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Cover Page

Project Title: Technical Report/Final Progress Report of Phase Two of ETA: Evaluation of Technology-based Advocacy Services: Assessment of Program Outcomes

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List of Acronyms and Notations

Acronym Key

ETA: Evaluation of Technology-assisted Advocacy

HAWC: Houston Area Women's Center

HT: Human Trafficking

IPV: Intimate Partner Violence

NIJ: National Institute of Justice

OVC: Office for Victims of Crime

PTSD: Post Traumatic Stress Disorder

SAFE: SAFE Alliance

SA: Sexual Assault

Qualitative Data Source Notation

T (Transcript)

P (Hotline Participant)

S (Staff or Stakeholder)

Summary of the Project

Overview

Hotlines, in phone or digital (chat/text) format, are primary first access points for support for survivors of violence. There are roughly half a million annual contacts to the National Domestic Violence Hotline (NDVH, 2023), nearly annual 30,000 to the National Sexual Assault Hotline (RAINN, n.d.), and over 15,000 annual contacts to the National Human Trafficking Hotline (Polaris, 2023). Local community-based programs for intimate partner violence (IPV) survivors, of which there are nearly 2,000 throughout the nation, take 23,348 hotline contacts in a single day (NNEDV, 2024). These local community programs offer free, comprehensive victim services in residential (e.g., shelter) and non-residential (e.g., counseling and advocacy) platforms. Data collected from a Texas study of non-residential IPV service use indicated that programs receive an average of 194 phone hotline contacts a month, with the highest total of contacts occurring in the summer months (Voth Schrag et al., 2022). Over the past decade, these community-based organizations that provide support to survivors¹ of IPV, sexual assault (SA) and human trafficking (HT) have increasingly integrated the use of digital formats, including chat and text, to offer timely services (Rempel et al., 2019; Moylan et al., 2022). Digital modality expands access beyond phone-based hotlines, which interpersonal violence prevention agencies have utilized for the last six decades (Ingram et al., 2008; Roth & Szlyk, 2021). Digital hotline helps access populations who are accustomed to and prefer communicating via chat and text, such as adolescents and college students (Coyne et al., 2013; Jensen & Arnett, 2012; Subrahmanyam & Greenfield, 2008) and those that are deaf and hard of hearing (Ballan et al.,

¹ This report will use the terms survivor and victim interchangeably

2017; Maiorana-Basas & Pagliaro, 2014). Despite the increasing use of chat and text for hotlines, there has been little research on the outcomes and participant experiences of these modalities.

Hotline, in any format, is typically the entry to services for survivors seeking support. People reach out to hotlines for information about supportive services; legal assistance; referrals; connections for housing and other shelters; and a listening ear (Sullivan & Goodman, 2019; PettyJohn et al., 2023). Hotline at community-based IPV, SA, or HT services is the portal of entry to other services offered at the agency, including shelter, counseling, and legal advocacy (Goodman & Smyth, 2011; Grossmann et al., 2019). Previous studies of phone hotline indicate high levels of satisfaction for participants. Survivors of IPV, SA, and HT report feeling positive about their hotline interactions (Finn & Hughes, 2008; Kalafat et al., 2007). Additionally, previous research has highlighted hotlines can have a positive effect on an individual's well-being, by increasing feelings of empowerment, connecting to needed resources, and helping foster coping skills (Kulkarni et al., 2012; McDonnell et al., 2018; Ogbe et al., 2020). As a vital access point, many IPV, SA, and HT survivor focused agencies have sought to expand hotline programs to increase access to 24/7 support (Emezue, 2020; Goodman et al., 2016c; Leslie & Wilson, 2020) and facilitate connection to other relevant services (Wood et al., 2023).

In more recent years, advancements in technology and changing communication preferences have allowed for digital hotlines to be introduced as an additional modality and initially adopted by national hotlines such as RAINN (Finn & Hughes, 2008) and the National Domestic Violence Hotline. Preliminary literature on digital hotlines has documented the potential benefits of the modality, including increased accessibility and survivor-centered communication preferences. (Bradbury, 2017; Moylan et al., 2022; Wood et al., 2023). Further, the COVID-19 pandemic and resulting stay-at-home orders led to a rapid expansion in use of

digital services to supplement or replace telephone and in-person advocacy (Wood et al, 2020). Initial research into digital hotlines at IPV, HT, and sexual assault support service agencies suggests survivors of IPV, SA, and HT value the increase anonymity and accessibility of the modality which can be especially beneficial to those who need to seek inaudible support (Finn & Hughes, 2008; Moylan et al., 2022; Wood et al., 2021; Wood et al., 2023). Still, little is known about digital hotline, including how it is delivered and experienced by the service participant, which is critically important in informing program development and implementation. There are limited investigations of the short- and long-term impacts of digital hotline services for victims of violence, which is a critical evidence gap, given the frequent use of this service modality.

In order to address this gap, we conducted a formative evaluation of a digital hotline in Austin, Texas with a 2018 Office for Victims of Crime (OVC)/National Institute of Justice (NIJ) phased evaluation grant (2018-ZD-CX-0004). The project, **Evaluation of Technology-assisted Advocacy (ETA)** was a mixed-methods, practitioner/researcher partnership that 1) described service participant and staff experience; 2) descriptively examined digital (chat/text) hotline services; and 3) articulated the model of digital hotline services, goals, activities, expected outcomes, and clear indicators of model fidelity. Analysis of nearly 400 digital hotline transcripts, surveys with service participants, as well as interviews and focus groups with digital hotline service participants and agency staffers resulted in several tangible products including: a) an evaluability assessment with guidance for a rigorous outcome evaluation that guided this study, b) a logic model articulating the skills used by staff, program theory of change and staff and survivor-identified outcomes, and c) initial fidelity assessments and tools for fidelity monitoring. Additionally, the research enabled collection of real-time data on the initial impact of the COVID-19 pandemic. The research team developed a comprehensive technical report (Wood

et al., 2021) in which results are further detailed. **While promising, the initial phase of research lacked short- and longer-term evaluation data to assess the effectiveness of digital hotline services.** As such, the research team sought to build upon phase one findings by conducting a rigorous process and outcome evaluation of digital hotline services for survivors of IPV, SA, and HT at two Texas agencies. Moreover, Phase Two of the ETA project aimed to assess digital hotline fidelity and further knowledge on victim services during COVID-19.

Major Goals and Objectives and Research Questions

The project goals of Evaluation of Technology-based Advocacy Phase Two were to 1) expand the evidence-base on the use and implementation of digital hotline advocacy services, including indicators of model fidelity, cost, and service needs; 2) assess the short and long-term outcomes of digital hotline for victims of IPV, SA, and HT; and 3) understand the impact of COVID-19 on the delivery of digital hotline services to aid future disaster and emergency planning. The specific project objectives and research questions are:

- 1) Evaluate short- and long-term outcomes of digital hotline services representing program goals: safety, resources, health, and support. Research questions for this objective include:
 - a. *What changes related to program goals are reported by digital hotline service participants over time?*
 - b. *To what extent do digital hotline service participants report changes in core advocacy services goals of safety, resource access, social support, and health over time?*
- 2) Examine the role of digital hotline fidelity on digital hotline service participants with measures initially developed in Phase 1 and adapted in Phase 2. Research questions for this objective include:
 - a. *What is the extent of fidelity to the programmatic model? What are the barriers to program fidelity?*
 - b. *What are the costs associated with digital hotline?*

3) Assess the impact of COVID-19 on digital hotline services. Research questions for this objective include:

- a. How did digital hotline and advocacy services change during the COVID-19 pandemic?*
- b. What were the main needs and concerns of hotline participants during the COVID-19 pandemic?*
- c. What skills and strategies did staff employ to meet changing service landscape during COVID-19?*

To conduct this study, we partnered with two large Texas community-based organizations serving survivors of IPV, SA, and HT to conduct a process and outcome evaluation focused on digital hotline services. The programs, two of the largest in Texas, were SAFE Alliance in Austin, and the Houston Area Women's Center (HAWC), in Houston. See collaborating organization section below for more on HAWC and SAFE Alliance.

Research Design and Methods

To achieve objective one, we recruited and prospectively followed 307 first time digital hotline service participants over 4 time points and conducted 25 semi-structured follow-up interviews with participants enrolled in the longitudinal study. To achieve objective two, we recruited staff members to complete 99 assessments of digital hotline program fidelity and we analyzed service use data and chat/text transcripts ($n = 328$). Finally, to achieve objective 3, we recruited 25 people who used chat/text services at either agency during the COVID-19 pandemic to participate in interviews to understand needs and experiences, and we reviewed 203 transcripts from the first year of the COVID-19 pandemic. To aid in all three objectives, we interviewed 17 staff members from HAWC and SAFE to gain insight about their experiences providing digital hotline services, including perceived program outcomes, and service modifications used during the COVID-19 pandemic. An additional 11 external professionals from other community settings were interviewed to understand the role of digital hotline in the community.

Data Analysis

The primary goal of the analysis of the longitudinal study data was assessment of both the short term and long-term effectiveness of the digital hotline delivery model in impacting safety, resource access, support, and health. Descriptive statistics such as frequency distributions, means, and standard deviations were used to provide a profile of the sample regarding the key study outcomes (violence experiences; demographic and behavioral characteristics). Confirmatory analyses were conducted to test the proposed hypotheses in study objective one, which have been stated a priori, within the context of the study design. Prevalence and incidence rates over the study periods as well as tests for within-person change for paired data were used to assess the impact of the digital hotline on short- and long-term changes over time in safety and violence experiences, resource access, support and health. Exploratory analysis was also conducted after all primary and secondary research questions had been addressed to identify relationships and patterns in the data that may not have been anticipated in the onset of the study. These results will be used for the purpose of yielding evidence that is suggestive of hypotheses to be considered in subsequent studies.

Fidelity Data Analysis. Chat and text transcripts of digital hotline service interactions, hotline staff fidelity reports, and other programmatic materials were analyzed with a combination of qualitative content analysis and quantitative assessments. Content analysis is a method used to code and summarize large data sets into categories (Braun & Clark, 2020). Qualitative analysis of transcripts included both deductive, based on expected content informed by the logic model established in Phase One, and inductive, based on discovered concepts and approaches. A subset of transcripts was initially reviewed for content related to research questions, leading to the development of a codebook of key categories related to study objectives. The remaining

transcripts were coded individually by three research team members, with double coding to ensure consistency on a subset of transcripts. Along with qualitative approaches, key quantitative fidelity indicators, such as interaction duration, subject, participant demographics, and key skills used, were captured for each transcript by study team members. These data were analyzed using univariate and bivariate analysis to assess presence of key intervention characteristics as well as relationships between service indicators (duration, primary focus, etc.) and intervention characteristics (e.g., advocacy skills used).

Fidelity to the digital hotline programmatic model articulated in phase one of this study was assessed via frequency of program and research staff endorsement of specific advocacy tasks being completed in assessed digital hotline interactions, and through content analysis of transcription. The validity and reliability of the fidelity measure itself was assessed through shared assessment of research team coded transcripts and staff fidelity ratings, and empirical examination of the internal structure of the fidelity data.

Qualitative Analysis Interview Data. Qualitative interview transcripts from interviews (staff, COVID-19 services, and longitudinal study participants) were recorded with participant permission. Transcripts and field memos were used for analysis. Content analysis techniques (Braun & Clarke, 2020) were used to analyze staff and stakeholder interviews for programmatic approach and COVID-19 experiences and service applications. Thematic analysis was used to analyze COVID and longitudinal participant interview data (Braun & Clarke, 2006; Braun & Clarke, 2020; Guest et al., 2012). Data was initially reviewed by three research team members. From this review, a codebook of initial themes for each data set (COVID-19 interviews and longitudinal study participant interviews) was developed from the dataset and then later refined, through open coding to confirm the codebook with the dataset. Data was then coded line-by-line

by two members of the team, with the third member available to resolve discrepancies. Regular meetings were held to discuss analysis. After line-by-line coding, the team defined and refined relationships and subsequent themes, relative to the study objectives and research questions. Additional analytic rigor was introduced through feedback on thematic trends through periodic meetings with HAWC and SAFE and by testing the themes confirmability and saturation (Guest, et al., 2012; Miles & Huberman, 1994). The final coded dataset for COVID-19 and outcome interviews included codebooks with inclusion, exclusion, and example data. COVID-19 interviews had 31 codes, with thematic domains on 1) service access and pandemic; 2) COVID experiences in the community and at home; 3) Virtual service experiences and 4) Service and community referral experiences. Longitudinal interviews had 19 codes, with thematic domains on 1) Service experiences; 2) Service outcomes, 3) Service motivations, and 4) Community and social support.

Expected Applicability of the Research

While the study focuses on two Texas organizations, we expect the findings to have broad applicability to the network of nearly 2000 (NNEDV, 2024) community-based programs serving survivors of IPV, SA, and HT. Federal policy (e.g., VAWA, FVPSA) establishes free, community-based services for survivors, including hotline. As such, this project, focused on the outcomes associated with digital hotline use, has relevance to all local IPV, SA, and HT programs providing hotlines, particularly those considering or beginning the process of implementing chat and/or text formats. Findings from this project can be used by such agencies to assess the alignment of their services with an evidence-based logic model for digital hotline services and to support funding requests for hotline focused services. Further, these findings have relevance to national digital hotline providers, as they illustrate participant-focused impacts, and

connected indicators of fidelity which are unique to digital hotline. Finally, these data provide some of the first evidence for the unique efficacy of digital hotline in addressing violence and service connection for a wide cross-section of those in need of support.

Collaborating Organizations

SAFE Alliance

SAFELine is a program of SAFE Alliance, an organization in Austin, Texas that provides services related to sexual assault and exploitation, intimate partner violence, human trafficking, and child abuse and neglect. SAFE Alliance was formed in 2017 through a merger of two long-standing central Texas agencies, SafePlace and Austin Children's Shelter. The merger aimed to provide streamlined, integrated services for those affected by myriad and interrelated types of interpersonal violence, abuse, and exploitation that affect individuals across their lifespan. In addition to SAFELine, SAFE Alliance provides a variety of services for both adult and youth survivors of violence and abuse, including emergency shelter and longer-term supportive housing services, counseling, financial and legal advocacy, sexual assault forensic nursing, and foster and adoption services. The CARES program is available to offer support services for recently recovered survivors of human trafficking. SAFE Alliance also provides prevention and outreach services to the community, including programs designed specifically for teens, individuals with disabilities, individuals that are D/deaf and hard-of-hearing, and parents and families with multiple stressors or involved in the child welfare system.

The SAFELine provides 24/7 phone, chat, and text support to victims of crime and violence, with a focus on Travis County, Texas, home to the city of Austin. SAFELine offers crisis intervention, safety planning, emotional support, screening for admission to most SAFE services, and information and referrals. Accessed through the SAFE website or via text, the SAFELine

serves as a private way for abuse victims to connect with advocates and receive the same services they would receive if they were to call the hotline. Depending on staff capacity, there may be a wait to be connected to staff. A welcome message with information about safety is provided before the client is connected to SAFeline staff. Regardless of call, text, or chat, SAFeline clients are given the opportunity to express concerns, and explain circumstances and experiences. They can also request services, and are provided with appropriate resources and referrals. SAFeline is the only bilingual (English/Spanish) call/chat/text line in Travis County, Texas. SAFeline is available for anyone who is experiencing or has experienced previously, interpersonal violence including intimate partner violence, sexual violence, child abuse and neglect, and human trafficking. Additionally, individuals use the SAFeline for information and resources on parenting, general questions about SAFE Alliance, and relationships. Both individuals experiencing violence and using violence use SAFeline services. SAFeline currently has six full-time staff, eight part-time staff, two managers and one director.

Houston Area Women's Center Hotline

The Houston Area Women's Center (HAWC) is the largest and most comprehensive service provider and advocate for survivors of domestic violence, sexual assault, and sex trafficking in the Greater Houston region. HAWC envisions the day when intimate partners, families, communities, and social norms consistently foster safe, healthy, and empowering relationships. For over 47 years, HAWC's highly trained Crisis Hotline Counselors have helped thousands of survivors of violence access life-saving resources. The agency provides immediate access to 24/7 crisis intervention services, ongoing trauma-informed support programs, and violence prevention initiatives to survivors, their families, and communities. HAWC's services are free, confidential, and available in multiple languages, as well as for the deaf/hearing

impaired, to best address the unique needs of every client. HAWC's hotline is the entry point to all programs and services including danger assessment, safety planning, hospital accompaniment, intake and referral to emergency housing, long term housing and access to comprehensive survivor empowerment programs like counseling, legal advocacy, and economic empowerment. HAWC currently has 12 full-time staff and 14 part-time staff.

Changes in Approach from Original Design and Reason for Change

Slight changes were made to the original proposed design for feasibility and agency staff constraints. We originally intended to have 200 staff fidelity checks, 100 from each agency. However, due to staffing constraints and the high volume of service interactions staff were encountering, only 99 were collected. Further, we anticipated having an equal amount of deidentified transcripts from chat and text interactions from each agency (HAWC and SAFE), but platform differences in accessing transcripts meant we were only able to obtain COVID-era service interactions from one site (SAFE), and staffing constraints limited sites from sharing large volumes of transcripts due to the time deidentification took. We made some measurement modifications on the longitudinal component of the study from our proposed design. Fidelity measures that better matched the programmatic logic model were tested for another project and then used for this study. We also had to reduce the length of the survey, so we omitted measures that had overlapping constructs to reduce the survey length to 20 minutes or less. None of these project changes impacted our ability to assess study objectives or conduct our evaluation.

Outcomes

Results and Findings

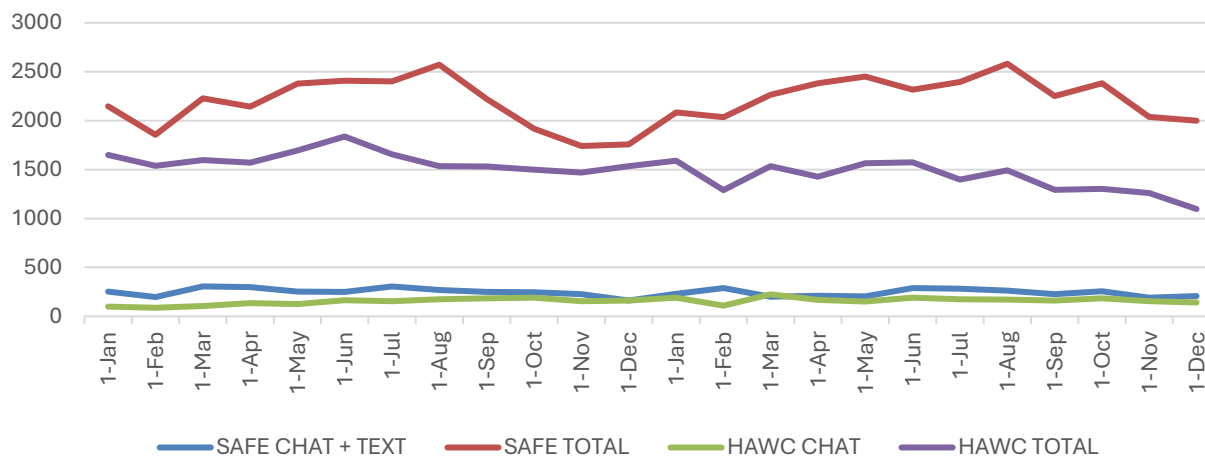
Across data streams which represent the voices of digital hotline participants, staff, and stakeholders, this project demonstrates the important impact of digital modalities for providing

effective, timely support to survivors of IPV, SA, and HT. In the time since initial service contact, service participants reported reduced violence victimization, improved mental health, and increased sense of their own ability to respond to and address safety concerns in their lives. Further, these data provide crucial insights into the “active ingredients” to high fidelity impactful services, providing data to support effective implementation of digital hotline via chat and text in agencies across the country.

Hotline Service Use at HAWC and SAFE

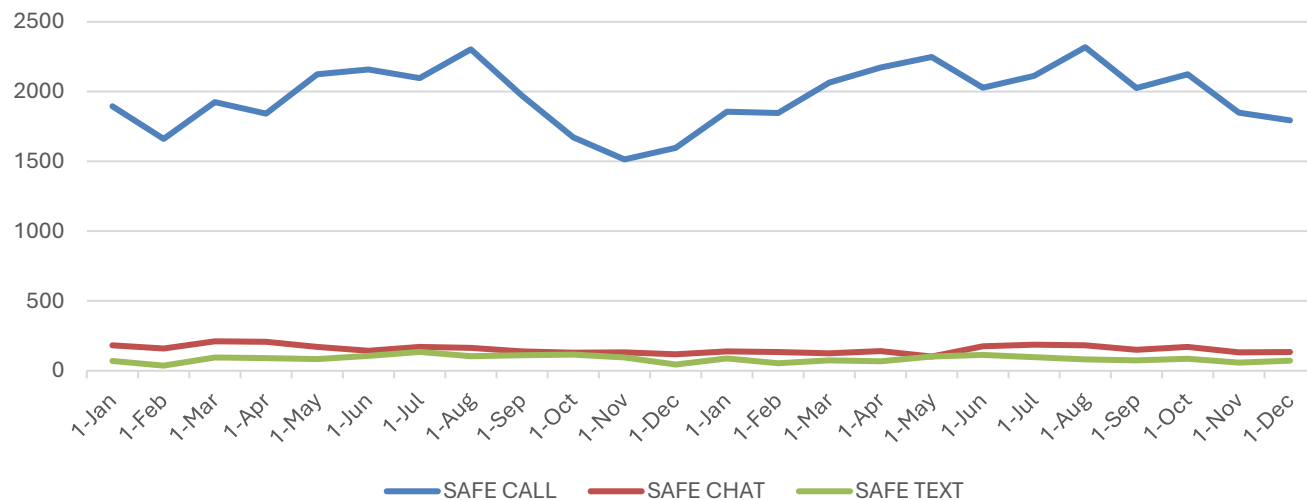
Agency partners at HAWC and SAFE provided deidentified hotline use data for calendar years 2022 and 2023. In 2022, the agencies had a combined 44,888 service interactions (phone, chat, and text), with an average of 3741 a month. The most service interactions in 2022 were recorded in June (n = 4247). In 2023, the agencies had a combined 44,010 service interactions, with an average of 3668 a month. The most service interactions were recorded in August (n = 4075). Over the two-year study period, 10.83% of hotline interactions were chat or text. See Figure 1.

Figure 1 *All Agency Hotline Interaction 2022 and 2023*



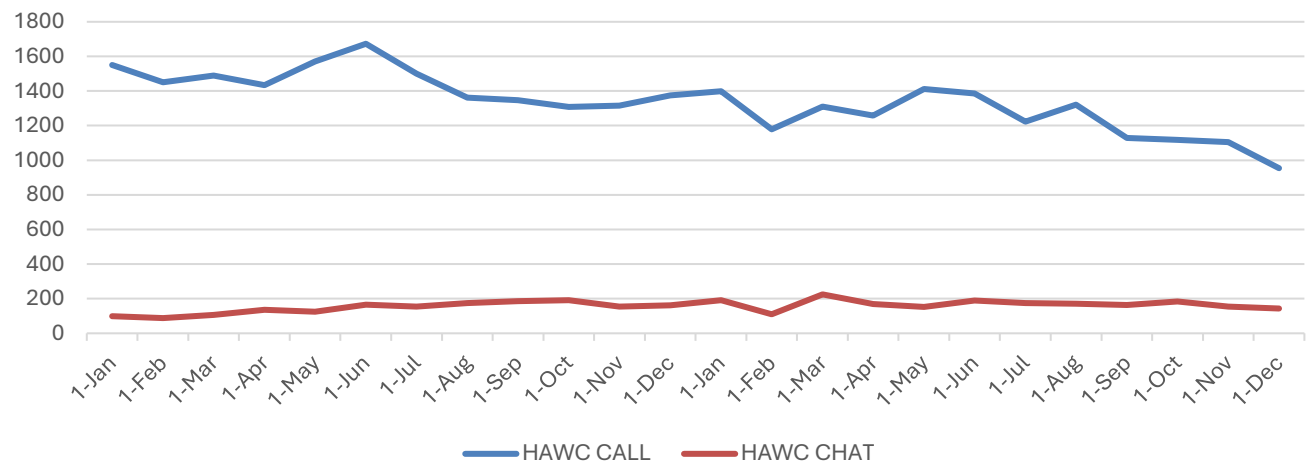
SAFE offers hotline via chat, text, and phone. In 2022, SAFeline recorded a total of 25,772 service interactions (phone, chat, and text), with an average of 2148 a month. The most services interactions at SAFeline in 2022 were recorded in June ($n = 2409$). In 2023, SAFeline recorded a total of 27,186 service interactions (phone, chat, and text), with an average of 2266 a month. The most services interactions at SAFeline in 2023 were recorded in August ($n = 2582$). In 2022, there were 3015 chat and text hotline interactions at SAFeline, with the highest number in March ($n = 306$). In 2023, there were 2848 chat and text hotline interactions at SAFeline, with the highest number in June ($n = 289$). See Figure 2.

Figure 2 *SAFEline Service Interactions 2022 and 2023*



HAWC offers hotline via chat and phone. In 2022, HAWC recorded a total of 19,116 service interactions (phone and chat), with an average of 1593 a month. The most services interactions at HAWC in 2022 were recorded in June ($n = 1838$). In 2023, HAWC recorded a total of 16,824 service interactions (phone and chat), with an average of 1402 a month. The most services interactions at HAWC in 2023 were recorded in January ($n = 1590$). In 2022, there were 1739 chat hotline interactions at HAWC with the highest number in October ($n = 191$). In 2023, there were 2029 chat and text hotline interactions at HAWC with the highest number in March ($n = 225$). See Figure 3.

Figure 3 *HAWC Service Interactions 2022 and 2023*



Study Participants

Staff Interviews. A total of 28 staff members participated in interviews, 17 of which were HAWC (n = 9) or SAFE (n = 8) employees, and 11 were employees of other agencies (e.g., stakeholders) that either referred to HAWC or SAFE or provided similar services. Staff and stakeholder interview participants were recruited electronically through emails shared by agency contacts. The 11 stakeholders included national hotline employees, forensic nurses, legal advocates, law enforcement, and hotline staff at other Texas IPV agencies. All staff and stakeholder interview participants identified as female. Participants ranged from age 24-64 and had between 5 months and 30 years of experience working with survivors of violence and referring to the hotline.

COVID-19 Interviews. Former or current clients from HAWC (n = 15) or SAFE (n = 10) that used digital hotline services during the first two years of the COVID-19 pandemic were interviewed. Interview participants were recruited via electronic flier shared by HAWC and SAFE staff to current and former clients. Participants were majority female, and, in most cases, had used both digital and phone hotline. See Table 1.

Table 1 *COVID-19 Service Experience Interviews*

COVID Interviews	n	%	COVID Interviews	n	%
Agency Use (n = 25)			Age (n = 25)		
SAFE Alliance (SAFE) in Austin, Texas	10	40.0	18-24 years old	4	16.0
Houston Area Women's Center (HAWC) in Houston, Texas	15	60.0	25-34 years old	10	40.0
Sex² (n = 25)			35-44 years old	3	12.0
Female	21	84.0	45+ years old	7	28.0
Male	2	8.0	Unknown	1	4.0
Missing	2	8.0	Race/Ethnicity (n = 25)		
			White or Caucasian-Non-Hispanic	8	32.0
			Hispanic or Latino/a	7	28.0
			Black or African American	4	16.0
			Asian	3	12.0
			Multi-racial or Unknown	3	12.0

Longitudinal Study. A total of 307 first time digital hotline participants were recruited after service use via HAWC and SAFE. See table 3 below for more on the full baseline sample. In addition to repeated surveys, interviews were conducted with a small group of longitudinal participants. Longitudinal study participants were invited to an interview from the study team. See Table 2 for an overview of longitudinal study participants interviewed for this project.

Table 2 *Outcome Interviews (n = 25)*

Outcome Interview Participants	n	%		n	%
Agency Use (n = 25)			Chat or Text		
SAFE Alliance (SAFE) in Austin, Texas	13	48.0	Chat	23	92.0
Houston Area Women's Center (HAWC) in Houston, Texas	12	52.0	Text	2	8.0
Sex (n = 25)			Race/Ethnicity (n = 25)		
Female	25	100.0	Black or African American	10	40.0
Age (n = 25)			White or Caucasian-Non-Hispanic	6	24.0
18-24 years old	2	8.0	Hispanic or Latino/a	6	24.0
25-34 years old	6	24.0	Asian or Multi-racial	3	12.0
35-44 years old	11	44.0			
45+ years old	6	24.0			

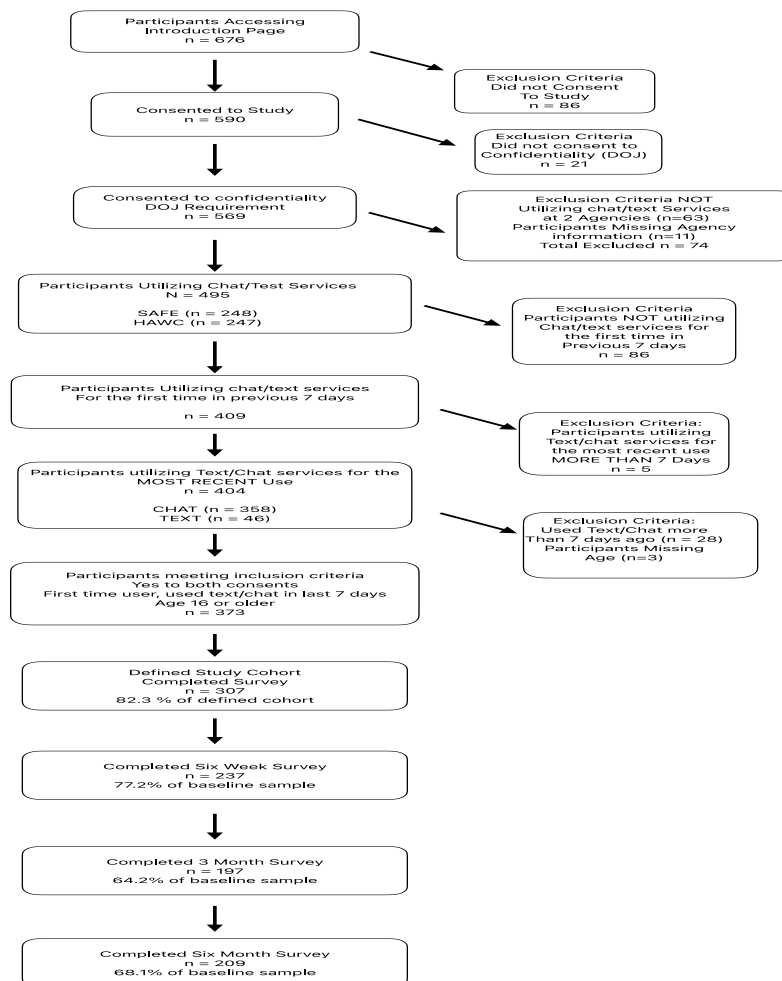
² For questions about missing data, please contact the first author.

Objective One: Longitudinal Outcome on Safety, Resources, Health, and Support

Study Participation. The survey invitation was sent to participants by a digital hotline advocate following a service interaction. Participants were sent a standard message after the interaction was completed, unless hotline advocates perceived it was unsafe. Participants were eligible if they were 16 or older and using digital hotline for the first time in the past seven days. Participants were recruited from July 2022 to February 2024 at SAFE and HAWC. A total of 676 people accessed the survey introduction page, and 569 consented. People were excluded most frequently from study eligibility due to not having used the service for the first time in the previous seven days (n = 86)

and not using chat or text services at the agency (n = 74). A total of 373 people met eligibility criteria and consented to the study, and 307 completed the baseline assessment. Participants were sent a \$30 gift card for each survey completed. See Figure 4 for study cohort.

Figure 4 *Study Cohort*



Retention for the study was 77.2% (n = 237) for the first follow-up at 6 weeks; 64.2% for the second follow-up at three months; and 68.1% for the final follow-up at 6 months. Attrition analysis of 64 participants with no follow-up surveys indicated no notable differences in baseline characteristics with regard to demographics, education, employment or income from those participants that were retained in the study (n = 243).

Some enhancements were made that improved our study retention over time. Our original retention plan planned for reminders at 3 and 9 weeks, and 4.5 months by email was not as impactful as we had hoped. We evaluated the effectiveness of our strategy after completion of the first 50 baseline surveys. Based on this assessment, we bolstered our approach by 1) asking participants about both preferred and safe contacts, including text messaging; 2) adding a study welcome message with three days of baseline via text or email; 3) enhancement of the three-week retention check to be done by phone or text if safe, and to be sent up to three times (or until we had confirmation from participant) and 4) ensuring initial incentives were sent within 24 hours of survey completion, and re-sending links for unspent gift cards to participants. These modifications improved our retention from baseline to the first follow up.

Table 3 *Demographics of Baseline Longitudinal Sample*

Demographics ¹	n	%	Demographics	n	%
Sex			Current Relationship Status		
Female	279	90.9	Married/partnered	84	27.4
Male	15	4.9	Single	136	44.3
Missing ³	13	4.2	Divorced/Separated	63	20.5
Race and Ethnicity			Dating/Hooking up	24	7.8
American Indian, Alaska Native, Native Hawaiian or Pacific Islander	3	1.0	Education Completed		
Asian	11	3.6	8th grade or less and Some high school	25	8.1
Black or African American	73	23.8	High school graduate or GED	76	24.8
Hispanic or Latino/a	93	30.3	Some college/vocational training	131	42.8
Multi-racial	31	10.1	Bachelor's degree	52	17.0
White or Caucasian-Non-Hispanic	96	31.3	Advanced degree (Masters, PhD, JD, etc.)	22	7.2

¹ Indicates valid percentages

³ For questions about missing data, contact the first author.

Demographics. Participants (n = 307) were recruited nearly equally from SAFE (48.9%) and HAWC (51.1%). The vast majority of participants identified as female (90.9%). The majority (67%) had some college or a college degree. The average age was 34, with a range of 17 to 65. See Table 3 for more on demographic composition of the baseline sample.

Participant Health at Baseline. The majority of participants (65.4%) indicated that they were in good to excellent physical health. About half (48%) indicated they had a disability. Nearly 75% of participants had symptoms indicating probable posttraumatic stress disorder (PTSD) using a standardized screener and 47.2% had moderate to severe depression symptoms using a standardized screener. Nearly 1/5 (19.2%) indicate potential problematic drinking. See Table 4 for baseline health characteristics. Interviews with study participants highlight health issues as a reason for digital hotline use, with one participant noting *"Yeah. I just remember feeling super depressed at the time due to my relationship. It was really, really abusive and toxic, I would say"* (P7). Another participant expanded on the particular importance of digital hotline in helping her access services without judgement related to her mental health.

I am severely physically disabled as well as mentally disabled. Just not having to have the stress of who's gonna answer the phone or anything like that is a lot easier on people like me, especially considering I have complex PTSD from even prior to my military service. It's absolutely a blessing for folks who have mental illness, period, because a lot of people are very shy to have mental illness, because we are stereotyped.... It basically didn't matter because the chat—it basically never really mattered that I had a mental health issue. (P13)

Table 4 *Baseline Health Characteristics*

Baseline Health Characteristics ¹			n	%	Baseline Health Characteristics			n	%
Would you say that your general physical health is					Have you been diagnosed with any disability or impairment, or mental health condition?				
	Poor	33	10.7			Yes	147	48.0	
	Fair	73	23.8			No	159	52.0	
	Good	98	31.9		Which of the following has been diagnosed?				
	Very Good	71	23.1		Sensory impairment (vision, hearing)			16	5.2

Probable PTSD	Excellent	32	10.4	Mobility impairment	12	3.9
	Yes	221	74.9	Learning disability (ADHD, dyslexia)	48	15.6
Depression Symptoms	No	74	25.1	Mental Health condition	113	36.8
				Brain injury	7	2.3
				Disability or impairment not listed above	35	11.4
	None/Mild	104	36.3	Probable Hazardous Drinking		
	Moderate	47	16.4	Yes	59	19.2
	Moderate Severe/Severe	135	47.2	No	248	80.8

¹ Indicates valid percentages

Participant Housing and Economics. Half of baseline participants were employed, with a majority (55%) with an income under \$1000 a month. Comparatively, in 2023, the federal poverty level was \$14,580 (HHS, 2023) and the median income for a household in the state of Texas was \$36,538 (Engel & Posey, 2024). Over 70% of participants had at least one lifetime experience of homelessness at baseline. Current housing was most frequently reported to be in a unit rented (36.7%) or owned (10.5%) or staying with friends or family (22%). Over half (58.5%) of participants had moved in the past 6 months. See Table 5 for baseline economic and housing information. Economic insecurity was a major draw to hotline services. One study participant, when interviewed, noted how precarious her economic situation was at the time.

I am living on the road full-time right now, my income has been really up and down because I don't have online work. It's been challenging to find online work. I've been kind of—I'll stay in one place and save money and then keep moving and then run out of money. It's like I'll go for a month at a time without really having any income and just kind of living off of my savings (P11).

Table 5 *Baseline Housing and Economic Characteristics*

Baseline Housing and Economics	n	%	Baseline Housing and Economics	n	%
Current Employment			Current Housing		
Employed, working 40 hours or more a week	86	28.1	Home/apartment/condo rented by myself or myself and my partner	112	36.7
Employed part-time, working less than 40 hours a week	48	15.7	Home/apartment/condo owned by myself or myself and my partner	32	10.5
Employed part-time, working seasonally/occasionally	19	6.2	Home/apartment/condo using a housing voucher from agency	10	3.3
Retired	3	1.0	Staying/living with a friend or family member	67	22.0
Not employed, looking for work	92	30.1	Domestic violence emergency shelter	13	4.3

Not employed, NOT looking for work	20	6.5	Domestic violence housing program (transitional housing or permanent supportive housing)	1	0.3
Not employed, caring for a child or loved one at home	30	9.8	Other emergency shelter or transitional housing	2	0.7
Missing ⁴	8	2.6	Hotel/motel paid for without emergency shelter voucher	18	5.9
Current Income (all sources)			Vehicle/recreational vehicle	19	6.2
Less than \$500	120	39.3	Outside/abandoned building or structure	14	4.6
\$501-\$1000	49	16.1	Other	17	5.6
\$1001-2000	55	18.0	Lifetime homelessness		
\$2001-3000	31	10.2	Never	91	29.6
\$3001-4000	19	6.2	Once	68	22.1
\$4001-\$5000	13	4.3	2-3 times	85	27.7
\$5001 or more	18	5.9	4-6 times	22	7.2
			More than 6	41	13.4

¹ Indicates valid percentages

Violence Experiences. At baseline, virtually all participants (93%) had experienced at least one measured form (physical, sexual, psychological, stalking) of intimate partner violence (IPV) in their lifetime, and 76.3% had experienced at least one type of IPV in the past 6 months. Over 52% had experience psychological IPV in the last six months; 44% physical IPV in the last six months; 32.8% sexual IPV in the last six months; and 41.6% stalking victimization in the last six months. Over 32% of baseline participants lived with or were still partnered with a person who harmed them. IPV was a major driver of digital hotline service use, as one study participant noted when interviewed. *“I mean it was with my husband. He came—he just went crazy one day. He started choking me, like I couldn't breathe. He stomped me. I honestly thought that I was gonna die”* (P14).

The large majority of baseline participants had also experienced sexual assault at least once in their lifetime (81%), with current or former partners (57.8%) being the most common perpetrator, followed by an acquaintance. One participant interviewed for the study noted how awareness of childhood experiences prompted outreach to the digital hotline. *“I had some*

⁴ For questions about missing data, please contact the first author.

childhood sexual trauma and um I kinda just remembered that as an adult. It wasn't necessarily something I was aware of all my life" (P4). Just under half (49.3%) had experienced at least one type of human trafficking⁵ in their lifetime, and 17.8% had experienced it in the last six months. The most frequent perpetrator of HT was a current or former partner (49.8%), followed by a boss/supervisor (10.6%). See Table 6 for more on violence experiences.

Table 6 Baseline Violence Experiences

Violence Experiences ¹	n	%
Intimate Partner Violence (Lifetime)	280	93.0
Intimate Partner Violence (Six Months)	229	76.3
Sexual Assault (Lifetime)	244	81.1
Sexual Assault (Six Months)	117	39.3
Trafficking (Lifetime)	143	49.3
Trafficking (Six Months)	51	17.8

¹ Indicates valid percentages

Service Experiences. The majority of participants at baseline reached out via chat (89.6%) and were using digital (chat/text) hotline for the first time that day (87.9%), though 42.0% had previously contacted the hotline by phone. The vast majority of participants were contacting hotline for themselves (90.2%). Participants typically waited no more than 5 minutes to be connected with a hotline staff member and the plurality of sessions lasted between 5-20 minutes. One interview participant shared, "*The wait wasn't very long. I would say maybe like two minutes. It wasn't immediate, but it wasn't very long either*" (P20). When assessing previous service use, counseling was the most frequently reported (19.9%). See Table 7 on current and previous service experiences.

Table 7 Current and Previous Service Experiences

	n	%
Times Hotline Contacted by Phone (Last Six Months)		
I have never contacted this hotline by phone.	178	58.0

⁵ Both sex and labor trafficking were behaviorally assessed for this study.

	Once	78	25.4
	2-3 times	34	11.1
	4-5 times	11	3.6
	6 or more times	6	2.0
Who did you contact the chat and text hotline for most recently?			
	Yourself	277	90.2
	A friend or family member	16	5.2
	A work-related reason/for a client	10	3.3
	Other	4	1.3
Preferred Language for Services			
	No	3	1.0
	Yes	299	99.0
Connection to Hotline Wait			
	5 minutes or less	280	91.2
	6-15 minutes	16	5.2
	16-20 minutes	3	1.0
	21-30 minutes	4	1.3
	31-45 minutes	3	1.0
	More than 45 minutes	1	0.3
Digital Hotline Session Length			
	5 minutes or less	80	26.1
	6-15 minutes	119	38.9
	16-20 minutes	50	16.3
	21-30 minutes	23	7.5
	31-45 minutes	14	4.6
	More than 45 minutes	20	6.5
Service Use at Baseline			
	Counseling services	61	19.9
	Advocacy and/or Case Management	41	13.4
	Emergency Shelter	34	11.1
	Legal advocacy services	31	10.1
	Other housing support	25	8.1
	Other services	24	7.8
	Financial help	23	7.5
	Parenting support	1	3.3
	Children's services	6	2.0
	Education support	4	1.3

¹ Indicates valid percentages

The most common way participants found the digital hotline was through social media/internet (38.4%). A participant interviewed for the study shared how she found digital hotline services:

I was at a certain site, and they were the partners for one of the sites. I was familiar with the organization. I just hadn't really had a need to reach out to them until that particular point in my life. I was familiar with them. I just looked up their website to see what group therapy and individualized therapy they offered. That's when I found the chat and text service. (P4)

The most common goals, as reported by baseline participants, when reaching out to digital hotline were 1) shelter (23.8%), followed by 2) counseling (17.6%). An interviewed participant

explained: “*I mainly needed a safe place that I could go because it was the person I was living with that assaulted me at work.*” (P13). The most typical referrals offered by digital hotline staff were 1) other shelter programs (13.4%), 2) legal services (12.4%) and 3) counseling (11.7%). Overwhelmingly, participants agreed that digital hotline staff helped somewhat (23.5%) or a lot (62.9%) with their goals when accessing services. Participants indicated that emotional support, safety help, and referrals were the most common types of help offered on digital hotline. A participant described the advocate’s approach:

She seemed sympathetic. She was, “I’m so sorry you are going through this. I can understand where that can be, you know, it can be abrasive it can be harmful. Is there anything— Are you feeling you know— Are you feeling like you are in danger right now? Is there anything that, you know—” She was very, very attentive and hopeful to me and she seemed really empathetic and sympathetic like she— It seemed like from the heart she really wanted to help. (P1)

See Table 8 for an overview of baseline service needs and goals.

Table 8 *Digital Hotline Service Needs and Goals*

	n	%		n	%
How did you first learn about the chat and text hotline?¹			What was your main goal for contacting chat and text services?		
Social media post or internet search	118	38.4	Help with shelter	73	23.8
Friend or family member	51	16.6	Help with counseling or support	68	22.1
Social service or community agency	55	17.9	Help with abuse/violence	54	17.6
Other	32	10.4	Legal help	36	11.7
Law enforcement/police	22	7.2	Help with housing (other than shelter)	35	11.4
Can't remember	12	3.9	Help with safety needs	16	5.2
Lawyer or person at court	7	2.3	Help a friend or family member experiencing violence or abuse	9	2.9
School or university	6	2.0	Other	9	2.9
Co-worker	4	1.3	Help a client/person I am working with experiencing violence or abuse	5	1.6
			Medical help after a sexual assault (SANE exam)	2	0.7
How much did staff and the chat/text line help with your goal?			When you contacted the chat/text hotline, did you get help with any of the following for yourself or another person you were helping?		
Not at all	8	2.6	Emotional support	92	30.0
A little	34	11.1	Getting safer/safety needs	88	28.7
Somewhat	72	23.5	Referral to services at other agencies	84	27.4
A lot	193	62.9	Referral service at this agency	75	24.1

What referrals did you receive for yourself or the person you are helping?			Housing		
				66	21.5
Other shelter programs	41	13.4	Info for my physical and mental health	51	16.6
Legal services at this agency	38	12.4	Information on law enforcement	33	10.7
Counseling at this agency	36	11.7	Did not get help with any of the above	29	9.4
Shelter at this agency	34	11.1	Financial/Transportation Needs	26	8.5
Other counseling services	34	11.1	Information about relationships	21	6.8
Other housing resources	25	8.1	Other	20	6.5
Financial support at this agency	17	5.5	Information on CPS and/or APS	14	4.6
Sexual assault services at this agency	15	4.9	Medical help	14	4.6
Food assistance/Food banks	12	3.9			
Transportation support	10	3.3			
Other	10	3.3			

¹ Indicates valid percentages

A strong majority (82%) were satisfied or very satisfied with their interaction with staff on digital hotline. At baseline, 47.7% of participants said they felt safe or very safe before working with the digital hotline advocate, and 52.3% of participants said they felt safe or very safe after working with hotline advocate, indicating a slight increase in feelings of safety post digital hotline use.

Safety Strategies. Participants were asked at baseline about strategies that they had employed to improve their personal safety. The most common strategies used in the previous six months were 1) leaving room or home to avoid partner; 2) doing things requested by partner to keep the peace and 3) using social media to connect with friends and family. Just 32.7% indicated they had contacted law enforcement in the past six months to improve their personal safety and 31.8% had used apps for personal safety in the past six months. See Table 9.

Table 9 *Safety Strategies*

Safety Strategies ¹	No, I have never done this in my life		Yes, I have done this in the past 6 months		I have done this in my lifetime but NOT in the last 6 months	
	n	%	n	%	n	%
Leaving room or house to avoid partner	41	13.5	182	60.1	80	26.4
Using social media/phones to connect with other people	55	18.2	175	57.8	73	24.1
Asking friends or family to help resolve conflict	116	38.2	102	33.6	86	28.3
Using public locations or help from friends and family for child custody exchanges	207	68.8	48	15.9	46	15.3
Doing things requested by partner, even if you didn't want to, to keep more peace	50	16.6	177	58.6	75	24.8
Using safety apps on your phone or mobile device	154	51.0	96	31.8	52	17.2
Removing alcohol, drugs and/or weapons from home	153	50.8	66	21.9	82	27.2
Changing passwords/accounts	86	28.5	143	47.4	73	24.2

Encouraging partner to seek counseling or support	60	20.1	157	52.7	81	27.2
Contacting law enforcement about partner	117	39.4	97	32.7	83	27.9

¹ Indicates valid percentages

Technology access and comfort. Participants indicated at baseline strong access and comfort with technology. Over 92% had access to a smartphone, and 75% had a computer at home. Over 76% had reliable internet access. The majority of participants (81%) were comfortable or somewhat comfortable sending emails; 80.9%; were comfortable or somewhat comfortable sending text messages; and 75.6% were comfortable or somewhat comfortable communicating with a healthcare provider online.

Longitudinal Outcomes

Longitudinal survey participants were asked to complete surveys at six weeks, three months, and six months after their initial assessments. The timing of assessments was linked to findings from the first phase of the *ETA* project on probable hotline outcomes. Four assessments were obtained for 182 (59.3%) participants and 3 surveys were completed at baseline, six-weeks, and six-months for 203 participants (66.1%). A total of 209 participants (68.1%) completed a baseline and six-month assessment only, and 77.2% (n = 237) completed baseline and six weeks only. Short (6 weeks) and long (6 months) changes were analyzed for measures of health, safety, support and coping, and resource and economic changes⁶.

⁶ Due to small sample size in subgroups, agency level differences were underpowered for analysis

Health Changes Associated with Digital Hotline Use. Health outcomes were assessed for short term and long-term changes. Paired t-tests were used to assess within person change from baseline to the short and long-term follow ups. Type I error rate was set at 0.05 for all significance tests. Digital hotline was associated with decreased negative mental health. There were significant reductions in depression symptoms at all time points, with decreases in participants who were moderately severely/severely depressed, and movement to participants with mild or no depression symptoms. Symptoms associated with probable PTSD significantly decreased at all time points. No significant changes were noted at any time point for physical health or hazardous drinking. See Table 10.

Table 10 *Health Changes in Longitudinal Sample*

Health Changes	Baseline	Short-Term (6 weeks)	Long-Term (6 months)	p-value ²		
(n = 203)	M (SD)	M (SD)	M (SD)	B-6w	B-6m	6w-6m
Depression (0-24)	12.87 (7.43)	11.01(6.78)	10.11 (6.89)	<0.001	<0.001	0.005
Physical Health	3.05 (1.15)	3.07 (1.12)	3.06 (1.09)	0.73	0.84	0.97
	%	%	%			
PTSD	73.5%	62.9%	55.6%	0.002	<0.001	0.04
Hazardous Drinking	16.2%	18.2%	16.2%	0.55	0.70	0.45

B-6w denotes within person change from baseline to 6week follow up

B-6m denotes within person change from baseline to 6month follow up

6w-6m denotes within person change from 6week to 6month follow up

²Paired t-test of within person change from baseline

Safety Changes Associated with Digital Hotline Use. Perception of safety increased significantly and positively from baseline to six weeks, and baseline to six months. Tradeoffs for safety, which is the extent to which a participant perceives they have to make compromises for safety, did not significantly increase or decrease at any time point. Internal tools for safety, which assesses the extent to which a participant perceives they have the skills and resources to address safety needs, significantly increased across all comparisons. See table 11. One participant described how chat in particular helped her safety.

I think it had a very positive impact on my safety. I feel like you may try to hurry up and call somebody and then forget to clear your call log. Then, say, your abuser comes in. Who was this? Then calls the number and then oh, you were trying to do this. Say you're

on chat. You could just hurry up and exit the browser, clear your history, and that's that. I feel like it was a very safer option than calling and speaking to somebody. Yeah. Like I said, I feel like it has a very positive—or it had a very positive impact on my safety. (P22)

Table 11 *Safety Changes in Longitudinal Sample*

Safety Changes (n = 203)	Baseline	Short-Term (6 weeks)	Long-Term (6 months)	P-value ²		
	M(SD)	M (SD)	M (SD)	Baseline -6w	Baseline- 6m	6w- 6m
Perception of Safety ³	3.34 (1.32)	3.83 (1.10)	3.9 (1.1)	<0.001	<0.001	0.51
Internal Tools for Safety ⁴	2.29 (1.02)	2.43 (1.02)	2.6 (1.10)	0.03	<0.001	0.001
Tradeoffs for Safety ⁵	1.67 (1.18)	1.53 (1.08)	1.5 (1.1)	0.11	0.05	0.50

² Paired t-test of within person change from baseline

³ Scale range 1-5

⁴ Scale range 0-4

⁵ Scale range 0-4; reverse coded

Violence Changes. At baseline, participants were asked about violence experiences at lifetime and the prior six months (see Table 12 for lifetime experiences) using behaviorally specific screeners (see Appendix C). Participants were asked about violence experiences on their final assessment, six months post-baseline. Significant reductions in physical and psychological IPV were observed 6 months after the first digital hotline use. No significant changes were observed in sexual IPV or stalking. There were no significant changes observed for sexual assault rates six months post-baseline. Unexpectedly, there were significant increases in trafficking reported six months post-baseline. See Table 12.

Table 12 *Violence Experience Changes*

Violence type	% 6-month incidence baseline	% 6-month incidence follow-up	P-value ²
Psychological IPV	50.5	41.2	<0.001
Physical IPV	43.0	28.4	<0.001
Sexual IPV	32.0	25.6	0.09
Stalking	39.5	39.2	0.91
Sexual Assault	40.5	39.7	0.99
Trafficking	15.3	32.5	<0.001

² Paired t-test of within person change from baseline

Support and Coping Changes Associated with Digital Hotline Use. Both short-term and long-term significant increases in support were identified. Participants were assessed for changes in expectations of support, a construct linked to social support and safety. Significant increases in expectations of support were found from baseline to six weeks and baseline to six months. Assessment of coping strategies revealed no significant changes between time periods. Hopefulness significantly increased from baseline to six weeks and baseline to six months. See Table 13. One study participant described in their interview how their coping strategies shifted after the digital hotline interaction.

I was able to start having the courage to reach out and get help from people and admit that I needed help because I have a lot of pride and a huge ego, and I don't like asking for help. It showed me that it was okay to start asking for help. Then in the process of doing that, it helped kind of open my eyes to my living situation and realize that I had been living in domestic violence without realizing it....That one chat experience is what led me to start asking for help and trying to get a sense of community. I started attending church and everything again because of it. (P12)

Table 13 *Support and Coping Changes*

Support Changes	Baseline	Short-Term (6 weeks)	Long-Term (6 months)	T-test P-value		
N = 203	M (SD)	M (SD)	M (SD)	Baseline-6w	Baseline-6m	6w-6m
Expectations of Support ²	2.00 (1.14)	2.28 (1.17)	2.37 (1.09)	<0.001	<0.001	0.13
Coping ³	1.85 (0.71)	1.86 (0.67)	1.84 (0.68)	0.68	0.99	0.25
Hope ⁴	2.34 (1.10)	2.50 (1.03)	2.55 (1.10)	0.005	0.001	0.34

² Scale Range 0-4

³ Scale Range 0-3

⁴ Scale Range 0-4

Resource and Economic Changes Associated with Digital Hotline Use. Differences in income were assessed from baseline to the six month follow up using the McNemar test for paired proportions. Significantly fewer participants were making less than \$1000 a month at follow up (55.7% B, 47.3% 6M, $p = 0.011$) and significantly more were making \$3,000-\$4,000 a month (4.9%B, 10.8% 6M, $p = 0.007$). No significant differences were observed in employment status. See Table 14.

Table 14 *Longitudinal Changes in Monthly Income*

Monthly Income	Baseline		Six Weeks		Six Months	
n (203) %	n	%	n	%	n	%
000-\$1000	113	55.7	104	51.5	96	47.3*
\$1001-2000	37	18.2	37	18.3	44	21.7
\$2001-3000	23	11.3	26	12.9	23	11.3
\$3001-4000	10	4.9	18	8.9	22	10.8*
More than \$4001	20	9.9	17	8.4	18	8.9

*Significant changes from baseline to six month follow up

Using data from participants who had completed all four assessments (n = 182), housing and economic insecurity factors were assessed at each time point (Table 15). Paired t-tests were used to assess within-person change from baseline to each of the subsequent follow ups.

Participants reported a significant decrease in trouble finding housing, trouble getting housing because of credit, and having utilities cutoff from baseline at all three follow ups. At the six month follow up, there was a significant decrease in having to stay with friends or family from baseline. At three months and six months follow up, there was a significant decrease in reports of evictions. At six weeks and six months follow up, there was a significant reduction of having to borrow money to pay bills. There was a significant reduction in having to ask community agencies for help or being harassed at six weeks follow up. No significant differences were observed for trouble buying food and other needs. See Table 15.

Table 15 *Economic and Housing Hardship Changes*

n = 182	Baseline		Follow- Up	
Economic and Housing Instability	Baseline	Six Weeks	Three Months	Six Months
	%	%	%	%
Trouble finding housing you can afford	68.4	61.5*	61.5*	59.0*
Had to stay with friends or family	57.0	52.5	49.4	46.6*
Trouble getting housing because of credit	67.0	57.8*	57.4*	59.2*
Been evicted	31.6	26.1	22.6*	23.8*
Trouble buying food and other needs	69.1	66.1	65.1	64.3
Had to borrow money to pay bills	72.1	64.6*	65.3*	65.1
Asked community agency for help to pay bills or rent	45.7	37.1*	37.4	41.0
Been harassed by people or companies	42.4	33.5*	37.9	40.1
Had utilities cutoff	50.8	41.2*	37.5*	39.3*

*Paired t-test for within person change from baseline, p-value <.05

Subsequent Service Use and Associated Changes. Subsequent hotline use decreased at each assessment. At six weeks post baseline, 45.6% had used hotline services again at HAWC, SAFE or another similar agency. At six weeks, repeated hotline clients used hotline once (45.7%) and two to three times (45.7%), and four or more times (8.5%). At three months, 33.7% had used hotline services again at HAWC, SAFE or another similar agency. At three months, repeated hotline clients used hotline once (44.1%), two to three times (48.5%), and four or more times (7.4%). At six months, 29.7% had used hotline services at HAWC, SAFE or another similar agency. At six months, repeated hotline clients used hotline once (49.2%), two to three times (39.3%), and four or more times (11.4%). In addition to subsequent hotline use, participants reported on additional services at HAWC, SAFE or a similar agency. At six weeks, the most frequently used services at six weeks were counseling, advocacy, and shelter. At three months, the most frequently used additional services were counseling, shelter, advocacy and other housing. At six months follow up, the most frequently used other services were counseling, advocacy, and other housing. See Table 16.

Table 16 *Follow Up Services*

Service (n = 182)	% Used between baseline and 6 Weeks	% Used between 6 weeks and 3 Months	% Used between 3 months and 6 months
Shelter	17.6	13.7	10.4
Advocacy/Case Management	20.3	9.9	13.2
Other housing	8.8	9.9	11.0
Counseling Services	30.8	26.4	26.4
Legal Services	9.9	7.1	7.1
Financial Help	9.3	8.2	7.1
Children's Services	6.0	6.0	3.3

Bivariate associations of key demographic factors and experiences were analyzed to understand differences between those who did and did not use hotline again during the follow up period (six weeks, three months, and six months). Repeated hotline use was not significantly associated with age, sex, or race and ethnicity. Repeated hotline use was associated with educational attainment,

in that, participants with some high school or less were more likely to use hotline again.

Repeated hotline use was also associated with probable depression, probable PTSD, and new experiences of IPV and sexual assault at the final follow up (six months), but not trafficking.

Increased perception of internal tools to manage safety concerns was significantly associated with no repeated hotline use at the final follow up (6 months). See Table 17.

Table 17 *Associations with Repeated Hotline Use*

		Mean/%		p
		Yes (Used Hotline Again) (57.46%)	No (Did Not Use Hotline Again) (42.54%)	
Sex	Age in Years	34.13	33.81	.81
	Female	58.18%	41.82%	.88
Race and Ethnicity	Black/AA	61.54%	38.46%	.34
	Hispanic/Latina	63.46%	36.54%	
	White	54.39%	45.61%	
Education	Some HS	72.22%	35.71%	.004*
	HS	74.42%	25.58%	
	Some College	57.14%	42.86%	
	Bachelors or Graduate Degree	34.89%	65.12%	
Internal Tools	Probable PTSD	3.55	2.65	.002*
	Probable Depression	11.20	8.16	.004*
	Human Trafficking	63.16%	36.84%	.19
	Physical IPV	73.47%	26.53%	.006*
	Psychological IPV	73.61%	26.39%	<.001*
	Sexual IPV	80.43%	19.57%	<.001*
	Stalking	66.67%	33.33%	.03*
	Sexual Assault	72.22%	27.78%	.001*
Internal Tools		2.40	2.89	.001*
Expectations of Support		2.29	2.45	.34

*Significant at p-value <.05

Objective Two: Fidelity

In phase one of ETA, a logic model and fidelity checklist for staff was developed to assess adherence to the model. The model from phase one indicated that digital hotline is guided by a service approach that is 1) service user centered; 2) trauma-informed; 3) social justice oriented, and 4) social presence facilitated. The phase one logic model had five goals and 24

skills (Wood et al., 2021). In phase two, we sought to revise our logic model related to study findings on outcomes and fidelity. To examine model fidelity to the logic model and programmatic goals, we analyzed four streams of data: 1) baseline survey data from longitudinal participants (n = 307); 2) staff fidelity survey data (n = 99); 3) deidentified transcripts from HAWC (n = 68) and SAFE (n = 260) and 4) staff and stakeholder interviews (n = 28). Transcript data were quantified for demographic and skill-based information, and qualitative data were analyzed using content analysis methods.

Staff Interviews and Program Input. Interviews were conducted with staff (n = 17) and community hotline partners external to the agency (n = 11) in part to understand any programmatic changes between sites and model adaptations during the COVID-19 pandemic. Staff interview data was also used to modify the fidelity checklist for staff from phase one of the project. After the research team modified the fidelity checklist, it was reviewed with community partners at HAWC and SAFE and further revised.

Baseline Fidelity Data. At baseline, all participants had used digital hotline services for the first time on that day, or the seven days prior. As such, participants were asked about their service experience for their digital hotline interaction. Fidelity to the model developed in phase one of ETA (Wood et al., 2021) was assessed using a modified version of the Foundations of Advocacy Behavior (FAB) scale (Sullivan et al., 2019) and selected modified questions from the Trauma Informed Practices (TIPS) scale (Goodman et al., 2016b). Questions from these scales were mapped to the five goals in the phase one ETA logic model. Additionally, overall questions of satisfaction were used. See Table 18 for an overview of baseline fidelity measures.

Table 18 *Baseline Fidelity Measures*

Fidelity Construct ¹	n	%	Fidelity Construct	n	%
The staff member I worked with was knowledgeable about community resources.			The staff member I worked with actively worked to connect me to community resources.		
Not at all true	3	1.0	Not at all true	14	4.6
A little true	26	8.6	A little true	27	8.9
Somewhat true	62	20.4	Somewhat true	67	22.1
Very true	213	70.1	Very true	195	64.4
The staff member I worked with helped me learn about signs of healthy and unhealthy relationships.			The staff member I worked with helped me learn about the impact of violence, abuse, or harm on my emotional and mental health.		
Not at all true	113	38.2	Not at all true	113	38.2
A little true	39	13.2	A little true	39	13.2
Somewhat true	42	14.2	Somewhat true	38	12.8
Very true	101	34.2	Very true	106	35.8
The staff member I worked with was interested in meeting my safety needs.			The staff member I worked with was interested in meeting my housing needs.		
Not at all true	29	9.8	Not at all true	71	24.4
A little true	34	11.5	A little true	39	13.4
Somewhat true	41	13.9	Somewhat true	52	17.9
Very true	192	64.9	Very true	129	44.3
The staff member I worked with was interested in meeting my emotional support needs.			The staff member I worked with listened to me.		
Not at all true	48	16.4	Not at all true	7	2.3
A little true	37	12.1	A little true	32	10.7
Somewhat true	43	14.7	Somewhat true	35	11.7
Very true	165	53.7	Very true	224	75.2
The staff member I worked with helped me learn new skills or practice existing skills.			The staff member I worked with valued my opinion.		
Not at all true	122	41.8	Not at all true	30	10.2
A little true	32	11.0	A little true	26	8.8
Somewhat true	42	14.4	Somewhat true	53	18.0
Very true	96	32.9	Very true	185	62.9
The staff member I worked with was available when I needed.			The staff member I worked with cared about my unique needs.		
Not at all true	11	3.6	Not at all true	21	7.0
A little true	28	9.2	A little true	40	13.4
Somewhat true	43	14.2	Somewhat true	37	12.4
Very true	221	72.9	Very true	201	67.2
The staff member I worked with supported and encouraged me.			The staff member I worked with was non-judgmental toward me.		
Not at all true	29	9.7	Not at all true	8	2.6
A little true	34	11.3	A little true	13	4.3
Somewhat true	34	11.3	Somewhat true	27	8.9
Very true	203	67.7	Very true	254	84.1
Overall, how satisfied are you with your interaction with staff at the chat and text hotline at this agency?			Overall, how connected do you feel to staff at the chat and text hotline?		
Very unsatisfied	8	2.6	Very disconnected	14	4.6
Unsatisfied	5	1.6	Somewhat disconnected	15	4.9

Neither satisfied or unsatisfied	42	13.7	Neither connected or disconnected	27	8.8
Satisfied	64	20.8	Somewhat connected	82	26.7
Very satisfied	188	61.2	Connected	169	55.0
If you had a friend or family member in need, would you recommend this chat/text hotline to them?					
Never	6	2.0			
Seldom	15	4.9			
Sometimes	40	13.0			
Often	36	11.7			
Almost always	210	68.4			

¹ Indicates valid percentages

The mean FAB score was 2.2 (range, 0-3, SD.77) indicating overall very positive experiences with hotline advocates. Supporting the conceptual model which holds that key advocate behaviors measured in the FAB scale (e.g., trauma informed and survivor centered services) are linked to increased empowerment related to safety, safety perception, and satisfaction with hotline services, significant positive correlations were found between the FAB scale and key indicators (see Table 19). High fidelity advocacy behaviors as measured by the FAB scale were highly positively correlated with participant satisfaction with the likelihood a participant would recommend hotline to a friend ($r = .70$), moderately positively correlated with satisfaction with hotline ($r = .67$), and connection with hotline staff ($r = .69$), and weakly positively correlated with sense of overall safety ($r = .16$), expectations of support around violence ($r = .21$) and internal tools for addressing violence ($r = .11$). See Table 19.

Table 19 *Baseline Fidelity Correlations*

	Expectations of Support	Internal Tools	Overall Safety Today	Satisfaction with Hotline	Connection with Hotline Staff	Recommend to a Friend
Foundations of Advocacy Behavior	.21***	.11*	.16**	.67**	.69**	.70**
Expectations of Support		.80**	.40**	.22**	.30**	.33**
Internal Tools			.41**	.12*	.19**	.22**
Overall Safety Today				.22**	.23**	.21**
Satisfaction with Hotline					.68**	.72**

Connection with Hotline staff	.76**
Recommend to a Friend	

*correlation significant at $p < .05$

**correlation significant at $p < .01$

Transcript Review. Fidelity was further assessed through analysis of deidentified digital hotline transcripts. SAFE and HAWC provided the research team with 328 transcripts that were suitable for analysis, and were analyzed quantitatively using the staff fidelity checklist modified after staff interviews. Additionally, the transcripts were analyzed qualitatively to understand more about the needs of digital hotline participants and to further understand staff use of skills and strategies.

Staff Fidelity Review. Finally, fidelity was assessed directly by staff using a fidelity checklist created in phase one and modified in phase two. Hotline staff at HAWC and SAFE were initially asked to complete a fidelity checklist administered via Qualtrics for every 10 hotline interactions, however after staff feedback, the request was changed to every three interactions. The fidelity assessment was fielded from March 2024 to May 2024. Table 20 illustrates the findings from the quantitative transcript analysis and the staff fidelity review. Overall, more transcripts ($n = 260$) and staff fidelity checks ($n = 72$) came from SAFE.

Table 20 *Agency and Participant Indicators*

Fidelity Data Review Sources	Transcripts Reviewed by Research Team ($n = 328$)		Sessions with Fidelity Reports by Agency Staff	
	N	%	n	%
Agency				
HAWC	68	20.7	27	27.0
SAFE	260	79.3	72	72.0
Service Type				
Chat	303	92.3	54	54.0
Text	25	07.6	24	24.0
	0	0	20	20.0
Phone				
Participant Type				
Survivor/Victim	258	78.7	84	84.0
Formal Support	12	3.7	7	7.0
Informal Support	29	8.8	4	4.0

Other/not indicated	13	4.0	4	4.0
Technical challenges indicated	4	1.2	4	4.0
Demographics				
Woman	103	31.4	61	61.0
Man	5	1.5	1	1.0
Other/Not Indicated	215	65.5	36	36.0
White/Caucasian	21	6.4	9	9.0
African American/Black	18	5.5	19	19.0
Asian	1	0.3	2	2.0
Hispanic/Latine	15	4.6	16	16.0
Not indicated/other	271	82.6	51	51.0
Age				
Under 18	4	1.2	3	3.0
18-25	20	6.1	5	5.0
26-50	41	12.5	38	38.0
50+	6	1.8	2	2.0
Not indicated	257	78.4	51	51.0
Length to be connected (in minutes)				
Less than 2 minutes	215	65.5	83	83.0
2-5 minutes	80	24.4	11	11.0
6-15 minutes	16	4.9	4	4.0
16+ minutes	11	3.4	1	1.0
Length of Session (in minutes)				
5 minutes or less	48	14.6	15	15.0
6-20 minutes	143	43.6	38	38.0
21-30 minutes	55	16.8	27	27.0
31-45 minutes	37	11.3	12	12.0
46+ minutes	45	13.7	6	6.0

*all but 2 were in English

In both staff recorded fidelity checklists, and research team review of transcripts, the vast majority of hotline interactions were about intimate partner violence (IPV). Interactions were frequently to a) request shelter and b) get safety, legal, and counseling support. See Table 21 below for an overview of transcript and fidelity assessment reports and goals.

Table 21 *Transcript Focus and Goals*

Fidelity Data Review Sources	Transcripts Reviewed by Research Team (328)		Sessions with Fidelity Reports by Agency Staff	
	n	%	n	%
Types of Violence/Harm Addressed (select all)				
Intimate Partner Violence	228	69.5	73	73.7

Adult Sexual Assault	30	9.15	21	21.2
Child abuse and/or neglect	8	2.4	6	6.1
Stalking	6	1.8	23	23.2
Human Trafficking	6	1.8	3	3.0
Child Sexual Abuse	8	2.4	6	6.1
Other Physical Assault	7	2.1	17	17.1
Elder Abuse	1		0	0.0
Sexual Harassment	3	0.9	7	7.1
Adult sexual abuse as a child		0.0	7	7.1
Other	43	13.1	15	15.1
Primary Session Objective (select all)				
Help with shelter	136	41.5	37	37.3
Help with abuse/violence	58	17.7	4	4.0
Help with safety needs	58	17.7	15	15.1
Medical help after sexual assault	4	1.2	0	0.0
Help with counseling or support	81	24.7	22	22.1
Help with housing (other than shelter)	28	8.5	7	7.1
Legal help	63	19.2	8	8.1
Help for a client/person the service user is serving	4		4	4.0
		1.2		
Help for a friend/family member experiencing abuse	18	5.5	2	2.0
Other primary objective	29	8.8	1	1.0

Mapping Logic Model Fidelity. The fidelity data was mapped against the phase one ETA logic model (See Wood et al., 2021 for an overview). Multiple data streams found evidence for strong alignment between the logic model and the services being provided at HAWC and SAFE. The evidence of overall use of a service approach that is 1) participant-centered; 2) trauma-informed; 3) justice oriented, and 4) social presence-facilitated was strong. Exemplar quotations from chat and text transcripts, as well as statements from staff survivor interviews illustrating each of these four overarching domains of the service approach are provided in Table 22.

Table 22 *Overarching Service Approach*

Approach	Example Quotations from Staff and Survivor Interviews	Transcript Quotation
Participant-Centered	“Putting a lot of emotion in their messages, talking—showing a lot of sympathy and empathy. They—whenever they talked, they were using a lot of grammatical and vocabulary usage that someone my age would use. It felt like I was talking to another person that	“We aren’t here to judge. We know recognizing the red flags aren’t easy and it can feel so impossible to leave.” (Advocate) “No problem. I am so grateful that you exist and that you are alive. Don’t hesitate to reach out when you need some support. Is there anything

	was around my age.” (Participant Interview)	else that you would like to go over before I clear the line for other chats?” (Advocate)
Trauma-informed	“They validated everything that I had went through. They reassured me that what I was feeling was completely okay and it was part of the healing process and that victims will be like that majority of the time because we’re all gonna handle things differently, but in a general way, we’re gonna have similar feelings.” (Participant Interview)	<p>“Yes, your brain & body don’t forget in order to try & keep you away from more danger.” (Advocate)</p> <p>“Flashbacks and memories can be detrimental to the ever[y]day functioning, especially when they are traumatic.” (Advocate)</p>
Social justice oriented	“Well, I’m a bi-language speaker, myself, so there’s sometimes a high influx or Hispanic or immigrants, and I’m able to—I feel like there’s something lost in translation whenever you translate it sometimes. They really find comfort in being able to speak in their own language. I’m able to directly identify with that.” (Staff Interview)	“Sounds like your boyfriend is the one who is the bully. If the relationship was healthy, why can’t you tell others about it?” (Advocate)
Social Presence facilitated	<p>“It’s important for people and humans to feel safe. It’s part of our right. It’s a human right.” (Staff Interview)</p> <p>“Very welcoming, accepting. I was able to get the help that I needed but also not feel as scared anymore.” (Participant Interview)</p>	“You are welcome! I hope you receive the services you need! It’s been an honor + privilege to share space with you this evening. Stay safe.” (Advocate)

Clear evidence of most activities in the logic model was found in the fidelity data streams.

Evidence was identified across four data streams- from participant report in the baseline survey panel, staff self-report when completing session fidelity checks, and in team review of qualitative transcript data and quantitative transcript data. These data streams are integrated by logic model domain in Tables 23-27, which describes and contrasts evidence for program fidelity related to each goal and activity.

Table 23 *Goal One Fidelity Mapping*

GOAL 1: Rapid engagement for support and connection				
Activities	Baseline Survey Panel	Staff Fidelity Checks	Transcript Review: Qualitative Panel	Transcript Review: Qualitative Evidence

Timely responsiveness to service users	Time to be Connected: Less than 5 minutes: 90.9%; 6 to 16 minutes: 5.5%; More than 16 minutes: 3.6%	Time to be Connected: Less than 1 minute: 83%; 1-5 minutes: 11%; 6-15 minutes: 4%; 16+ minutes: 1%	Time to be Connected: Less than 2 minutes: 65.5%; 2-5 minutes: 24.4%; 6-15 minutes: 4.9%; 16+ minutes: 3.4%	"Apologies for the long wait"
	Staff Availability to Address Needs: Not at all true and a little true: 13.1%; Somewhat true: 13.8%; Very true: 73%			
Welcoming to digital hotline		Hotline Skills: Welcoming to services: 97%	Hotline Skills: Welcoming to services: 96%	"Hi, thank you for reaching out to [agency]. Before we begin, are you in a safe place to text?"
Establishing safety for all service participants		Hotline Skills: Establishing safety: 80%	Hotline Skills: Establishing safety: 88%	"If your safety changes, feel free to disconnect, as we are here 24/7."
Establishing boundaries of service possibilities		Hotline Skills: Establishing boundaries: 20% Hotline Skills: Explaining Chat/Text Services: 14%	Hotline Skills: Establishing Boundaries: 14% Hotline Skills: Explaining Chat/Text Services: 12%	"Hello, we can talk to you a little bit about what is abuse, or may be abusive, but I do want to let you know that on this line we are not licensed counselors."
Use of emotive language and emoticons to show presence (tech-based skill)		Hotline Skills: Emoticons, Emojis: 24%	Hotline Skills: Emoticons, Emojis: 10.3%	"You're welcome! I'm sure she is very grateful to have your support ♥"
Empathy, sympathy, and validation	Staff interested in meeting my emotional support needs: Not at all: 16%; A little: 13%; Somewhat: 15%; Very true: 56% Staff cared about meeting my needs: Not at all true: 7%; A little true: 13.3%; Somewhat true: 12%; Very true: 68%	Hotline Skills: Expressing sympathy, empathy validation: 83%	Hotline Skills: Empathy, sympathy and validation: 66%	"Oh, wow I am so sorry that happened to you. Thank you for sharing that with us, I know talking about it isn't easy."

Promotion of service user strengths	Staff supported and encouraged me: Not at all true: 10%; A little true: 12%; Somewhat true: 11%; Very true: 68%	Hotline Skills: Identifying user strengths: 31%	Hotline Skills: Identifying user strengths: 18%	"Please don't give up in reaching out for help. You are so strong for continuing to fight for your safety ♡"
Encouraging future connections to digital hotline		Hotline Skills: Encouraging Service User to Connect Again: 67%	Hotline Skills: Encouraging Service User to Connect Again: 39%	"Apologies for the long wait"
Guided service termination to end interactions				"Is there anything else I can help you with before I assist another client?"
Metacommunication about content and tone (tech-based skill)				"I am chatting with a second [person] at the moment, so my messages may be a little delayed"
Identification of preferred language or communication		Language of Interaction: English: 94%; Other: 4%	Language of Interaction: English: 99%; Spanish: 1%	"I am checking on something."

Fidelity mapping indicated strong support for goal one and related activities, both illustrating the importance that staff and survivors place on timely engagement, and the general efficacy of this form of service delivery in facilitating connection. Specifically, timely connection, empathy, sympathy, and validation were critical to a trauma informed approach, as one hotline advocate described:

We have to respond in a timely way. We might use more emotional language or more emotional describing words or descriptions. I think there's definitely a tone that text—that might be a whole other area of work that I'm not necessarily an expert on, but we chat daily with folks so that's part of it. That's part of the **embodiment** of being trauma-informed through chat and text. S5

Safety planning and promotion of strengths was also strongly evident across data streams. Over 90% of baseline panel participants waited less than 5 minutes for connection to an advocate, with over 65% of transcripts reviewed by the team demonstrating connection within a minute. Meta communication about tone, guided termination of service interactions, establishing boundaries of service interaction, and identification of preferred language were not as strongly identified, but

still occurred across a range of interactions. This suggests that these activities represent important skills available to advocates as they navigate the complexities of digital communication.

Table 24 *Goal Two Fidelity Mapping*

GOAL 2: Identify Needs and Options Related to Violence, Abuse, and Harm, and Related Concerns				
Activities	Baseline Survey Panel	Staff Fidelity Checks	Transcript Review: Qualitative Panel	Transcript Review: Qualitative Evidence
Assessment of service participant needs and goals.		Hotline Skill: Assessment of Needs & Goals: 68%	Hotline Skill: Assessment of Needs & Goals: 89%	"Can you provide a little more info about what kind of support you are looking for?"
Reflective listening of participant needs and goals	Staff listened to me: Not at all true: 2%; A little True: 11%; Somewhat true: 12%; Very True: 75%	Hotline Skill: Asking clarifying questions: 68%	Hotline Skill: Helping service users identify options: 46%	"I hear you say that you are looking for a place for only your 2- year-old daughter to stay. Is this correct?"
Clarifying meaning when need or goal is unclear		Hotline Skill: Asking clarifying questions: 68%	Hotline Skill: Helping service users identify options: 46%	"Lets figure out a plan, the goal is to figure out shelter correct?"
Identify options to address needs	Staff valued my opinion: Not at all true: 10%; A little true: 9%; Somewhat true: 18%; Very true: 63%		Hotline Skill: Helping service users identify options: 46%	"Can you go to urgent care, perhaps? if it's something that you don't want to do....you know what's best for you."
Open-ended questions to assess options & solution				"What kind of assistance are you looking for in order to move out?"
Minimal text-based encouragements (tech-based skill)				"Uh-huh"

For goal two, fidelity mapping indicated strong use of reflective listening and identification of goals and options across data streams. Importantly, participants in the baseline survey clearly felt that hotline advocates understood and valued the importance of their opinions about their situation and needs, with over 80% feeling that it was somewhat or very true that staff valued their opinions. In reviewing transcripts, the study team identified extensive use of assessment

skills, identifying assessment skills used in 89% of the transcripts. Assessment of goals and clarification was also frequently used. Use of text-based minimal encouragers was observed in transcript review, with techniques like using “ums”, “uh-huh” or other minimal encouragers to illustrate concern and encouraged continued presence. One advocate explained *“I would say the most important skill is active listening because we wanna know what the client is—we wanna understand what the client is wanting to share, what the client is needing.”* (S11)

Table 25 Goal Three Fidelity Mapping

GOAL 3: Expand Understanding of Violence, Abuse, and Harm Through Community and Survivor Education				
Activities	Baseline Survey Panel	Staff Fidelity Checks	Transcript Review: Qualitative Panel	Transcript Review: Qualitative Evidence
Concise psychoeducation about IPV/SA/HT/	Staff helped me learn about signs of healthy and unhealthy relationships: Not at all true: 38%; A little true: 13%; Somewhat true: 15%; Very true: 34%	Hotline Skill: Psychoeducation about relationships & trauma: 17%	Hotline Skill: Psychoeducation about relationships & trauma: 15%	"Not wanting to be abused does not make you cocky. And everyone is entitled to decency and respect. Abusers are often committed to making their victims feel as small and powerless as possible."
Education about mental and physical symptoms of trauma	The staff member I worked with helped me learn about the impact of violence, abuse, & trauma. Not at all true: 38%; A little true: 12%; Somewhat true: 13%; Very true: 36%	Hotline Skill: Psychoeducation about relationships & trauma: 17%	Hotline Skill: Psychoeducation about relationships & trauma: 15%	"This is typical when leaving an abusive relationship, Feelings and trauma manifest in many different ways. Sometimes our body might freeze or not react. it can be useful to think of some things you would do to be emotionally and physically safe"
Helping participant identify harm in the situation		Hotline Skill: Normalizing/Reducing Blame: 31%		"You didn't do anything wrong and this is not your fault. He would have done this to any other partner. Abuser's want for you to feel the blame and shame"

Sharing information about victim/survivor rights		Hotline Skill: Psychoeducation about legal and civil rights: 2%	Hotline Skill: Psychoeducation about legal and civil rights: 5%	so they don't have to hold themselves accountable for their choices and behavior.” “A protective order can stipulate things like how close he is allowed to come to your house, or job. It can also stipulate he is not able to contact you. Judges can also decide on things like mandatory anger management classes.”
Address feelings self-blame related to abuse or impact	Staff was non-judgmental toward me: Not at all true 3%; A little true: 4%; Somewhat true: 9%; Very true: 84%	Hotline Skill: Normalizing/Reducing Blame: 31%		“It's understandable to feel that way. But you are not dumb, and this was not your fault.”
Identification of wellness strategies	Staff helped me learn new skills or practice existing skills: Not at all true: 42%; A little true: 11%; Somewhat true: 14%; Very true: 33%	Hotline Skill: Identification of wellness strategies: 13%	Hotline Skill: Identification of wellness strategies: 5%	“You can care for someone, but also not want to engage in an unhealthy relationship. You need to establish boundaries.”
Sharing grounding strategies to address trauma-impact		Hotline Skill: Identification of wellness strategies: 13%	Hotline Skill: Identification of wellness strategies: 5%	“Please take care of your overall health. Stress can cause damage to your overall well-being.”

Less support was found among mapped data for goal three in general. Educational activities were less endorsed in both hotline participant and staff data, although psychoeducation was still an important component of some service interactions, especially with younger service participants.

One advocate explained:

Also, one of my favorite parts about working as a hotline advocate is being able to provide education around dynamics of domestic violence, sexual assault and human trafficking. That would look like anything—like if a client calls in, and they’re wanting advice on how to support a survivor of domestic violence, sexual assault, human

trafficking, or child abuse, I would provide them education around what those dynamics look like, how to support someone, what healthy boundaries look like. S6

Interestingly, both staff fidelity reports and team transcript review reported such psychoeducation activities less frequently than baseline panel participants. Reduction of blame and normalization were used more frequently of the goal three activities. In particular, over 90% of baseline panel participants identified that their advocate helped them address feelings of safe blame related to abuse, even as only 31% of staff self-reported specifically using skills related to normalization or blame reduction in their self-rated sessions.

Table 26 *Goal Four Fidelity Mapping*

GOAL 4: Improve Survivor Safety to Prevent Future Violence and Harm				
Activities	Baseline Survey Panel	Staff Fidelity Checks	Transcript Review: Qualitative Panel	Transcript Review: Qualitative Evidence
Crisis de-escalation		Hotline Skill: Crisis Intervention & De-escalation: 14%	Hotline Skill: Crisis Intervention & De-escalation: 9.6%	"If you need to scream and cry - that's okay. Emotions need motion."
Individualized Safety Planning	The staff member I worked with was interested in meeting my safety needs. Not at all true: 10%; A little true: 11%; Somewhat true: 14%; Very true: 65%	Hotline Skill: Safety Planning: 45%	Hotline Skill: Safety Planning: 23%	"There are some things that I wanted to suggest you do for safety since you are planning on going back home such as maybe having check ins with friends or family members are certain times so that they know you are safe."
Identification of survivor-defined safety and harm reduction strategies Safety assessment		Hotline Skill: Establishing safety: 80%	Hotline Skill: Establishing safety: 88%	"That is great, I am glad that you are able to end the lease without any issues. " "Can you explain what is going on? When was the last incident of abuse and what occurred?"
Actual or waitlist for emergency shelter	Staff was interested in meeting my housing needs. Not at all true: 24%; A little true: 14%;	Hotline Skill: Referral to shelter at agency: 21% Hotline Skill: Referral to other shelter: 21%	Hotline Skill: Referral to shelter at agency: 37.4% Hotline Skill: Referral to other shelter: 21%	"The housing assessment may take 30-45 minutes over chat is that okay?"

Technology safety (tech-based skill)	Somewhat true: 18%; Very true: 44%	"If you have recordings, be careful where you store them and make sure they are somewhere he would not look." "Okay, we don't want to cause any additional harm so please feel free to stop texting when you are in danger. How can I help?"
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Goal four focuses on safety, and there were clear indications across all mapped data sources that activities such as safety assessment and planning were endorsed frequently. Nearly 80% of participants in the baseline panel felt that their staff member was interested in meeting their safety needs, while the skill of establishing safety was observed in 80% of self-reports and 88% hotline transcripts reviewed. Advocate interviews expanded the safety planning process:

It's about empowerment. It's about believing what they are telling us. It's about providing emotional support and those resources that they might need for a protective order and just that safety plan. S15

Transcripts frequently illustrate staff asking open-ended questions related to survivor safety or specific situations, and providing information related to lethality risk, safety strategies, supports available for safety. Technology safety planning was typically part of individual safety planning, indicating those activities are typically merged. One advocate explained how safety planning and crisis intervention are merged into resource provision.

Mainly it is about providing crisis intervention. A lot of the clients who reach out to us via chat or even through hotline are in crisis. A lot of 'em are seeking shelter. It's assessing and determining what type of services they're looking for. (S21)

Table 27 *Goal Five Fidelity Mapping*

GOAL 5: Increase Access to Timely Supports and Address Needs by Opening Doors to Services and Beyond

Activities	Baseline Survey Panel	Staff Fidelity Checks	Transcript Review: Qualitative Panel	Transcript Review: Qualitative Evidence
Help-seeking assistance to prepare for asking for support		Hotline Skills: Help-seeking assistance: 34%	Hotline Skills: Help-seeking assistance: 26%	"I would suggest asking specifically for case management resources when you call the hotline! That way they can help you find long term housing in gated communities. Those types of services usually serve survivors of their specific counties. So if you can find one where you live now they should be able to help in finding a place elsewhere."
Identification of formal and informal support sources		Hotline Skills: Resource referral – Internal: 50%	Hotline Skills: Resource referral – Internal: 66%	"Do you have any friends/family you can stay with in the meantime? I can also provide resources to additional shelters in the area."
		Hotline Skills: Resource referral – External: 42%	Hotline Skills: Resource referral – External: 48%	
Education about agency and other similar services	Staff was knowledgeable about community resources: Not at all: 1%; A little: 9%; Somewhat: 20%; Very true: 70%		Hotline Skills: Helping service users identify options: 46%	"We have legal advocate as well, however they do not offer legal representation."
Referral to and education about other formal support systems and agencies	Staff actively worked to connect me to community resources: Not at all: 5%; A little true: 9%; Somewhat true: 21%; Very true: 65%		Hotline Skills: Referrals Provided - Internal: Shelter (agency): 37%; Counseling (agency): 22%; Sexual assault services (agency): 1%; Legal services (agency): 8%; Financial Support (agency): 1% Hotline Skills: Referrals Provided - External: Other shelter: 21%; Other counseling: 8%;	"The following are agencies that provide FREE legal assistance."
			Hotline Skills: Referrals Provided - Internal: Shelter (agency): 21%; Counseling (agency): 26%; Sexual assault services (agency): 3%; Legal services (agency): 4%; Financial Support (agency): 6%; Hotline Skills: Referrals Provided - External: Other shelter: 21%; Other counseling: 5%;	

	Other legal support: 17%; Other financial support: 3%; Food assistance/food banks: 0.3%; Other Housing resources: 7%; Transportation support: 2%; Other: 6%	Other legal support: 10%; Other financial support: 3%; Other Housing resources: 5%; Transportation support: 2%; Other: 8%
Internet-based referrals and education materials (tech-based skill)		"This is my go to safety planning website for safety planning for when survivors are ready to take that step and leave."
Concise written response (tech-based skill)		"Yes, your brain & body don't forget in order to try & keep you away from more danger" "It can be normal to not be able to remember a lot of the details after an experience like that."

Goal five, focused on providing useable and desired resources and referrals, had strong evidence across all mapped fidelity data sources. Eighty-percent (80%) of baseline panel participants felt that the staff person they worked with was somewhat or very knowledgeable about community resources, and nearly as many felt that the staff member was actively working to connect them with community resources. Referrals to internal (SAFE/HAWC) and external resources were present in most reviewed transcripts, and these data demonstrated that staff often go beyond simply providing phone numbers to provide helpful context and additional information about the resources to support service users in making informed decisions and feeling more confident in help seeking. While help seeking assistance was used less frequently, the use was mapped to participants particularly in need of additional support navigating services.

Logic Model Updates. After mapping fidelity data streams and reviewing the outcome data from our study, the logic model was updated to reflect the current evidence. All goals remained, however goal three was updated from a psychoeducational goal focused on understanding violence, to an educational goal focused on the impacts of violence. Activities were condensed and streamlined to reflect actual practice. Given the profound focus on housing and shelter, an activity was added in goal four to reflect the amount of time and energy spent addressing housing needs. Outcomes were removed from goal two (e.g., increased self-efficacy); goal three (e.g., reduction of self-blame) after reviewing project data. Several outcomes were condensed, for example, technology safety was added to safety planning, rather than being a separate outcome.

Costs

The total costs per year across HAWC and SAFE for hotline were \$1,652,977. Across two years (2022 and 2023), the two programs provided an average of 44,449 hotline interactions per year. Of those interactions, on average 10.89% were chat/text based, resulting in approximately 4,400 interactions annual at the two programs. If we assume 10.89% of the total cost across the programs is attributable to digital (text/chat) services, the annual cost of digital hotline is estimated at \$178,521. This results in an estimated total average cost of \$40.60 per digital hotline interaction. Both agencies pay frontline hotline staff around \$20/hour. They highlighted expenses including staff fringe benefits, professional development & training, the yearly cost of the digital platform, and hardware, software, and physical space needs. Importantly, many digital hotline staff work on phone, chat, and text mediums, which likely reduces total costs. Additionally, one agency has hotline staff physically located on site, and the other has all remote hotline staff.

Table 28 Hotline Costs

Costs	Annual Average Across Two Agencies
Staff Salary (all hotline staff)	\$1,245,015
Staff Fringe Benefits (all hotline staff)	\$334,391
Professional Development & Training Costs	\$9,060
Chat/Text Platform Cost	\$5,304
Hardware, Software, & Furnishings	\$59,207
Total	\$1,652,977

Objective Three: COVID-19 and Future Disaster Planning

Building on the findings from the initial phase of the ETA study, phase two sought to deepen understanding of digital hotlines during the COVID-19 pandemic and generate knowledge to inform future disaster and emergency planning. The research team collected qualitative data through semi-structured interviews that explored the needs and service experiences of individuals who accessed digital hotline services during the pandemic (March 2020 and May 2022). A total of 25 interviews were conducted between June and October 2022 – 10 with individuals who used services via SAFeline and 15 with individuals who used services with HAWC. To add a more holistic understanding to the impact of COVID-19 on digital hotline services, 203 deidentified transcripts from SAFeline during the height of the pandemic (March 2020 to August 2020) were analyzed. Finally, staff interviews were conducted with hotline advocates (n = 17) to expand understanding of changing practice.

Main Needs, Concerns, and Experiences of Participants. Qualitative data was analyzed and the following themes were developed to understand hotline participant needs and concerns during the first year of the pandemic. The main themes related to survivor needs and concerns were: 1) Economic/financial obstacles and instability; 2) Concerns about health and safety from COVID; 3) Housing insecurity; and 4) Emotional and mental health needs.

Economic/Financial Obstacles and Instability. During the pandemic, many participants faced severe financial challenges due to job losses and reduced income. Rent became difficult to

manage, especially when government assistance programs, such as rental relief or unemployment benefits, ended. One interview participant shared *“If the rental relief had continued, I definitely wouldn't be in this situation right now...I wouldn't be lookin' at homelessness”* (P4). Several interview participants shared experiences of job losses related to the pandemic. One reported:

I went through three different jobs because I've had COVID.... Yeah. I got COVID twice, and then for the third time, it was because I had told her—it was because I didn't want to get—I wanted to get vaccinated, but the people that I worked for with the company didn't believe in COVID. (P1)

Financial insecurity and limited access to resources such as food, transportation, and basic-need supplies were recurring issues, worsened by the pandemic. When asked about needs one hotline participant told their advocate, *“We are a little low on food...we may also need more feminine hygiene items...we are almost out of diapers as well”* (T20). An interview participant shared needing to rely on her parents financially because she *“wasn't bringing much to the table”* (P23). Several participants shared how COVID-19 related financial strain drained their savings. *“I had a—my savings account was huge, I had money in my checkings account. Now, it's as if I'm struggling to keep money even in our checkings account, let alone—like, forget the savings, you know?”* (P12). Another shared:

Just lost my job, lived off my 401(k), just completely depleted it because of no job because of COVID workforce reduction. Eventually—this was June last month—I got evicted because I couldn't—eventually—I mean, excuse me, essentially, I was fine because I had my 401(k), right, but after a period of time, I was not able to keep up, so yeah, I got evicted. (P18)

Concerns about Health and Safety from COVID. Staff and participants alike report increases of violence incidents and severity during the COVID-19 pandemic. Virtually all staff interviewed reported increased intensity and lethality of violence during the first year of the COVID-19 pandemic.

Since the pandemic, I would say at least the last two years, we're definitely hearing from—and, as someone who's been on the hotline consecutively since 2017, we're hearing about calls that are higher lethality. S5

Staff at both hotlines reported increased calls during the first year of the pandemic of up to 30%.

The fear of contracting COVID-19 was a significant concern for a few of the participants, especially those living with others who were less cautious about health guidelines. One interview participant shared:

I don't know of anyone around me who did, but that whole thing has impacted me, even to this day, much more than it would the regular person. For example, I still have to take all the precautions. Other people, their masks are off, and they're runnin' around, doin' whatever (P19).

Some of the participants expressed concern for elderly or medically frail family members or those with underlying health conditions. Further, a handful of interview participants shared experiencing the loss of a loved one as a result of COVID and COVID related complications.

Well, the thing was that my dad, he had COVID, but he got better. He ended up testing negative, but his lungs were really affected from COVID. They never functioned correctly, and he did end up passing away from the complications like a month later. COVID left him, and so he passed away. My grandparents—my grandpa, he also ended up passing away because he got COVID. He was an older man, so he did also end up passing away. My grandma, she passed away two months later (P23).

Lastly, a small number of interview participants reported difficulties accessing healthcare services due to overwhelmed medical systems and restrictions on hospital visits, further increasing their fear and anxiety during the pandemic.

Housing Insecurity. Study data indicate that digital hotline service participants reaching out during the COVID-19 pandemic expressed urgent housing needs. Participants reached out in efforts to get support with both emergency shelter and long-term housing assistance. For those seeking shelter, participants frequently faced barriers in accessing emergency shelters due to capacity limits and waitlists at both agencies. One advocate explained:

What I will say, COVID really reduced survivors' options. Survivors, when we were safety planning, we would be like, "Can you crash on a friend's couch?" There was an extended period where that answer was no because nobody was taking houseguests. That's not happening right now, but that was how things were for a long time. S3

As a result, participants shared being forced to seek safety in ways that may still leave them vulnerable. For example, one individual who reached out to the digital hotline shared, "*I'm sleeping in my truck because he doesn't work on weekends... I can't sleep in my truck anymore*" (T2). In order to get sparsely available housing support, participants were reaching out multiple times to the digital hotline for either the shelter waitlist or housing. One individual who utilized the digital hotline stated to their advocate during a service interaction: "*Yes I have spoken with another person two times today I need somebody to call me about getting housing assistance I need something immediately*" (T1).

The pandemic worsened housing instability for a number of the participants, with some being evicted due to their inability to pay. For example, one interview participant shared "*I went through getting evicted from my home*" (P1). Another expanded, "*I did get evicted from my housing, and it was because of all the hassle with tryin' to get caught up with bills. I could just never get caught up, and I ended up getting evicted from my apartment*" (P14). Others were forced to stay in unsafe environments – often with abusive partners. In both interviews and service transcripts, participants mentioned the lack of affordable housing options and long wait times for assistance programs.

Emotional and Mental Health Needs. Isolation and uncertainty during COVID-19 caused a decline in positive mental health for many of the participants. With stay-at-home orders in place, a number of the participants reported feeling disconnected from support systems, amplifying feelings of loneliness and isolation. Individuals who reached out to the digital hotline during the pandemic frequently expressed feelings of loneliness; for example, one shared "*I feel*

alone” (T11) and another stated “*I’ve been severely isolated*” (T6). Individuals accessed the hotline in part to address isolation. For example, one participant reported:

I am not in a good state of mind. My husband is mentally and verbally abusive. I have been secluded from all of my family. My health is now taking an extreme toll I have no one to talk to (T3).

When thinking of the mental health needs experienced during the pandemic another interview participant said, “*I was isolated. I was super depressed. I was starting to spiral*” (P15). Abuse further exacerbated isolation, because of controlling behavior from the partner. An advocate shared about her client’s experience of isolation.

Yeah. Like going to the grocery store—I know for some people—if the abuser stayed in the car while they went in, I know there were—I remember that being the only time one person could call or chat <the hotline> was in the grocery store. That was the only time that she was by herself. S13

Staff Skills and Strategies. Qualitative data were analyzed and themes were developed related to staff strategies to address pandemic-related concerns. Themes around staff management of COVID impacts included: 1) Interpersonal connection and compassionate communication; 2) Knowledge and resource sharing; 3) Coping strategies for mental health; and 4) Safety planning. Notably, for many participants, hotline, in phone or digital form, was perceived to be the only resource available during stay-at-home orders and intensive COVID restrictions, making the service all the more essential.

Interpersonal Connection and Compassionate Communication. Clients reported that advocates prioritized empathy, patience, and non-judgmental communication to help several participants feel heard and supported during the pandemic. For example, one interview participant who used the digital hotline said, “*They were friendly. They were understanding, and they were always there. If I needed to talk to them, I would call them. They were just all*

supportive” (P24). Transcript analysis revealed that individuals who utilized digital hotline often said things like “*Thanks for listening to me*” (T13) and “*I just needed someone to talk to in the moment thank you*” (T5). Overall, for the majority of the participants interviewed about COVID experiences, advocates created a safe space to share their concerns about both their experiences of violence and pandemic-related experiences. Advocates did so without having others feel dismissed or rushed. One participant recalled “*To me I’ve noticed that there was a lot of patience. It was a lot of patience with working with the advocate. They are very understanding*” (P6). Another said, “*They told me that any time I needed them, they would be there to listen to me*” (P24). Experiencing violence in interpersonal relationships is an isolating experience; further, several of the interview participants noted how the ‘stay at home’ orders of the pandemic exacerbated that isolation. Participants discussed how the digital hotline advocates contributed to them feeling less alone in their experiences of violence and the pandemic.

You know how you feel a lot—you don’t feel so alone. They make you feel not alone. You have people to go through. You have to people to help you. You have people that you can relate to. You don’t have to feel so alone. (P23)

Knowledge and Resource Sharing. During the pandemic, advocates played a crucial role in connecting multiple participants with vital resources, including housing assistance, mental health services, and financial assistance. By staying informed about rapidly changing government relief programs and local resources, advocates were able to guide participants to requested resources. When working with the advocate on the digital hotline, one participant reported “*Oh, my goodness, gave me so many resources*” (P2), and another reported the advocate having provided:

The police, the 311 number to go ahead and report it. The restraining order, the protective order, and then referrals on different places I can call. Women’s shelter or I forgot what the places were exactly called, but there were different shelters for women and children. They just gave me the resources that I was looking for. (P14)

This practical support was felt to be essential for participants who felt overwhelmed by the bureaucratic processes and uncertainties brought on by COVID-19. For example, one participant with shelter needs expanded on this saying:

I was confused at first because I didn't know what this stuff was, how things, what the protocol was, I didn't know what the rules were there, was not the rules. I didn't know anything. I was basically confused when I first had the call. I was mad...When I first had to they're basically—they sympathize and basically understood that I didn't really want to go through that process, but it was a very easy process. They helped guide me through that process. (P6)

Coping Strategies for Mental Health. Recognizing the rise in mental health challenges during the pandemic and the trauma-related impacts of violence, advocates provided participants with practical coping strategies. These included mindfulness exercises, breathing techniques, and grounding methods to help manage symptoms, emotions, and experiences. Advocates also recommended low-cost activities like journaling or crafting as a way to process emotions and stress. These strategies were especially helpful for participants dealing with IPV because they offered them tools to regain a sense of control over their emotional state. Examples of advocate approaches included:

- 1) *“I mean, they walked me through a whole process of kind of going through my body and feeling those tense points. I mean, it was just like a meditation thing. I mean, it was a very different experience and then started to talk to me about the way I was feeling and then started to talk about resources.”* (P2)
- 2) *“They would tell me—I remember one time they told me when I had problems that I had nobody to talk to that I could make like a little diary. You know, write my thoughts. I did start doing that when I felt anxious or just depressed, write my thoughts.”* (P24)
- 3) *“At the time, they gave me this skill that I use a lot. It's this breathing skill. They're like exercises that they give you.”* (P23)

Safety Planning. For participants facing IPV, HT, and SA and the related unsafe and challenging situations during the COVID-19 pandemic, advocates worked with them to create

plans for their safety. This included identifying potential escape routes, other sources of support, emergency contacts, and shelter options. For example, one participant shared the reason for reaching out, *“I was also looking for resources on places that I could go to escape the situation. Yeah. I can say they were pretty helpful”* (P30). Another participant that utilized the digital hotline stated *“At that point, it was a point of emergency... ‘Cause at that point, that was the only available resources to me”* (P8). Advocates also helped participants navigate the process of leaving harmful environments by connecting them with services or other community-based resources when available. One participant noted *“that person did tell me about the [agency] and [agency], and so that was phone calls I could make, and it did give me power to make those calls”* (P2). A participant expanded on the information provided, saying:

To be honest, I literally cried for 30 minutes when I got in the car after that chat. I was just so grateful that that person was so mindful of everything I was going through as if she understood or she was in my shoes and was able to give me all the provided information I needed and didn’t take anything for granted. All that information was very useful, and I did every single thing that was on there to get me and my children to safety and away from their father. (P1)

Advocates often reminded individuals reaching out that the digital hotline was available 24/7 and to reach back out if needed. This helped to address concerns with isolation.

Lessons for future disasters. As has been previously documented (Piquero et al., 2021), violence was perceived to have increased during the COVID-19 pandemic, leading to increased needs for services responses. Study findings indicate that not only is digital hotline seemingly effective at addressing safety concerns and reducing violence risks, it is also an important tool to addressing isolation and mental health concerns. **The first lesson learned from this study is that hotline is effective and should be expanded during times of disaster.** As such, hotline should be made widely available in the event of future public health disasters through media campaigns and connections with social services and local communities. Funding for increased

staffing on hotline during emergencies is needed to address increases in volume and intensity of service interactions. Finally, staff wellness efforts are needed to address risks for secondary trauma associated with hotline calls during emergency and high intensity times.

Staff and participants overwhelmingly reported intense financial and housing challenges during not only the first year of the pandemic, but also in the following two years. In fact, some staff commented that the end of the pandemic-related aid was more impactful to economic insecurity than the initial financial impact. Given the ubiquity of financial concerns during the pandemic, referrals alone were not sufficient. Resources needed to be available without significant wait to impact safety and health. As such, **our second lesson learned is that hotlines need to be equipped with low-barrier financial and housing resources for people with immediate needs.** This includes hotel vouchers to address limited shelter capacity, direct financial assistance to address immediate food and resource needs, and a direct connection with meaningful employment and government resource assistance. While hotline advocates had timely referrals, many participants were not able to access those services because of wait times. This challenge can be addressed in future situations by having resources available for hotline clients at the onset of public health emergencies.

Health challenges, including isolation and mental health needs, were among the most pressing for survivors using services during the COVID-19 pandemic. The two agencies included in this study, HAWC and SAFE, innovatively pivoted mental health and peer support services to virtual formats, which allowed for quick supportive connections. **Our final lesson learned is that digital hotline can be a gateway for connection to high impact virtual services.** Given the low barrier nature of digital hotline, connecting survivors who are reluctant to seek more extensive support to hotline can be a first step to ongoing help. Indeed, some

participants reported being hesitant of IPV, sexual assault and HT survivor services, scared of reaching out, or confused about the nature of supports available. Hotline, as an anonymous and free resource, provided the first connection to learn about rights and services available. This allowed people to be connected with health care services they needed in virtual formats. In future public health situations, hotline can be harnessed to educate people about virtual services, like counseling and legal aid, that might support additional reductions of violence risks.

Project Limitations

This project has some limitations of note. Our project sites were in one state (Texas) and two large programs with comprehensive services. As such, we cannot generalize our findings to community-based violence programs, especially those in rural areas or with limited or no residential offerings. Future studies should include rural and locally specific sites. Our study is also limited by self-report of most data (e.g., no additional verification of other service use) and by a lack of a comparison group. Subsequent studies should seek to compare hotline service use in a sample of participants with similar violence, economic and mental health experiences.

Agencies were asked to furnish random transcripts for analysis, however, selection bias could have occurred in service interaction selection. Further, our design was limited by the assessment of baseline experiences after the initial intervention (hotline use). The agencies provided transcripts, rather than the research team having the ability to collect a random sample. This was due to platform feasibility and confidentiality. Finally, we lost some participants to follow up, a limitation we sought to mitigate by attritional analysis.

Summary

Based upon study findings, digital hotline is a highly effective and relatively low-cost intervention that can improve health and safety and reduce violence and financial instability.

Further, the role of hotline as an access point to additional services means that service benefits can be expanded via additional resource access. In this mixed methods longitudinal study in two Texas programs, digital hotline was found to be effective at addressing survivor needs and implemented with high levels of fidelity to a trauma informed and survivor-centered service model. Future study is needed to understand the comparative benefits of hotline and to understand longer term impacts.

Appendices

Appendix A: References

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Appendix B: ETA Phase Two Logic Model

ETA Phase Two: Digital Hotline Logic Model

Overarching Goal: Reduce the negative impacts of interpersonal violence and connected forms of harm by creating a survivor-centered digital space for support.

Service model: The overall service model at digital hotline offered at community-based services is:

Participant-centered. Digital hotline participants engage with advocates on their self-defined goals at their own pace and in their preferred language.

Trauma-informed. Advocates working on digital hotline acknowledge and center the role of trauma and trauma reactions, as well as the need for safety, empowerment, and privacy, in their interactions with digital hotline participants. Advocates recognize the importance of connection in building a safe context for service engagement.

Justice-oriented. Digital hotline participants identities local ties are valued, and experiences of historical and current harm are considered in program design, referrals, and advocacy approach. Digital hotline staff use a human rights perspective.

Social presence-facilitated. Advocates on digital hotline engage with participants with individualized responses for unique situations, showing their professional personality and authentic human qualities using digital skills and strategies for engagement.

Goals	Activities	Short-Term Outcomes Immediately after service	Long-Term Outcomes Up to 6 months after service
1. Rapid engagement for support and connection	<ul style="list-style-type: none"> • Timely responsiveness to digital hotline participants • Welcoming to digital hotline • Establishing safety for all service participants • Use of emotive language and emoticons to show presence (tech-based skill) • Empathy, sympathy, and validation • Promotion of participant strengths • Encouraging future connections to help • Guided service termination to end service interactions • Metacommunication about content and tone (tech-based skill) 	<ul style="list-style-type: none"> • Service interactions are answered with no or minimal wait time • Digital hotline participants can reach out through modality of their choice (Chat, text, phone) • Digital hotline participants can identify personal strengths • Increased service access for hard to reach populations • Digital hotline participants feel respected and listened to by advocate • Digital hotline participants perceive advocates are available for support • Digital hotline participants feel comfortable reaching out again • Digital hotline participants can get services in their language of choice 	<ul style="list-style-type: none"> • Repeated outreach on digital hotline by service participants • Increased chat, texts, and calls to hotline • Increased chat, text, and calls from hard-to-reach populations • Digital hotline participants refer people to the agency • Digital hotline participants feel cared for by digital hotline and the agencies they represent • Reduction of isolation • Increased sense of community connection and support
2. Identify needs and options related to violence, abuse, and harm, and related concerns	<ul style="list-style-type: none"> • Assessment of digital hotline participant needs and goals <ul style="list-style-type: none"> ◦ Reflective listening of participant needs and goals • Identify options to address needs <ul style="list-style-type: none"> ◦ Asking questions to assess options and solutions • Minimal text-based encouragements (tech-based skill) 	<ul style="list-style-type: none"> • Identification of participant- defined goals and needs • Participant perceives advocate understood their goals • Participant-defined options are identified 	<ul style="list-style-type: none"> • Progress on participant defined goals • Participant can use options of choice to address needs as available
3. Expand understanding of and strategies to reduce the impact of violence and related harms	<ul style="list-style-type: none"> • Concise education about mental and physical health impacts of trauma • Address feelings of self and societal blame • Identification of wellness and grounding strategies to address trauma impacts 	<ul style="list-style-type: none"> • Increased knowledge about trauma and abuse reactions • Increased understanding of mental and physical health symptoms and impacts • Increased understanding of ongoing self-care and wellness needs • Increased knowledge of referrals to address health needs 	<ul style="list-style-type: none"> • Abusive/harmful behaviors are identified by participant if they reoccur • Mental and physical health impacts are identified and addressed as needed • Increased use of grounding and coping skills • Increased hope • Improved mental health

Goals	Activities	Short-Term Outcomes Immediately after service	Long-Term Outcomes Up to 6 months after service
4. Improve survivor safety to prevent future violence and harm	<ul style="list-style-type: none"> • Crisis de-escalation and immediate connection to crisis supports • Individualized safety planning <ul style="list-style-type: none"> ○ Identification of participant-defined safety and harm reduction strategies ○ Identification of legal rights ○ Safety assessment, including technology • Identify safer housing <ul style="list-style-type: none"> ○ Actual or waitlist for emergency shelter ○ Locate other housing options 	<ul style="list-style-type: none"> • Immediate crisis stabilization • Immediate safety needs are addressed • Digital hotline participants increase identification of safety strategies • Supports to improve safety are identified 	<ul style="list-style-type: none"> • Physical & emotional safety are improved • Housing stability is improved • Economic stability is improved • Risk for subsequent violence is reduced
5. Increase access to timely supports by opening doors to violence prevention services and beyond	<ul style="list-style-type: none"> • Identification of formal and informal support sources • Education about hotline hosting agency and other similar services • Referral to and help seeking assistance about other formal support systems and agencies • Concise written response (tech-based skill) 	<ul style="list-style-type: none"> • Referrals are given to address needs • Increased knowledge of agency and community resources • Planning to access informal support 	<ul style="list-style-type: none"> • Digital hotline services are accessed as needed • Community referrals are accessed as needed • Informal supports are used as needed

Appendix C: Table of Measurements for Longitudinal Study

Construct	Reference	Example Item
Intimate Partner Violence	<i>Adapted from National Intimate Partner and Sexual Violence Survey (NISVS):</i> United States Department of Health and Human Services. Centers for Disease Control and Prevention. National Center for Injury Prevention and Control. <i>National Intimate Partner and Sexual Violence Survey (NISVS)</i> . https://www.cdc.gov/nisvs/documentation/nisvsReportonSexualViolence.pdf	Did a romantic or dating partner or spouse ever do any of the following: Slapped, pushed, shoved, hit, slammed, or kicked you?
Human Trafficking	Human Trafficking Screening Tool (HTST): Dank, M., Yahner, J., Yu, L., Vasquez-Noriega, C., Gelatt, J., & Pergamit, M. (2017). <i>Pretesting a Human Trafficking Screening Tool in the Child Welfare and Runaway and Homeless Youth Systems</i> . Urban Institute. https://www.urban.org/sites/default/files/publication/93596/pretesting_tool_2.pdf	Did you ever trade sexual acts for food, clothing, money, shelter, favors, or other necessities for survival?
Sexual Assault	<i>Adapted from Sexual Experiences Survey:</i> Koss, M. P., Abbey, A., Campbell, R., Cook, S., Norris, J., Testa, M., & White, J. (2007). Revising the SES: A collaborative process to improve assessment of sexual aggression and victimization. <i>Psychology of Women Quarterly</i> , 31, 357-370. https://libres.uncg.edu/ir/uncg/f/J_White_Revising_2007.pdf	Has this happened: A person used physical force or threats of physical harm to make you have vaginal, anal, or oral sex?
Hotline Engagement	<i>Study Designed</i>	When you contacted the chat/text hotline, did you get help with any of the following?
Experience with Digital Hotline Advocate	<i>Adapted from Foundations of Advocacy Behavior:</i> Sullivan, C.M., Chiamonte, D., Farero, A., & Allen, N. (2019). <i>Foundations of Advocacy Behaviors Scale</i> . East Lansing, MI: Michigan State University.	The staff member I worked with at the hotline was knowledgeable about community resources.
Overall Health	Single item from SF-36 Health Survey: Ware, J.E., Kosinski, M., Dewey, J.E., & Gandek, B. (2000). <i>SF-36 Health Survey Manual and Interpretation Guide</i> . London: Quality Metric Inc.	Would you say that your general physical health is?
Alcohol Use	AUDIT-C: Bush, K., Kivlahan, D. R., McDonell, M. B., Fihn, S. D., & Bradley, K. A. (1998). The AUDIT alcohol consumption questions (AUDIT-C): An effective brief screening test for problem drinking. Ambulatory Care Quality Improvement Project (ACQUIP). Alcohol Use Disorders Identification Test. <i>Archives of Internal Medicine</i> , 158(16), 1789–1795. https://doi.org/10.1001/archinte.158.16.1789	How often do you have a drink containing alcohol?

Depression	PHQ-9: Kroenke, K., & Spitzer, R. L. (2002). The PHQ-9: A new depression diagnostic and severity measure. <i>Psychiatric Annals</i> . Slack Incorporated. https://doi.org/10.3928/0048-5713-20020901-06	How often have you felt little interest or pleasure in doing things?
PTSD	PCL-5: Weathers, F. W., Litz, B. T., Keane, T. M., Palmieri, P. A., Marx, B. P., & Schnurr, P. P. (2013). <i>The PTSD Checklist for DSM-5 (PCL-5) – Standard</i> [Measurement instrument]. https://www.ptsd.va.gov/ .	Have you felt numb or detached from people, activities, or your surroundings?
Safety Strategies	<i>Study Designed</i>	Did you ever use any of the following strategies to reduce conflict and/or increase your personal safety...
Economic and Housing Hardship Index	<i>Adapted from Housing Stability Index:</i> Rollins, C., Glass, N. E., Perrin, N. A., Billhardt, K. A., Clough, A., Barnes, J., ... Bloom, T. L. (2012). Housing Instability Is as Strong a Predictor of Poor Health Outcomes as Level of Danger in an Abusive Relationship: Findings From the SHARE Study. <i>Journal of Interpersonal Violence</i> , 27(4), 623–643. https://doi.org/10.1177/0886260511423241 and the Economic Hardship Index: Adams, A. E., Sullivan, C. M., Bybee, D., & Greeson, M. R. (2008). Development of the scale of economic abuse. <i>Violence Against Women</i> , 14(5), 563-588. https://doi.org/10.1177/1077801208315529	Have you had to stay with friends or family or in a shelter because you could not find a place to live?
Empowerment Related to Safety	Measure of Victim Empowerment Related to Safety (MOVERS): Goodman, L.A., Bennett Cattaneo, L.B., Thomas, K., Woulfe, J., Chong, S.K., & Smyth, K.F. (2015). Advancing domestic violence program evaluation: Development and validation of the Measure of Victim Empowerment Related to Safety (MOVERS). <i>Psychology of Violence</i> . http://dx.doi.org/10.1037/a0038318	I know what to do in response to threats to my safety.
Hope	Herth Hope Scale: Herth, K. (1992). Abbreviated instrument to measure hope: Development and psychometric evaluation. <i>The Journal of Advanced Nursing</i> , 17(10), 1251-1259. https://doi.org/10.1111/j.1365-2648.1992.tb01843.x	I believe that each day has potential.
Coping	Three subscales from Brief-COPE: Carver, C.S. (1997). You want to measure coping but your protocol's too long: Consider the brief COPE. <i>International Journal of Behavioral Medicine</i> , 4(1), 92–100. https://doi.org/10.1207/s15327558ijbm0401_6	How much or how frequently: I've been getting emotional support from others.
Comfort with Technology	Functional Assessment of Comfort Employing Technology Scale (FACETS): Lepkowsky, C.M. (2017). Functional assessment of comfort employing technology scale (facets): A brief intake instrument to facilitate treatment planning and communication with patients. <i>Psychology Behavior Medicine</i> . https://ologyjournals.com/pbmoaj/pbmoaj_00002.pdf	These questions ask how comfortable you are with: Sending text messages using a smart phone.

Appendix D: Interview Tool – Staff and Stakeholders

Demographic Question

1. What is your sex?
 - a. Female
 - b. Male
2. How old are you? *In years.*
3. Which best fits your race/ethnicity?
 - a. Black/African American
 - b. Hispanic or Latino/a
 - c. Asian or Asian American
 - d. White/Caucasian
 - e. Multiracial
 - f. Native American or Alaskan native
 - g. Hawaiian or Pacific Islander
 - h. A race/ethnicity not listed here: _____

Staff Role

I want to ask you few questions about how services are provided at this agency. We can skip any questions you don't want to answer.

4. What is your role at the agency?
5. How long have you been at the agency?
6. What kinds of services does the [program] (or [agency]) provide?

Service User Experience

We'd like to know more about your perception of service user experiences using and accessing [program] (or [agency] Advocacy services).

7. In your experience, who most commonly uses chat/text? *How do they hear about it?*
8. Based on your experience working with service users, what barriers are encountered?:
 - a. In accessing chat/text services?
 - b. In accessing other agency services?
9. Are there any groups of service users in particular that benefit from chat/text?

Service Provision during COVID-19

Now we are going to ask you a few questions about how your work was impacted by the COVID-19 pandemic.

10. How did your job change during the Coronavirus Pandemic?
11. Thinking about service users overall: How did their safety and experiences change during COVID-19?
12. How did chat/text and phone services change during COVID-19?
13. What strategies did you use to help clients address violence, threats, stalking, or abuse during the coronavirus pandemic?
14. Did your use of technology with clients change during the coronavirus pandemic? If so, how did it change?

Experience Working at the Program

Next, we are going to ask you some questions about being an advocate in general. These can include during the COVID-19 pandemic or skills that you used pre- and post-pandemic.

15. What are the most important skills you use at as an advocate on chat/text ?
16. How do those skills or approaches change if you are communicating via text? Chat?
17. What are some of the best (most successful) approaches you have used to convey emotions, thoughts, or feeling to [program] service users? How do they know you are “listening?”

Recommendations

18. How would you improve [program] (or [agency]) advocacy for future service users?
19. Is there anything else you think our team should know about or that we didn’t ask you about before we close?

Appendix E: Interview Tool - Individuals that Used Digital Hotline During the COVID-19 Pandemic

Screening Questions

1. Did you use [program] chat and or text services between March 2020 and May 2021?
 - a. Yes [continue to interview]
 - b. No [Thank participant for their time and let them know that they are not eligible for the interview.]
2. Which hotline service did you use?
 - a. SAFEline (SAFE Alliance's hotline)
 - b. Houston Area Women's Center hotline

Demographics

3. What is your sex?
 - a. Female
 - b. Male
4. How old are you? *In years.*
5. Which best fits your race/ethnicity?
 - a. Black/African American
 - b. Hispanic or Latino/a
 - c. Asian or Asian American
 - d. White/Caucasian
 - e. Multiracial
 - f. Native American or Alaskan native
 - g. Hawaiian or Pacific Islander
 - h. A race/ethnicity not listed here: _____

Health and Safety Questions

The following questions are about your needs and experiences since the CORONAVIRUS (COVID-19) PANDEMIC began (around March 13th 2020)

6. How was your personal/family health been affected by the Coronavirus pandemic?
7. How was your work housing, and financial situation been affected by the Coronavirus pandemic?
8. Did you have any safety concerns related to people you live with during the coronavirus pandemic?
9. What strategies did you use to improve your safety from violence, threats, stalking or abuse during the coronavirus pandemic?
10. Aside from chat/text, during the coronavirus pandemic, did you seek services from a domestic violence agency, rape crisis center or child-focused agency? *What was it like? Were you able to get what you needed from the agency?*
11. Since the coronavirus pandemic, have you had any virtual counseling, advocacy or case management sessions through chat, text or video? What was your experience like with virtual services? *What type of technology did you use? Do you think you would want to keep receiving services this way after the end of social distancing measures?*

Service Use Questions

The services at this agency are typically for people who have experience some sort of violence. I want to ask you few questions about how you came to use services at this agency during the COVID-19 pandemic. We can skip any questions you don't want to answer.

12. Were you involved in other services or systems as a result of the violence (like law enforcement or CPS)? Did you become involved in these systems before or during the COVID-19 pandemic?
13. Was there any particular event or concern that led you to seek services at [agency]?
14. When you first accessed [program] services, what was your experience like?
 - a. Follow-up Questions: Is there a wait for any services? What are some of the first things discussed?
 - b. Did you face any challenges to seeking services due to social distancing and/or lockdown procedures due to COVID-19? What was is like to seek these services during the pandemic? Do you think those challenges would have happened before the pandemic?
15. What are the most important skills the person at [program] used to help you?
16. What are your biggest barriers to receiving help over the phone? By chat? By Text?
17. What barriers or difficulties did you experience getting help/support on [program]?
18. How would you improve [program] (or [agency]) advocacy for future service users? Is there anything you would do to improve their procedures during a natural disaster or something like the pandemic?

Appendix F: Interview Tool - Interviews with Longitudinal Study Participants

Demographic Survey

To start off, I am going to ask you a few questions about yourself.

1. Sex:
2. Age:
3. Race/ Ethnicity:
4. Location:
5. Which of the following services did you use?
 - a. SAFeline at SAFE Alliance
 - b. Houston Area Women's Center hotline

Semi Structured Questions:

The services at this agency are typically for people who have experience some sort of violence. I want to ask you few questions about how you came to use services at this agency. We can skip any questions you don't want to answer.

6. Before coming into services at this agency, who did you tell about the violence you had experienced? Potential Prompts (To be asked if needed)
 - a. Formal services
 - b. Family/Friends/Community?
7. Was there any particular event or concern that led you to seek services at SAFE Alliance/HACW?
8. When you first accessed SAFeline/HAWC services, what was your experience like?
 - a. Follow-up Questions: Is there a wait for any services? What are some of the first things discussed?
9. How do you think most service users hear about SAFeline/HAWC (SAFE Alliance hotline/HAWC)?

Experience at the Program

10. What impact, if any, did SAFeline/HAWC have on your safety? Resource access? Social support? Health?
11. What barriers or difficulties did you experience getting help/support on SAFeline/HAWC?
12. How would you improve SAFeline/HAWC advocacy for future service users?

Appendix G: Staff Fidelity Checklist

Agency Name:

Service Type

- a) Chat
- b) Text
- c) Phone

If known, what is the participant age?

- a) Under 18 yrs
- b) 18-25 yrs
- c) 26-50 yrs
- d) Over 50 yrs
- e) Not indicated

If known, what is the participant race/ethnicity?

- a) Hispanic/Latino/a
- b) White/Caucasian
- c) African American/Black
- d) Asian
- e) Native American or American Indian
- f) Native Hawaiian or Other Pacific Islander
- g) Not indicated
- h) Other (fill in the blank)

If known, what is the participant sex?

- a) Female
- b) Male
- c) Not indicated

Language used in session

- a) English
- b) Spanish
- c) Other (fill in the blank)

Service Duration

- a) 5 minutes or less
- b) 6-15 minutes
- c) 21-30 minutes
- d) 31-45 minutes
- e) 46+ minutes

How long did it take for the participant to be connected with an advocate?

- a) Less than 1 minute

- b) 1-5 minutes
- c) 6-15 minutes
- d) 16+ minutes

Participant group

- a) Survivor/victim
- b) Formal support person
- c) Informal support person
- d) Other
- e) Not indicated

Were there technical challenges during this session?

- a) Yes
- b) No

Type of violence/harm referenced by the participant:

	Yes	No
Intimate partner violence		
Adult sexual assault		
Child abuse/neglect		
Stalking		
Human trafficking		
Child sexual abuse		
Other physical assault		
Elder abuse		
Teen dating violence		
Sexual harassment		
Adult sexual abuse as a child		
Other		

Primary objectives of service interaction (pick the most appropriate)

- a) Help with shelter
- b) Help with abuse/violence
- c) Help with safety needs
- d) Medical help after a sexual assault
- e) Help with counseling or support
- f) Help with housing (other than shelter)
- g) Legal help
- h) Help a client/person the service user is working with experiencing violence or abuse
- i) Help a friend or family member experiencing violence or abuse

Needs expressed in session by the participant:

	Yes	No
Childcare		
Emergency shelter		
Financial assistance		
Housing		
Legal		
Medical		
Emotional support		
Relationship advice		
Resource information		
Help a friend or family		
Information on SANE exam		

Staff Skills and Tasks from this session:

	Yes	No
Welcoming to services		
Replying as quickly (to show I am listening)		
Establishing Safety (to chat or text)		
Resource referral (internal)		
Resource referral (external)		
Help identifying supports: formal		
Help identifying supports: informal		
Safety assessment and planning		
Technology safety (information & skills)		
Encouraging future hotline use / connection		
De-escalation and stabilization		
Asking clarifying questions		
Help seeking assistance (navigation, enhanced referral support)		
Expressing Empathy/Sympathy/Validation		
Normalizing & Reducing Blame		
Addressing technical problems (fill in)		
Explaining chat/text service		
Establishing boundaries of chat/text line (confidentiality, child abuse reporting)		
Using emoticons and minimal encouragers ('tell me more' 'uh-huh')		
Psychoeducation (legal and civil rights)		
Psychoeducation (Relationships)		
Psychoeducation (Trauma & Violence)		
Psychoeducation (coping skills, mindfulness, stress reduction)		
Psychoeducation (parenting)		

What referrals were provided during the session?

Yes

No

Shelter at the agency

Counseling at the agency

Sexual assault services at the agency

Legal services at the agency

Financial support at the agency

Other shelter program (not at the agency)

Other counseling program (not at the agency)

Other legal support (not at the agency)

Other financial support (not at the agency)

Food assistance/food banks

Other housing resources (not at the agency)

Transportation resources

Children's services

Other referral types

Fill in:

Is there anything you would like to add about this service interaction?