needs to be involved in that conversation, and they can tell where the person is at that point, and they can help the person if they need to, or get them to the services that they do need."<sup>b</sup></i>	<i>"Assessment of the person's stability, living, environmental stability. If they're homeless, struggling with alcohol, for example, you're not going to want to be engaging – at least, immediately engaging in this stuff."<sup>a</sup></i>
Establish respectful, trusting relationships		<i>"Establish rapport with the patient. Some sense of relationship. Trust in that provider. I guess seeking just what the patient is willing to acknowledge they need help with... and I guess, you know, just moving one step at a time."<sup>a</sup></i>

<sup>a</sup> Provider<sup>b</sup> Leader<sup>c</sup> Patient