



# Suicide Prevention in Primary Care

Trainings for Primary Care Clinicians and Leaders

## Evaluation Report

November 2019



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## Executive Summary

Suicide prevention has been named a national priority and much work has been done to review existing evidence and to identify gaps in how our nation's mental health and health care systems address this public health challenge. However, less attention has been paid to the integration of suicide prevention into primary care settings. The Association of Clinicians for the Underserved (ACU) worked with partners to develop and deliver training to prepare primary care teams to better meet the needs of patients at elevated risk for suicide.

### Overview

The ***Suicide Safer Care*** program was created to train primary care providers and their teams on basic principles of suicide prevention and skills for integration into practice. The trainings provided a comprehensive, skills-based learning opportunity that offered "hands on" strategies that could be used with patients during a primary care visit. Skills developed through the training included identification of patients at risk, conducting risk assessments using a standardized tool, and brief evidence-based interventions including strategies for reducing access to lethal means, and safety planning.

An analysis of surveys conducted with ***Suicide Safer Care*** participants prior to the start of training found that 91% of the participants believed that suicide prevention was an important part of their role, including 93% of primary care providers and 89% of health care team members. However, one-third of health care team members and primary care providers had not received training on how to recognize the warning signs that a patient may be at elevated risk for suicide. Survey responses from providers prior to attending the training highlighted the importance of addressing suicide care in primary care, such as:

- 36% of primary care providers had interacted at least once with a patient who ended his or her life by suicide.
- 57% of primary care provider did not feel confident in their ability to provide treatment to patients with suicidal thoughts or behaviors.

The ***Suicide Safer Care*** training was delivered to 1,060 individuals across eight states between December 2018 and June 2019. In addition to the in-person live trainings, web-based trainings were conducted to expand the reach of the educational offerings.

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*Analysis of the pre- and post-surveys clearly demonstrates that the Suicide Safer Care training is effective in increasing the knowledge, skills and confidence among clinicians to care for patients at increased risk for suicide.*

## Impact

Analysis of the provider responses on post-training surveys demonstrates that the training achieved increases in provider knowledge, skills and comfort in screening patients and addressing the needs of patients at increased risk for suicide. Importantly, the training increased awareness of the role that primary care plays in suicide prevention as well as a positive impact on knowledge and level of comfort in providing evidence-based care that addresses suicide risk.

The data collected in the pre- and post-surveys from the *Suicide Safer Care* workshops indicates that this training was successful in bridging the knowledge gap in health care professionals' treatment of patients with suicide ideation. Participating providers report on post-surveys that this training increased their confidence and ability in recognizing, assessing and caring for patients at elevated risk for suicide.

The largest gains were seen in provider responses regarding their level of comfort in conducting a suicide risk assessment, with an increase of 40% from pre- to post-test (82% of providers indicated comfort post-training). This was followed by a 28% increase in provider confidence in providing care to patients who have been identified as being at elevated risk for suicide (75% of providers indicated comfort post-training).

## Lessons Learned

One important finding of the project for ACU was the tremendous response from primary care providers and other care team members in the interest and desire to receive training on how to assess patients at risk and care for patients that are identified with elevated risk for suicide. While more than one-third of providers had one or more contacts with patients who had died from suicide, nearly the same proportion had never received training on how to address the needs of patients at risk. Qualitative and quantitative data from this evaluation of the training program demonstrate that a pragmatic introduction to suicide risk assessment, screening tools, and evidence-based brief interventions is appropriate for primary care audiences and improves the ability of care team members to integrate suicide safer care practices into the primary care setting.

## Background

### A Call to Action for Primary Care

Primary care clinicians are increasingly confronted with concerns for their patients that may be at risk for suicide. Suicide is a leading cause of death in the United States, cited as the cause of death for nearly 45,000 Americans in 2016<sup>i</sup>. The suicide rate among individuals age 10 and older has increased by 30% since 1999<sup>ii</sup>. A report released by the Centers for Disease Control and Prevention (2018) revealed that suicide rates increased in all but one state between 1999 and 2016. In 2016, 9.8 million adults aged 18 and older, or about 4 percent of the adult population, reported serious thoughts of suicide<sup>iii</sup>.

Suicide is rarely caused by any single factor. Diagnosed depression or other mental health conditions are reported for less than half (46 percent) of suicide deaths. Other factors that contribute to suicide deaths include relationship problems, substance use, physical illness and chronic conditions, job loss, and financial troubles<sup>iv</sup>. The National Strategy for Suicide Prevention calls for a comprehensive approach to suicide prevention that includes action at individual, family, community, and societal levels<sup>v</sup>.

Primary care teams are uniquely positioned to identify risk and intervene. Primary care providers in particular have a unique opportunity to incorporate suicide prevention into established health risk assessment and patient safety practices<sup>vi</sup>. Approximately 45 percent of individuals who died by suicide visited a primary care provider in the month before their death<sup>vii,viii</sup>.

Suicide is often discussed in the context of mental illness and suicide prevention is considered an issue that mental health agencies and systems should address. However, given that mental health conditions are only one of many factors that contribute to suicide risk, it is incumbent upon all sectors of the U.S. healthcare system to adopt evidence-based approaches to identify and care for those at risk for suicide.

### Response: Suicide Safer Care Training Program

In response to this growing issue, the Association of Clinicians for the Underserved (ACU) worked with the Institute for Family Health to develop a training program and companion toolkit to offer primary care teams the opportunity to talk about the impact of suicide in primary care settings, review evidence based approaches for screening, assessment and intervention, and develop skills for engaging with patients who may be a high risk for suicide. ACU is a membership organization of clinicians, advocates and healthcare organizations that provide health care for the underserved. This training was developed in collaboration with the Institute for Family Health and was supported through a generous program grant from the Centene Corporation.

## Suicide Safer Care Training Overview

### Training Development

The training content was derived from a review of existing resources and draws primarily from the highly comprehensive [Zero Suicide in Health and Behavioral Health Care Toolkit](http://zerosuicide.sprc.org/toolkit) [http://zerosuicide.sprc.org/toolkit]. The training content was developed as a Toolkit and adapted specifically for primary care organizations and clinicians who care for underserved populations.

The training content focused on three core components:

1. Screening and assessment
2. Care management and evidence-based interventions
3. Referral processes

Additional information on administrative and legal issues was included to support primary care providers and clinical leaders in the integration of *Suicide Safer Care* into practice.

### Training Implementation

The trainings began in December of 2018 and trained a total of 1,060 primary care providers and care team members. The eight states in which training took place included Arizona, Idaho, Missouri, Montana, New York, Oklahoma, Texas, and Washington. In addition, some multi-state regional forums were also offered. Trainings were delivered primarily through in-person day-long workshops, however in order to expand the reach some trainings were conducted through webinars. ACU worked with state Primary Care Associations (PCAs) to organize the workshops, often in conjunction with other PCA events or conferences. Table 1 offers an overview of what states were targeted and the number of primary care providers and care team members that attended.

Table 1. Overview of Trainings by State and Number of Participants

State	Participants Trained
Arizona	9
Idaho	53
Missouri	220
Montana	268
New York	322
Regional Forums	103
Oklahoma	27
Texas	30
Washington	28
<b>Total</b>	<b>1,060</b>

The Northwest Regional Suicide Safer Care workshops included two in-person trainings conducted in Colorado, one in-person training in Alaska, and a national webinar (ACU). These trainings were attended by health care professionals from HRSA Regions VIII, IX, and X states, including Alaska, California, Colorado, Hawaii, Idaho, Montana, Nevada, North Dakota, Oregon, South Dakota, Utah, Washington, Wyoming, in addition to partners from across the United States.

### Target Audience for Training

During the course of the project, the training was provided to a broad spectrum of health care staff and professionals, representing different roles within primary care teams. Table 2 below includes a look at training attendees by discipline.

Table 2. Suicide Safer Care Training Participants By Discipline

Primary Care Clinicians	Primary Care Team Members	Behavioral Health Team Members	Others
Medical Doctor Osteopathic Doctor Nurse Practitioner Physician Assistant Midwife Resident	LPN / LVN Registered Nurse Medical Assistant	Counselor Social Worker Psychologist Psychiatrist Psychiatrist Nurse Practitioner	Management Administrative Dental Staff

Of the 1,060 training participants of the Suicide Safer Care training workshops, a total of 319 were primary care providers. New York had the highest number of primary care providers participating in the training (148), representing 47% of all providers trained in the state. In Montana, 75 primary care providers received training and in Texas 29 primary care providers participated, representing 24% and 9% of providers trained, respectively (Figure 1).

Figure 1. Primary Care Provider Participants By State

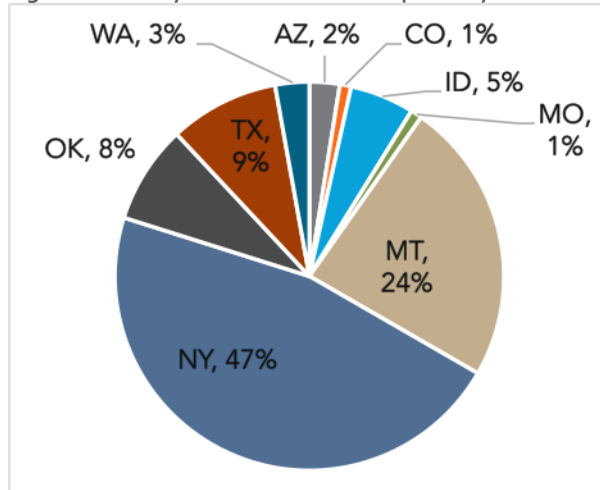
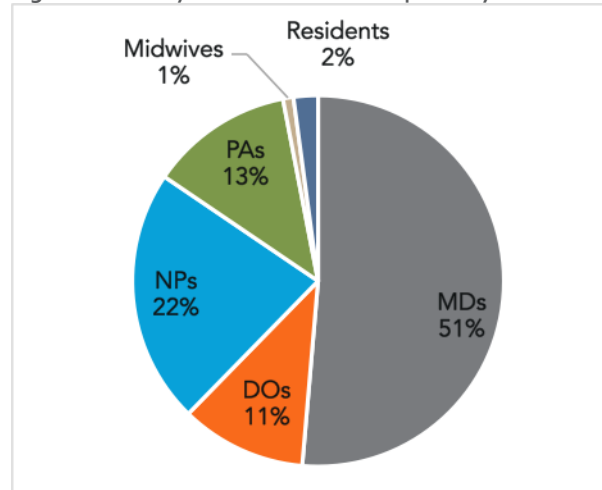


Figure 2. Primary Care Provider Participants by Licensure



Among primary care providers trained the majority (51%) were Medical Doctors. Nurse Practitioners represented the second largest group of primary care providers trained (22%) along with Physician Assistants (13%), Osteopathic Doctors (11%), Residents (2%), and Midwives (1%) (Figure 2).

## Evaluating the Impact of Suicide Safer Care Training

Before and after the training, participants were administered a Suicide Safer Care Workforce survey consisting of 19 questions designed to gauge their perceived need, knowledge, and skills in assessing and treating patients at elevated risk for suicide. Pre- and post-test surveys were collected from 1,060 participants.

### Identified Gaps in Provider Knowledge and Skills

The pre-training survey responses identified gaps in provider training and skills for meeting the needs of patients at risk for suicide.

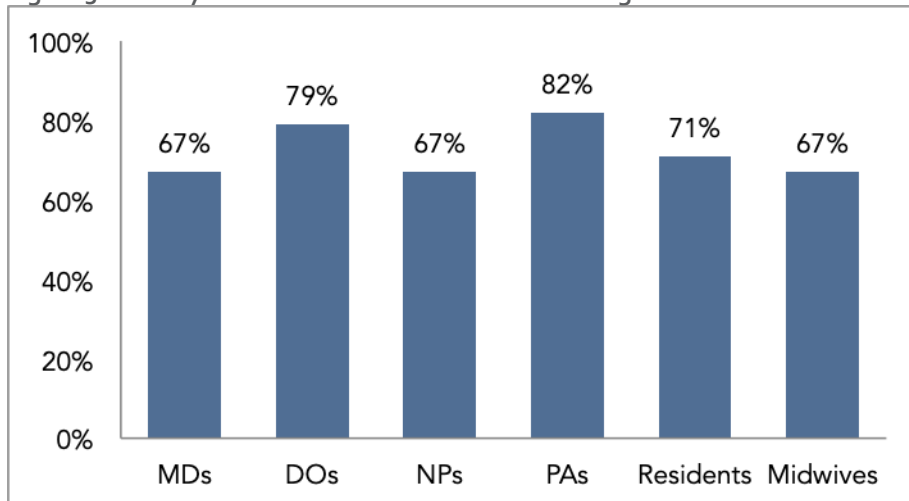
**Lack of Training:** Responses from the Suicide Safer Care pre-surveys revealed that while 93% of primary care providers indicated their belief that suicide prevention was an important part of their role, nearly one-third (29%) of primary care providers reported that they had never received training on how to recognize the warning signs for a patient with an elevated risk for suicide.



"I would freeze; I wouldn't know what to do. I'd want to get them to somebody else as quickly as possible. Now, I feel like I've got a plan for myself as to what to do with these patients."

Physician assistants reported the highest exposure to training (82%) and medical doctors, nurse practitioners and midwives all reported the lowest exposure of training (67%).

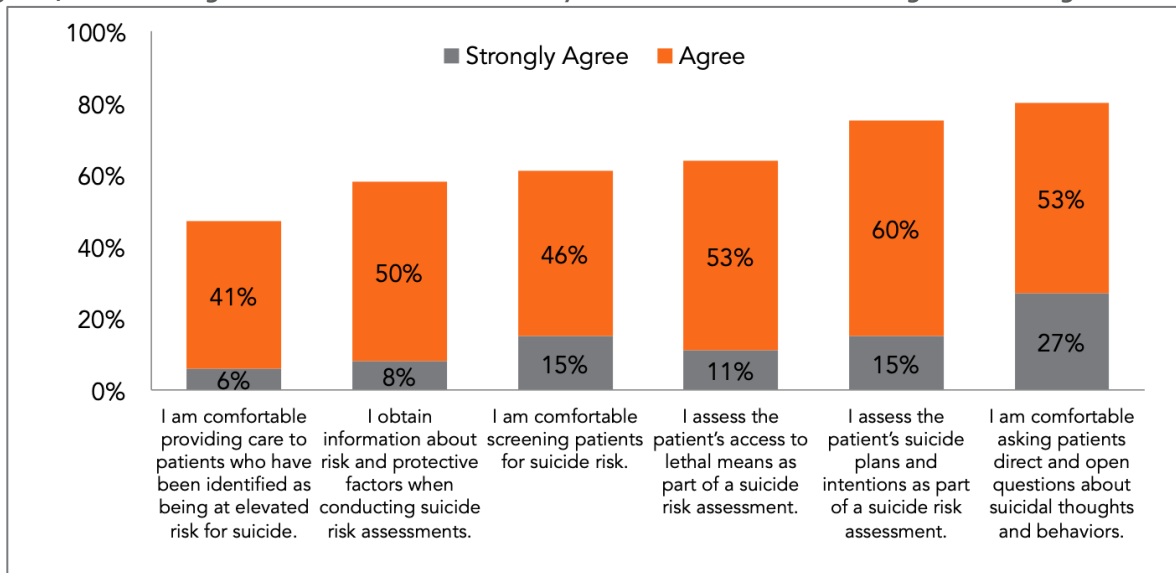
Figure 3. Primary Care Providers Ever Trained to Recognize Suicide Risk





**Lack of Comfort in Caring for Patients at Risk:** The majority of primary care providers reported that they did not feel confident in their ability to provide treatment to patients with suicidal thoughts or behaviors. In pre-training survey responses, 80% of primary care providers indicated that they are comfortable asking patients direct and open questions about suicidal thoughts and behaviors. And three-quarters of providers (75%) indicated assessing the patient’s suicide plans and intentions as part of a suicide risk assessment. However, only 47% of primary care providers expressed comfort in providing care to patients who have been identified as being at elevated risk for suicide.

Figure 4. Pre-Training Assessment of Provider Ability and Confidence in Addressing and Treating Suicide Risk



Despite this lack of comfort in caring for patients at elevated risk for suicide, more than one-third of primary care providers reported having interactions with patients that had died by suicide. In some states, more than half of providers report such interactions (Figure 5).

More than one-third (36%) of primary care providers reported having interacted at least once with a patient who had died by suicide, with 17% of primary care providers reporting one such interaction, and 19% reporting more than one such interaction.

Figure 5. Provider Experience, Knowledge and Skills Gaps - State Examples

<b>Gaps in Provider Experience, Knowledge and Skills – State Examples</b>	
Among the nine state trainings, the pre-survey results identified several gaps in experience, knowledge and skills well beyond the national average among participants.	
<u>At least one interaction with a patient who had ended his or her life by suicide:</u>	
Washington:	67%
Northwest Regional Training:	56%
Idaho:	55%
<b>Average:</b>	<b>36%</b>
<u>Knowledgeable about the risk factors for suicide:</u>	
Arizona:	0%
<b>Average:</b>	<b>45%</b>
<u>Confidence in provider ability to conduct a suicide risk assessment:</u>	
Washington:	56% No Confidence
Texas:	52% No Confidence
New York:	44% No Confidence
<b>Average:</b>	<b>36% No Confidence</b>
<u>Ability to provide treatment to patients with suicidal thoughts and behaviors:</u>	
Montana:	58% No Confidence
<b>Average:</b>	<b>53% No Confidence</b>

### Assessing Training Impact and Outcomes on Primary Care Providers

The survey tool administered prior to the start of the training was also administered upon completion of the training to assess changes in primary care provider knowledge, skills and abilities in providing care to patients at elevated risk for suicide. Analysis of the provider responses demonstrates that the training increased awareness of the important role that primary care plays in suicide prevention as well as a positive impact on knowledge and level of comfort in providing evidence based care that addresses suicide risk.

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*"This lecture will absolutely change my practice. I thought the discussion on intent was so helpful and the safety plan. Best lecture at this conference!! Thank you! Primary care doesn't get enough education on suicide treatment."*

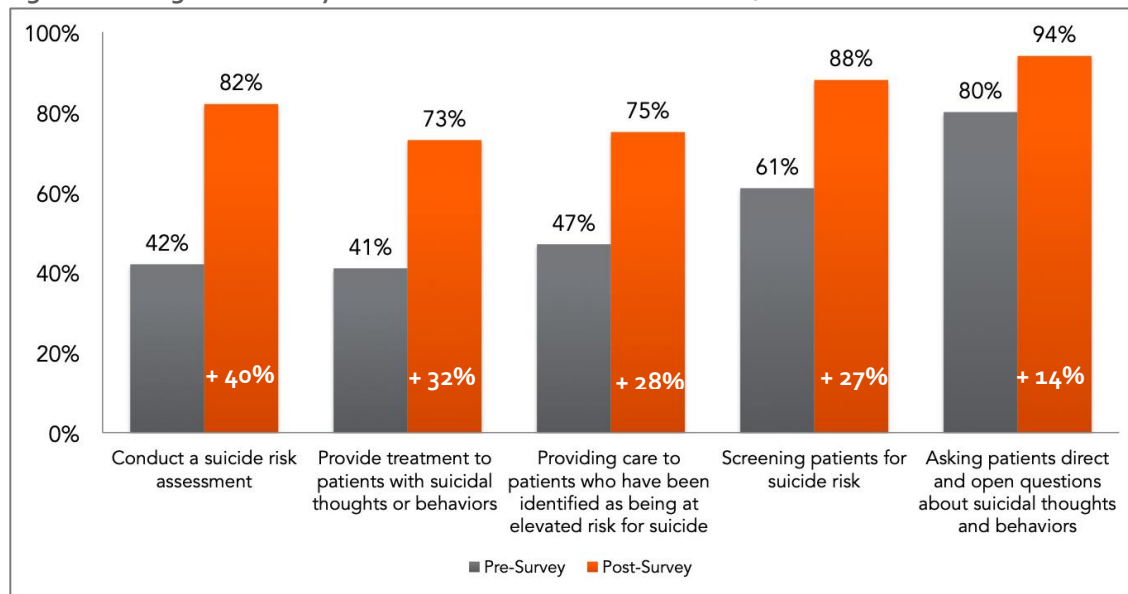
*~ Training Participant*

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Tremendous gains were observed in provider responses to their knowledge and comfort level in assessing and providing care for patients at risk for suicide from pre-survey to post-survey. When analyzing the post-survey results corresponding to knowledge and skills, affirmative responses ("strongly agree" or "agree") to all questions increased by at least 14%. A review of some of the key findings post training is reviewed below.

The greatest improvement was seen in provider responses regarding their level of comfort in conducting a suicide risk assessment, with an increase of 40% from pre- to post-test (42% of providers indicated confidence in conducting risk assessment prior to training compared to 82% post-training). This was followed by a 32% increase in provider confidence in treating patients with suicidal thoughts or behaviors. Also seen was a 28% increase in provider confidence in providing care to patients who have been identified as being at elevated risk for suicide (47% indicated confidence pre-training compared to 75% post-training). These achievements in improved knowledge, skills and abilities were also reflected for all training participants (primary care providers and other non-clinician participants).

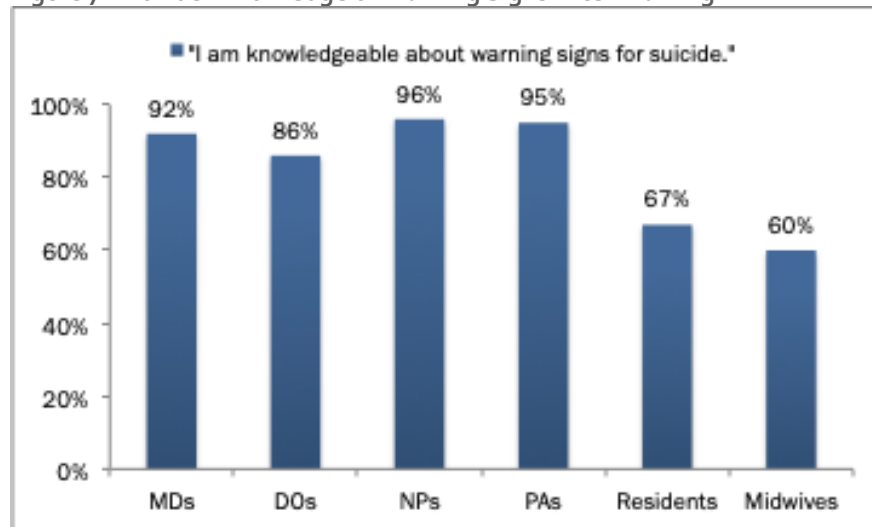
Figure 6. Changes in Primary Care Provider Skills and Abilities Pre/Post



An analysis of survey data by provider type shows an overall high level of confidence in knowledge and ability after training. Osteopathic doctors reported the highest level of confidence in their knowledge and skills post-training to care for patients at elevated risk for suicide with 87% responding, "strongly agree" or "agree" to the statement, "I have the knowledge and skills needed to provide care to patients." In addition, 83% of osteopathic doctors reported feeling comfortable providing primary care to patients at elevated risk, and 86% reported feeling confident in their ability to provide treatment for suicide risk.

However, gaps still remain. Nurse midwives reported the lowest level of confidence in their knowledge and skills in providing care to patients at elevated risk for suicide. Sixty percent (60%) of midwives responded that they "strongly agreed" or "agreed" to the statement, "I have the knowledge and skills needed to provide care to patients." And 40% of midwives reported that they felt confident in their ability to provide treatment for suicide risk to patients.

Figure 7. Provider Knowledge of Warning Signs After Training




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*"What I really appreciate about the presentation today is tangible, practical tools to assist me in helping those in crisis." ~ Training Participant*

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Lastly, residents were significantly behind their counterparts (except for midwives) when asked if they were knowledgeable about warning signs for suicide. Only 67% were in agreement about knowledge. Additional work will need to focus on increasing all provider types' abilities and knowledge.

## Conclusion

Throughout the training implementation process, ACU and the training team were struck by the high level of interest and demand for training on suicide prevention by primary care providers and care teams. More than one-third of health care professionals and staff who attended the training had provided some level of care to a patient who died by suicide. Primary care teams are often a significant point of contact for health care service for individuals in crisis. These health care professionals need the knowledge, skills and tools to implement suicide safer care practices and effectively meet the needs of patients at risk for suicide.

Based on our initial experience with this training program, ACU is seeking to build on this work and expand the training program to deliver this essential content to primary care providers and care teams across the U.S. Current plans include seeking multi-year funding for this program from existing and new funding partners. ACU recognizes that no single strategy or approach will prevent suicide within a primary care organization's patient population. Rather, a comprehensive approach that embeds evidence-based practices throughout the organization can reduce suicide deaths. ACU will utilize the tools and expertise developed through this initial program to support our primary care teams to prevent deaths by suicide and improve patient health outcomes.

<sup>1</sup> Stone DM, Simon TR, Fowler KA, et al. *Vital Signs: Trends in State Suicide Rates — United States, 1999–2016 and Circumstances Contributing to Suicide — 27 States, 2015*. MMWR Morb Mortal Wkly Rep 2018;67:617–624. DOI: <http://dx.doi.org/10.15585/mmwr.mm6722a1>

<sup>2</sup> *ibid.*

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- <sup>iii</sup> Substance Abuse and Mental Health Services Administration. (2017). Key substance use and mental health indicators in the United States: Results from the 2016 National Survey on Drug Use and Health (HHS Publication No. SMA 17-5044, NSDUH Series H-52). Rockville, MD: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. Retrieved from <https://www.samhsa.gov/data/>
- <sup>iv</sup> Stone DM, Simon TR, Fowler KA, et al. *Vital Signs: Trends in State Suicide Rates — United States, 1999–2016 and Circumstances Contributing to Suicide — 27 States, 2015*. MMWR Morb Mortal Wkly Rep 2018;67:617–624. DOI: <http://dx.doi.org/10.15585/mmwr.mm6722a1>
- <sup>v</sup> Office of the Surgeon General; National Action Alliance for Suicide Prevention. 2012 National strategy for suicide prevention: goals and objectives for action. Washington, DC: US Department of Health and Human Services, Office of the Surgeon General; 2012. <https://www.surgeongeneral.gov/library/reports/national-strategy-suicide-prevention/full-report.pdf>
- <sup>vi</sup> National Action Alliance for Suicide Prevention: Transforming Health Systems Initiative Work Group. (2018). Recommended standard care for people with suicide risk: Making health care suicide safe. Washington, DC: Education Development Center, Inc.
- <sup>vii</sup> Ahemdani, B.K., Simon, G.E., Steward, C., Beck C., Waitzfelder, B.E., Rossom, B....Solberg, L.I. (2014). Health care contacts in the year before suicide death. *Journal of General Internal Medicine*, 29(6), 870-877.
- <sup>viii</sup> Luoma JB, Martin CE, Pearson JL. (2002). Contact with mental health and primary care providers before suicide: a review of the evidence. *Am J Psychiatry*. 2002 Jun;159(6):909-16