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Implementation of Mobile Health Applications Safety Plan (MHASP) to Reduce the Risk of Suicide

Abstract

Suicide is one of the most serious public health issues in the US today. Suicide is of particular interest because it is the tenth leading cause of death for all ages in the United States, the second leading cause of death in ages 10-34, and the fourth leading cause of death in ages 35-54 (CDC, 2020). Despite national goals to lower the suicide rate, several recent reports have documented a steady increase in suicide rates in recent years. Suicide rates continues to rise in almost every state. The purpose of this manuscript is to describe a quality improvement project (QI) that was carried out to increase knowledge and use of a Mobile Health Applications Safety Plan (MHASP) to reduce the risk of suicide. The need for this project was identified at an outpatient clinic where patients at high risk for suicide were not receiving printed completed safety plan or enhanced instruction. Several studies identified potential barriers to adherence including complexity of treatment, low health literacy, and persistent symptoms while other studies displayed the positive impact of enhanced instruction on reducing the risks of suicide. This QI project lasted 6-week period and included a telehealth intervention that used verbal instructions and teach-back to improve knowledge. Participants filled-out surveys before and after intervention. Despite the small sample size, all the participants showed improvements. Based on these findings, the outpatient clinic was advised to continue reinforcing knowledge of the mobile suicide safety plan application and to incorporate a telehealth follow-up program to emphasize proper application use for these patients. Future projects and research should focus on larger sample sizes over longer periods of time as well as tracking suicide risks and outcomes.

Call for Nursing

Lucie, a 38-year-old white female presented to the clinic post-discharge after an involuntarily admission to the psychiatric ward for suicide attempt by cutting her wrist. While in the hospital, Lucie drank shampoo that was provided for her shower, banged her head on the wall and she continues to express suicide ideation with the intent to die. As the project leader listened to Lucie, she was aware of the many patients at the clinic with similar situations, and she determined that this call for nursing could be answered with evidence-based quality improvement in a caring environment.

Project Purpose

The purpose of this Mobile Health Applications Safety Plan (MHASP) project was to implement a structured suicide prevention safety plan on a mobile device to increase knowledge and use of a mobile safety plan application to reduce the risk of suicide. This was achieved by consistently providing accurate information to patients at high risk for suicide about the application safety plan's availability, usage, convenience, and effectiveness. A safety plan is an emergency plan the patient develops for suicide crises. This evidence-based project reflects the philosophy of Florida Atlantic University's Christine E. Lynn College of Nursing by encouraging participants' intentional well-being and nurturing the wholeness of the person using an effective tool to prevent suicide in at-risk populations. The clinical question: *In patients 18 to 65 years-old with major depressive disorder at high risk for suicide, how does a phone-app safety plan affect knowledge use of the plan and access to safety resources to reduce the risk for suicide within a 3-months period?* addressed the decision-making process patients faced when choosing to develop a mobile safety plan. Overall, the results of the project showed a positive shift in safety plan knowledge for eligible patients after completion of a 6-weeks of psychoeducation program.

Problem Statement

Suicide is one of the most serious public health issues in the US today. Suicide is of particular interest because it is the tenth leading cause of death for all ages in the United States, the second leading cause of death in ages 10-34, and the fourth leading cause of death in ages 35-54 (CDC, 2020). Despite national goals to lower the suicide rate, several recent reports have documented a steady increase in suicide rates in recent years. Suicide rates continues to rise in almost every state. Suicide remains a leading cause of mortality and morbidity internationally, with suicide rates in some Western countries, such as Australia and the United Kingdom remaining relatively stable while increasing in others, such as the United States (Melvin et al., 2019). Depression is a major risk factor for suicide attempts and other suicidal behaviors (US Department of Health and Human Services, 2014). Having major depression increases the risk of suicide when compared to people who do not have depression. Those treated for depression as inpatients after suicidal ideation or attempt are roughly three times more likely to die by suicide (6%) than those treated only as outpatients (CDC). Healthy People 2030 aims to improve health and quality of life for people affected by mental health and behavioral disorders. Interventions to address behaviors that increase the risk of suicide, like drug and alcohol misuse, may help to reduce the suicide rate nationwide. Suicide is a complex behavior that necessitates a complex prevention strategy that identifies broad patterns of suicide and suicidal behavior across a population.

Literature Review and Synthesis

Westling et al (2019) conducted a study to determine the effects of brief admission (BA) among individuals who self-harm and are at risk of suicide. This study design was a randomized controlled trial (RCT), level II evidence. While there was no significant difference in the number of days spent in the hospital between the BA and control groups, this was the first RCT to look at the

impact of patient-controlled BA on inpatient service use, daily life functioning, non-suicidal self-injuries (NSSI), and attempted suicide in people who recurrently self-harm and are at risk of suicide.

O'Toole et al (2019) conducted a study to evaluate the effect of an app-assisted suicide prevention treatment on suicide risk and depression. This study design was a randomized controlled trial (RCT), level II evidence. Contrary to the hypothesis, the group receiving treatment as usual in combination with access to the mobile app experienced a smaller decrease in self-reported suicide risk immediately following treatment, but there was no between-group difference concerning symptom of depression. This study highlights critical issues to consider when incorporating technology into face-to-face psychological interventions for this and other populations.

Melvin et al (2019) conducted a study to examine the feasibility and effectiveness of a suicide prevention smartphone application. This study design was an open-label single-group trial, level IV evidence. Participants were asked to use the BeyondNow safety planning smartphone application to manage their suicide safety plan during a 2-month trial, as an adjunct to treatment as usual. A reduction was observed in participant severity and intensity of suicide ideation, and suicide-related coping increased significantly. The current findings are encouraging, although future research should attempt to disentangle the impact of safety planning from other treatment strategies.

Project Goals and Objectives

The aim of the Mobile Health Applications Safety Plan (MHASP) project was to reduce the risk of suicide in depressed adults aged 18 to 65 by implementing a mobile suicide safety plan program approach. A safety plan intervention was designed to support patients who are

experiencing suicidal thoughts. It is a customizable plan that is unique to each patient. A safety plan is usually completed with the patient, and the clinician is responsible for printing a copy for the patient to take home. However, because most clinic visits were virtual since the pandemic, providing patients with a copy of the safety plan became impossible. A mobile application safety plan was being considered since it offers the convenience of always having this plan on hands whenever it is needed. However, patients' education was lacking as they were unaware of this valuable resource. The overall goal of this project was to reduce the risk of suicide in participant populations by developing a mobile application safety plan. The following objectives of the project were met:

- 1) Week 1-2: Seventy-five percent of eligible patients developed an application safety plan by using their mobile application.
- 2) Week 3-4: One hundred percent of participants showed an increase in knowledge use of the application as measured by a minimum of 15% increase on the survey tool from preto post-survey.
- 3) Week 5-6: Thirty percent of participants used the mobile application safety plan as evidenced by self-report and a review of the electronic health records.

Potential Impact: How Project Will Influence Health Care for A Specific Population

This project is significant to reduce the impact of suicide in the severely depressed adult patients. Users of the mobile application would be able to list warning signs, reasons for living, ways to limit access to lethal means, coping strategies, and personal and professional contacts.

Delineation of the Role of the DNP in Addressing the Challenge or Problem

The role of the DNP in addressing this problem is to use evidence-based health care using existing research to develop and implement quality improvement projects to decrease adverse

health outcomes (Zaccagnini, 2017). DNPs are prepared to address the challenges, changes, and gaps in healthcare delivery. The DNP project described in this paper embraced the DNP competencies and strove to make a difference in the lives of patients who are mentally ill.

Conceptual Framework

The Iowa model of Evidence-Based Practice to Promote Quality Care (Iowa model), developed and revised by Dr. Maria Titler in Iowa city at the University of Iowa (Dang et al., 2019), informed this project's planning, implementation, and evaluation. This model fit with the Theory of Nursing as Caring as "the Iowa Model stands the test of time as a pragmatic, application-oriented and theory-based EBP process model." (p. 395). The Iowa model was applied to this quality improvement project based on the understanding that there exist some triggers that are problem-focused (reduce the risk of suicide in the 18 to 65 years-old patients with major depression and at high risk for suicide) and knowledge-focused (having knowledge and access to a mobile application safety plan can help reduce the risk of suicide).

How Caring Science Will Inform Development and Implementation

The theory of Nursing as Caring developed in the early 90's by Anne Boykin and Savina Schoenhofer, guided this project's planning and implementation. The Nursing as Caring theory emerges in the quest of Dr. Boykin to separate the discipline of nursing from medical science, stemming from her realization that the focus of medical science was generally not on the persons themselves. This theory guided this project based on the theme of the "Dance of Caring Persons". As per Boykin & Schoenhofer (2020), personal knowing of self and others is integral to the connectedness of persons in the dance, the nurse and the nursed, sustain the dance, being energized and resonating with the music of caring. This project was intended to empower patients with the knowledge and resources to reduce the risk of suicide. Sustainability was facilitated through skilled

building, confidence, and accessibility to a mobile safety plan. The project leader promoted a nurturing environment by being careful to not build any prejudice or bias, and seeing the patient as a whole, with no insufficiency or deficits in anything.

Graphic Representation

Use of the Iowa Model to Enhance Use of a Mobile Health Application Safety Plan.

Triggers:									
Identified pro	oblems:								
reduce risk of	f suicide in 18	to 65 years-ol	d patients with	MDD &	at high risk	for suicio	le		
New knowled	lge:						1		
having knowledge & access to a mobile app. safety plan can help reduce risk of suicide									
Clinical Question									
In patients 18 to 65 years-old with major depressive disorder at high risk for suicide,									
how does a p	hone-app safe								
to safety resources to reduce the risk for suicide within a 3-months period?									
		1							
	le	this a priori	+w2						
	15	tilis a priori	Ly:						
					Yes				
Form a Team									
Team member	ers: Nurses, DN	NPs, SWs, Psy	chologist, Psy	chiatrists,	managers				
Analysis and appraisal of the literature									
		ls there suff							
		evidenc	e?						
		-I $-$							
					Yes				
Pilot change in practice:									
Evaluation plan: Likert scale initial survey									
Baseline data collection survey									
Implementation plan: weekly evaluation									
Provide unit-specific education									
Collect post-survey data									
	_								
Is change appropriate for adoption?									
		adoption							
			<u> </u>						
Integrate & sustain the practice change									
Key personnel: nurses, DNPs, SW, Psychiatrists, managers									
Hardwire change into the system						Disseminate results: weekly case studies, FAU			
Monitor key indicators through quality improvement						nursing,	Poster presenta	ation, published	abstract
Reinfuse as needed									

Project Processes

Permission From Agency

Permission was obtained (Appendix A) from Dr. M. E. Stone, owner and director of Dr MSD, LLC, a privately owned and operated outpatient practice in West-Palm-Beach, Florida. Services offered include medication management and psychotherapy for various psychiatric conditions. The owner granted permission for the proposed training program to be conducted virtually with the eligible participants.

Team Development

Project Team Leader. Myrbelle Joseph, a doctor in nursing practice student, master prepared board-certified psychiatric mental health nurse practitioner has been a nurse for 20 years working in a variety of setting, including critical care and psychiatry. She maintains a certification as a clinical nurse leader, a critical care nurse, and a psychiatric nurse practitioner. She currently manages a team of veterans that suffers from psychiatric disorders in the inpatient and outpatient setting.

Faculty Leader. Tracian Kelly Hershorin, a doctoral prepared family nurse practitioner, psychiatric mental health nurse practitioner has been a nurse for over 20 years working in a variety of roles and settings, including as the FNP Coordinator and Assistant Professor of Advanced Practice Nurses at the Florida Atlantic University.

Community Leader. Mary E. Stone-Duffy, a doctoral prepared psychiatric mental health nurse practitioner has been a nurse for over 39 years working in a variety of roles and settings, including as Adjunct Professor at Florida State University and Palm Beach Atlantic University, and as Clinical Instructor at Florida International University. She's currently the owner and

director of Dr MSD, LLC – Private Practice providing psychiatric care to various mental health conditions.

Recruitment of Participants

Recruitment of the participants for the Mobile Health Applications Safety Plan (MHASP) MHASP project was successful as participants voluntarily and successfully joined in the program. The participants included six patients currently enrolled in the Dr MSD, LLC's clinic. The community leader Dr. Stone-Duffy identified potential participants, confirmed their interest, obtained consent, and identified a preferable interview mode and communication mode. Inclusion criteria consisted of (1) patients' ages 18-65, (2) consent to participation, (3) a diagnosis of major depressive disorder, (4) in possession of a smart device. The exclusion criteria eliminated patients who (1) denied suicide ideation, (2) denied past suicide behaviors or attempts (3) had no access to a smart device. All patients eligible for this project were educated using the MHASP program education tools and this application was free to download on their phone's device. The list of participants and their identifiers were kept in the electronic records, accessible only to the project leader and those with authorized access to the medical records. The risks to the participants were no different than patients receiving usual care.

Intervention

The Mobile Health Applications Safety Plan (MHASP) project was implemented for eligible participants. This project leader developed a relationship with the patients to develop a suicide safety plan with the participants by using their mobile device. The project leader administered the initial MHASP survey (Appendix B) and educated the participants on the use of an individualized safety plan. The project consisted of six weekly telephone sessions lasting 20-30 minutes each for the demonstration of the use of the MHASP by using the Stanley-Brown safety plan mobile

application (Stanley & Brown, n.d.). Sessions included an initial suicide risk assessment to obtain a description of a recent suicidal crisis to identify warning signs. During these sessions, participants were educated on the importance of a safety plan to identify coping strategies and resources before a crisis to better manage the future crisis and allow time to pass without engaging in suicidal behavior. The sessions also included the discussion on the details of the safety plan, its location on their device, who to share it with, the likelihood of its use and potential barriers. Additional follow-up sessions were conducted to determine if the safety plan was helpful and needs revision. At the final session, the project leader again administered MHASP to compare preand post-survey data to identify any significant change. The project was possible with the use of resources inclusive of electronic health records (EHR) and data reports run through the EHR. Completion of the program was notated in the medical records.

Tools/Instruments

To measure the effectiveness of this training program, participants were asked to complete a Mobile Health Applications Safety Plan (MHASP) Awareness, Knowledge, and Attitude survey (Appendix B) to compare the participants' pre- and post-intervention awareness, knowledge, and attitude of MHASP. The project leader used evidence-based resources related to suicide safety plan to develop the MHASP survey based on the objectives of the project. At the beginning and completion of the project, participants completed the survey which consisted of 21 closed-ended questions. Seven questions pertained to socio-demographic characteristics, three questions related to family history, five questions related to safety plan knowledge, six questions related to attitudes, barriers, and intent toward the use of the application. The 3-item response ranged from yes, no, or don't know for comparisons over time. The faculty leader served as the expert reviewer to appraise the content validity of the tool.

Timeline

Upon confirmation that the project proposal was approved, the project started with its implementation during the months of May 2022 through November 2022. The project leader started recruiting participants at the end of May. By the end of August 2022, all patients ages 18 to 65 years of age were instructed about MHASP if they met inclusion criteria. During the Fall of 2022, the project leader examined and assessed the data collected and disseminated the findings.

- May 2022: Submission to the DNP committee for project proposal approval occurred
- May 2022: Initiation of the project began with recruitment of participants
- **June -July 2022:** Implementation of the counseling sessions with participants were completed via telehealth.
- August-October 2022: Analysis of Results and evaluation of findings
- November 2022: Manuscript submission and poster presentation completion
- **December 2022:** Dissemination of findings

Results

Analysis of Data

Participants' awareness, knowledge, and attitude were the three areas assessed throughout the MHASP project. Participants were examined through a pre- survey prior to any intervention and post-survey following completion of the program utilizing the same survey. Data was collected from a 3-item completed by 5 participants in a private mental health outpatient clinic in Jupiter, Florida. The total scores for each question of the pre-test were compared to the total scores of each question of the post-test questionnaire.

The success of this Project was determined by meeting the project objectives which were:

1) Seventy-five percent of eligible patients will develop an application safety plan by using their

mobile application in week 1-2. 2) One hundred percent of participants will show an increase in knowledge use of the application as measured by a minimum of 15% increase on the survey tool from pre to post-test in week 3-4. 3) Thirty percent of participants will use the mobile application safety plan as evidenced by review of electronic health records in week 5-6. Suicide ideation and depression scores were also monitored to evaluate program effectiveness. This was evaluated by reviewing the medical records prior to implementation, at initial, and upon completion of the program. Each objective was achieved to the anticipated extent. The first objective was the completion of successful development of an application safety plan on their mobile device. All participants agreed to partake in the program, educational sessions, and pre- and post- testing. Overall, participants were receptive to education counseling and the weekly meetings.

To evaluate participants perceived knowledge, the MHASP survey was given and utilized prior to project implementation and following implementation to measure an increase in participants knowledge and attitude. A comparative analysis was completed of the pretest and posttest results of the MHASP questionnaire to assess changes in participants' education and recommendations. On the pretest, most participants expressed zero knowledge regarding MHASP. Subsequently, the posttest showed a significant increase in participants' competency about MHASP. The difference between pre- and posttest scores were calculated and there was an average of 80% increase in scores following the project. Data analysis was focused on meeting the program objectives. The three objectives set forth by the project leader were fully met.

Despite the small sample size, all the participants showed improvements. Based on these findings, the outpatient clinic was advised to continue reinforcing knowledge of the mobile suicide safety plan application and to incorporate a telehealth follow-up program to emphasize

proper application use for these patients. Future projects and research should focus on larger sample sizes over longer periods of time as well as tracking suicide risks and outcomes.

Key Facilitators of Project Success

There are many individuals who should be recognized as key facilitators of the project's success. First and foremost, a huge debt of gratitude to Dr. Tracian Kelly, faculty chair, for her tireless guidance and endless support. Dr. Kelly spent many hours providing guidance, manuscript edits, and advice on the created tools and questionnaire and understood the importance and need for education on the development of a mobile suicide safety plan. Special gratitude must also be given to Dr. Mary Stone-Duffy, community chair, for her well-appreciated assistance with recruitment of participants, facilitation of implementation, feedback, and physical space for the conduction of this project. The access to the outpatient clinical medical record and full participation from all participants allowed for the accomplishment and success of this project.

Key Barriers/Challenges

During the implementation of this project, many challenges, and barriers, also known as limitations, occurred. These limitations included a global pandemic, due to the SARS-CoV-2 (COVID-19) unforeseen by the project leader, resulting in a limitation of in-person patient visits and a lack of available participants. Although the three project objectives were fully met, these limitations significantly altered the anticipated outcome project. Having only five participants restricted the project's ability to prove that it had a positive impact or any statistical significance. Because of the time constraints, it was difficult to make convincing summations. A longer observation period of 6-12 months would have been more amenable to quantitative support of success.

Unintended Consequences

The MHASP project brought about an essential awareness to the importance of a mobile suicide prevention safety plan. Participants were able to develop their overall educational skills, which allowed them to increase their knowledge on preventative care regarding suicide risk. In the end, it was the patients who benefited most, as they became the recipients of enhanced preventative care and ultimately decreased their overall risk of suicide. While it is important to have a suicide safety plan readily available, it is also vital that participants recognize the importance of treatment adherence to prevent symptoms return. Some of the participants verbalized appreciation for weekly guidance. Participants also discussed their challenges with other chronic illnesses and felt good having healthcare providers listen to their health concerns. As healthcare professionals, we may underestimate the importance of patient teaching. Studies show that nonadherence is a significant problem for patients with chronic illnesses.

Project Evaluation

Formative

The MHASP sought to address the awareness, knowledge, and attitude of patients in using a mobile health application safety plan to reduce the risk of suicide. It was intended for a larger and more diverse population. However, due to the restrictions imposed from the COVID-19 pandemic, the project was limited to a small outpatient private practice. After successful implementation, MHASP could be appropriately adapted to reach a larger institution as originally envisioned later.

Summative

The results of this project confirm that following a formal education program, patients were more likely to develop and use a mobile suicide safety plan. The weekly follow-ups'

sessions revealed overall gratitude for the program and an overall appreciation of new information communicated and the education shared with the participants. There is evidence to suggest when treatment is combined with access to a mobile application, there is a smaller decrease in self-reported suicide risk immediately following treatment. Initially, participants were more receptive to in-person educational sessions rather than telehealth, which were necessary due to social distancing mandates related to the COVID-19 pandemic. However, over time, participants developed an interest in telehealth modality since it offers the convenience of being home for the sessions. If this project were to be expanded, it is recommended to do telehealth education sessions due to an increase in interest, interactive involvement, and location convenience. The private practice location allowed the project leader to document in the medical record the ongoing progress for all eligible patients and the completion of the project. Ideally, the MHASP documentation will be a regular part of the medical records to continue in the efforts to increase awareness and knowledge of a mobile suicide safety plan.

Recommendations

Site Specific

The project's findings will be presented to key stakeholders at Dr. MSD, LLC – Private Practice (facility director, students/interns, and health care providers) via power point and poster presentations at weekly case studies and staff meetings via teleconference presentation to all mental health providers and students who evaluate patients at high risk for suicide. To further increase positive results, the project leader suggests the project should be discussed at daily office huddles.

Public Specific

Through dissemination of the results of this project to relevant colleges, students may ultimately gain the necessary skills and confidence to successfully manage patients at high risk for suicide to improve patients' outcomes. The project leader believes there needs to be a change with the current education on suicide prevention in providers' office, at nursing and medical conferences, and nursing and medical schools. As suicide remains a serious public health concern, increasing awareness and knowledge in the development of a mobile safety plan can lead to an increase in patients' attitude to use a safety plan at a time when help is desperately needed.

Project Appraisal

This quality improvement project had positive statistical results and met all goals set, making it eligible for further continuation and expansion at larger institutions. It is important to consider the fact that the participants in this project were actively enrolled in the mental health clinic and were, to varying degrees, familiar with a suicide safety plan. Presented to a population who may be less familiar with the various items of a safety plan, the findings could be much different. Overall, the project was successful in increasing patients' awareness, knowledge, and attitude to develop a mobile suicide safety plan to reduce the risk of suicide in those at high risk for suicide.

Conclusion

The aim of the Mobile Health Applications Safety Plan (MHASP) project was to reduce the risk of suicide in depressed adults aged 18 to 65 by implementing a mobile suicide safety plan program approach. The comprehensive literature review revealed the addition of a mobile application to treatment as usual led to a reduction in participant severity and intensity of suicide ideation, and suicide-related coping increased significantly. The MHASP project resulted in an

increase in participants' awareness, knowledge, and confidence to develop and use a mobile suicide safety plan. Due to the positive impact of the MHASP project, it is suggested that the program be disseminated to larger institutions that manage patients at high risk for suicide. In addition, the project leader hopes to present the findings through a presentation at the Christine E. Lynn College of Nursing. Then the results will be expanded to the FAU community through the FAU bulletin or students' news. Finally, the abstract will be presented at the American Psychiatric Nursing Association's annual conference. It is the hope that the MHASP project impacted not only mental health patients, but also benefited primary care patients from the harmful consequences of suicide risk.

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APPENDIX A

Dr MSD, LLC

Dr. Mary E. Stone-Duffy DNP APRN PMHCP-BC

2101 Vista Parkway WPB, FL 33411

561-660-0501

February 25, 2022

Dr. Debra Hain PHD APRN, AGPCNP-BC, FAAN, FAANP

DNP Acting-Program Director

Christine E. Lynn College of Nursing

777 Glades Road

Boca Raton, Fl 33431

Dear Dr. Hain,

This letter is to confirm that we have granted Myrbelle F Joseph MSN APRN PMHNP-BC

Doctor of Nursing Practice student, approval to complete her DNP Project at Dr MSD, LLC -

Private Practice. The project entitled "Implementation of Mobile Health Applications Safety Plan

to Reduce the risk of Suicide" is based on the clinical question "In patients 18 to 65 years-old with

major depressive disorder at high risk for suicide, how does a phone-app safety plan affect

knowledge use of the plan and access to safety resources to reduce the risk for suicide within a 3-

months period?"

The agency may include any other details about the relationship or responsibilities.

Sincerely,

Dr. Mary E. Stone-Duffy DNP APRN PMHCP-BC

APPENDIX B

Mobile Health Applications Safety Plan (MHASP) Awareness, Knowledge, and Attitude Survey

Thank you for choosing to complete this survey. My name is Myrbelle Joseph, and I am a Doctor of Nursing Practice (DNP) student at Florida Atlantic University. The purpose of this survey is to assess your knowledge, awareness, and intent to use the mobile health application if having a suicide crisis. Your response will help me to assess your knowledge use of the plan and of available resource that is safe and effective for you. Your answers are strictly confidential and will not be shared with anyone. The survey will take approximately 5-10 minutes to complete.

Socio-Demographics

- 1. Age
- 18-30 31-44 45-65
- 2. Relationship Status
- Married Single Divorced widowed Roommates
- 3. Level of Education
- No school High School College and beyond
- 4. Monthly Income
- 0-1,000
- 0 1,001-3,000
- 3,000 and more
- 5. Employment Status
- o Employed o Unemployed
- 6. Race/Ethnicity
- White/Non-Hispanic Black/Non-Hispanic Hispanic Other Don't Know
- 7. Ethnicity
- Hispanic or Latino Not Hispanic or Latino Don't Know

Family / Living Situation

- 1. Who live in your home?
 - Alone with spouse spouse + children with roommate with parents with pets
- 2. How many children do you have
- $\circ~0~\circ~1~\circ~2~\circ~more~than~2$
- 3. How old is your youngest child?
- \circ Less than 1 \circ 2 or older

Safety Plan Knowledge

- 1. Have you ever heard about the mobile suicide safety plan?
- $\circ \; Yes \circ No \circ Don't \; Know$
- 2. Have you ever made a suicide safety plan?
- Yes No Don't know
- 3. Do you know what a suicide safety plan is?
- Yes No Don't Know
- 4. Do you know when to use a suicide safety plan?
- $\circ \; Yes \circ No \circ Don't \; know$
- 5. Do you know where to find a suicide safety plan?
- Yes No Don't know

Attitudes towards MHASP

- 1. Should you develop a mobile health suicide safety plan?
- Yes No Don't know
- 2. Should you use a mobile suicide safety plan?
- Yes No Don't Know
- 3. Would others know if you make a safety plan?
- \circ Yes \circ No \circ Don't Know

Barriers to MHASP

- 1. Which would prevent you from using the mobile suicide safety plan (chose all that apply)
- Worried about others talking about you
- On't know enough about it
- o Fear of unknown
- o It is too time consuming

Intent to use MHASP

- 1. Have you ever used a suicide safety plan?
- Yes No Don't Know
- 2. Would you use one if it was available?
- Yes No Don't Know