

## Suicide Prevention and Intervention in the ED

Updated September 2021 | Original Release March 2019

Improving interventions to support people experiencing suicidal thoughts in emergency departments is a critical need. In Minnesota, the suicide rate has increased by 90% since 1999, with 830 deaths by suicide reported in 2019 or 14.7 deaths per 100,000 population which is about on par with the national rate at 14.5 (CDC). For 2020 the preliminary data show the number of deaths by suicide dropped to 723 (MDH). However, even with the drop, 2020 marks the sixth straight year in which more than 700 Minnesotans died by suicide. (MDH)

Nationally, 47,511 lives were lost to suicide in 2019, with firearm suicide being the leading cause of suicide death, followed by suffocation and poisoning. Both nationally and in Minnesota, male suicide deaths are higher than females and age spread is about the same with most suicides in 25-54 years age group. (CDC)

Data for Minnesota show racial disparity in suicide deaths: nationally the highest suicide death rates are among whites while in Minnesota they are the highest among Native American

individuals have experienced larger increases in suicidality (Admon, 2020).

population. (CDC, MDH) Non-Hispanic Black individuals, individuals with lower income, and younger

The Emergency Department (ED) is a critical setting in which to identify people at risk and provide support. In 2018, there were 312,000 emergency department visits for self-harm injury. (CDC) Approximately 8% of all adults visiting an ED report suicidal ideation, including those with a non-psychiatric reason for their visit (Ilgen, 2009). Further, 40% of patients who died by suicide were seen in an ED within 12 months of their death (Da Cruz, 2011; Gairin, 2003).

The period following ED discharge is a time of high risk for patients seen initially for suicidal thoughts and/or behaviors. Within one year following their ED visit, the risk of suicide for at-risk patients can be 66 times higher than that of the general population (Hogan, 2016), yet follow-up is often lacking. A large population study in 2018 found that approximately 70% of at-risk patients did not have an outpatient visit within 30 days of ED discharge (Hunter, 2018).

The goal of these recommendations is to strengthen how we screen, assess and intervene to help patients at risk of suicide, both during the visit and afterward. The recommendations have been informed by current evidence and work group expert consensus. Also incorporated is feedback from people who have accessed the ED in mental health crisis and their family, gathered through semi-structured interviews.

MN Health Collaborative partnering organizations are particularly focused on ensuring the use of evidence-based tools and practices, including conducting screening, a comprehensive assessment and intervention, and supporting people through transitions and follow-up.

"Suicide remains a leading cause of death in Minnesota. We know how to intervene. help people decrease their suffering and avoid suicide. Implementing these interventions at the front line of emergency care is crucial to move from 'knowing' what to do to actually doing it."

> SUZANNE WITTERHOLT, MD, DFAPA Medial Director of Emergency Services and Complex Care, Allina Health

## September 2021 Update

- Patient and family feedback, incorporated in the new engagement section and throughout
- New evidence incorporated throughout
- Updated suicide data in intro section
- Added the Presentations/Chief Complaints populations and clarified those where no screening needed, go straight to assessment
- Updated the screening recommendation and list of screening tools options
- Incorporated new MN Health Collaborative recommendations on Medical Clearance Evaluation and Agitation
- Updated the workflow in particular, positive/negative screen differentiating what to do for patients who screen negative, vs. some positive screen and negative
- Noted the issue of false negatives upon screening and how to handle
- Called out life stressors as risk factors to consider
- Noted computer assisted interventions
- Clarified the disposition section (specifically observation and admission to behavioral health unit) and called out EmPATH and telehealth
- Updated discharge to home safety plan with specific info that should be included
- Incorporated new information from ACEP on patient engagement and practical considerations on implementing safety precautions

#### Also included in this document are:

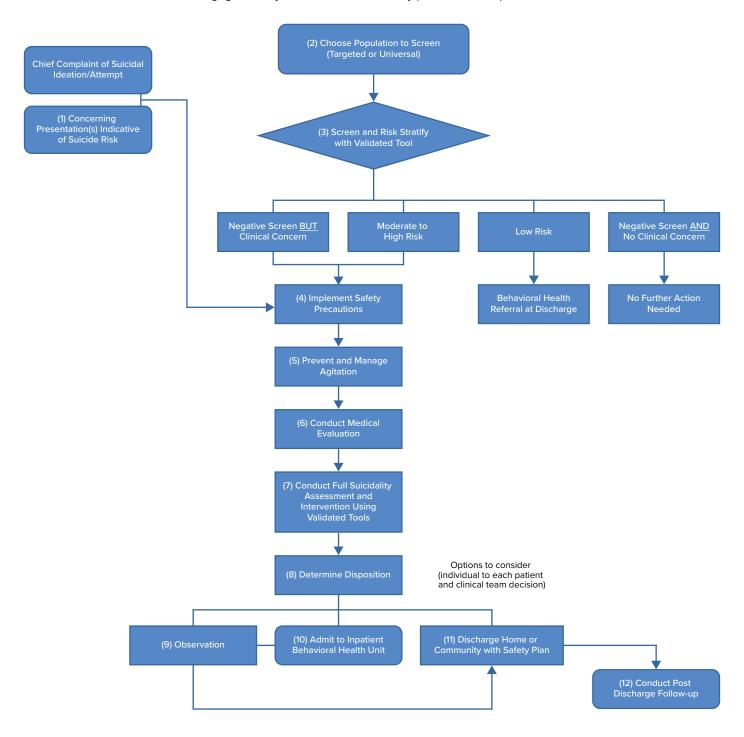
- 1. Evidence Summary
- 2. Overview of Tools and Protocols

"I had no idea what was going to happen next. I waited and waited, feeling worse and worse."

> Person who accessed the ED in mental health crisis

# Suicide Prevention and Intervention Workflow\* in the Emergency Department

Patient engagement by the clinical team is a key part of each step in the workflow.



<sup>\*</sup>This workflow is designed to serve as a template – modifications may be needed depending on organizational resources.

## **Recommendations:**

## Suicide Prevention and Intervention in the ED

## PATIENT ENGAGEMENT (applicable to all recommendations)

Throughout these recommendations (outlined below), patient engagement is paramount for effective completion of screening, assessment and intervention and follow up. Some patients may be more willing than others to be screened for or discuss their suicide risk or mental health issues, therefore it is important for the EDs to create a safe and comfortable environment for patients. American College of Emergency Physicians (ACEP) recommends: (Wilson, 2020)

- 1) Ensure privacy of information and only share it with those "who need to know"
- 2) Providers create an environment that is emotionally safe for patients to communicate openly
- 3) ED staff treating patients with empathy and respect

Some tips on creating a safe and comfortable environment for patients include: (Wilson, 2020)

- 1. Help normalize the situation by explaining that ED staff are here for patients with health problems, and that mental health is one type of common health problem. Also explain that sometimes when people's mental health deteriorates under the stressors of life, many people can feel overwhelmed.
- 2. Open-ended questions such as, "What's that been like for you?" or "Can you tell me what your triggers for feeling overwhelmed/suicidal tend to be?" may be helpful in eliciting history. Some stakeholder review also noted that questions should be clear, i.e., "Are you thinking of ending your life?" is preferable to a question like, "Are you going to be okay?"
- 3. Dimming bright, fluorescent lights, offering a blanket if the room is cold, and offering food can also provide comfort.

"We went there for help, and it just got scarier and scarier. Finally someone pulled a chair up side-by-side with her and listened. That was the turning point."

— Family member

## 1. Concerning Presentation(s) Indicative of Suicide Risk

#### **Recommendation:**

Patients with a chief complaint of suicidal ideation and/or suicidal attempt should have suicidal assessment and intervention done (no screening needed). In addition, consider moving right to suicidal <u>assessment and intervention</u> for patients who present to the ED with the following, which may be indicative of possible suicide risk:

- Overdose (especially medication overdose; illicit drug overdose should also be considered)
- Single car motor vehicle crash
- Hanging injury
- Burns
- · Evidence of cutting or other self-harm
- Depression, especially when combined with recent bereavement, breakup, job loss, humiliating event
- · Report of gathering lethal means (e.g., buying a firearm, stockpiling medications)
- · Family or friends report concerns or discrepant history
- · Concerns from other/recent providers

In the meantime, depending on the level of imminent risk in the ED, implement appropriate safety precautions.

## Implementation Considerations:

- Triage should immediately alert the clinical team of the presentation.
- Try to provide risk assessment as soon as possible.

## 2. Choose Population to Screen (e.g., targeted or universal)

**Recommendation:** Determine patient populations for which to conduct screening for suicide risk, using one of two approaches:

- a) Conduct targeted screening for specific patient populations where risk is higher. This includes people presenting with an acute mental health need or who have a mental health disorder diagnosis, history or current substance abuse or diagnosis of substance use disorder and previous suicide attempts.
- b) Universal screening (all patients who present in the ED). While evidence shows universal screening in the ED identifies more patients at risk of suicide and is feasible, more evidence is needed on its relationship to suicidal outcomes (suicidal thoughts and/or behaviors).

Click here for more information on this topic in the Evidence Summary.

#### Implementation Considerations:

What approach is appropriate considering your patient population? What fits considering your organizational resources? Recognize there is risk with both approaches:

- Universal screening involves the use of more resources (both to screen and manage).
- With universal screening, false positives could occur, but at some level any positive response indicates a person struggling to solve a problem. More concerning are the

false negatives, when people are motivated to underreport they have thoughts of suicide. (see section 3, below).

With targeted screening, there is a risk of not identifying all suicidal patients. For example,
if screening is targeted only for those presenting with a mental health concern, it will miss
patients who present for physical concerns who may not disclose their suicidal thoughts
and intent.

## 3. Screen and Risk Stratify with Validated Tool

**Recommendation:** Use a validated, evidence-based tool to screen and stratify for suicide risk.

- For patients who screen negative on all questions on the screening tool, no intervention
  is necessary unless there is a clinical concern. If there is clinical concern, the patient should
  get full assessment and intervention using validated tools.
- Based on screening results and/or organizational policy, determine suicide risk category (e.g., low, moderate, high). While standard screening tools do provide some guidance to risk stratification, these categories are not rigorously defined. Specifics of risk categories and the subsequent standard processes need to be determined by organizations based on the patient populations they serve.

MN Health Collaborative organizations have adopted the C-SSRS tool because they are able to generalize it across different settings in their systems. Uniformity of screening tools also across the different systems may also improve care transitions and ultimately benefits patients.

Consider what the systems in your region are using in helping decide the tool to use.

- Columbia-Suicide Severity Rating Scale Screener with Triage Points for Emergency Department (C-SSRS) for children (five years and older), adolescent and adult patients.
- For patients ages 10 to 24, an alternate screen is Ask Suicide-Screening Questions (ASQ).
   The ASQ addresses feelings of being a "burden" which can be especially relevant to pediatric populations.
  - ASQ now has a screener and risk assessment tool for adults in the ED. Note that the published validation studies are for youth.
- Patient Safety Screener (PSS)-3. This tool was developed and used in the ED-SAFE study and is noted in the ACEP guideline.

**Important note:** Screening can sometimes result in false negatives where patients who screened negative on current suicidal ideation may still be exhibiting presentations potentially suggestive of suicide risk. These may be cases in the ED where staff may want to conduct further mental health assessment if available.

Currently, screening tools include direct indices of suicide risk such as current ideation, behaviors and attempts, but not the indirect indices of suicide risk such as current anxiety/agitation and sleep problems, current interpersonal problems or job/financial strain,

"I'm not sure I would tell the truth when screened."

 Person with lived experience who accessed the ED in mental health crisis

current co-morbid diagnoses, current social isolation/withdrawal, and a family history of mental disorder that can lead individuals to die by suicide even if they deny suicidal ideation. A chart review of 157 patients who died by suicide found that those who denied having suicidal ideation when last asked prior to death were quite similar in charted diagnoses, symptoms, behaviors, and environmental circumstances to those who died who responded affirmatively to having suicidal ideation (Berman, 2018).

Click here for more information on this topic in the Evidence Summary.

## Implementation Considerations:

- Determine who should do the screening. We recommend screening be done at triage or as early in the process as possible.
- Consider having patients self-report by filling out a questionnaire. This may elicit more honest responses.
- Asking screening questions is a relatively quick process and triage staff may not have time to listen to the whole story. Screening staff need to be trained to ask questions compassionately and then transition to the provider with a warm hand-off.

## 4. Implement Safety Precautions

**Recommendation:** Determine ED rooming and resource needs based on the screening results or clinical concern. Use the least restrictive interventions and setting, however, patients at imminent risk of suicide may require more restrictive restrictions. Risk stratification will also help in assisting decision-making on safety precautions.

## Implementation Considerations: (from ACEP ICAR<sup>2</sup>E Tool):

- Ensure environment is safe, i.e., free of any sharp objects, cords, glass, and any other objects that could be used to suicide
- Ensure patients are not in a possession of any weapons, sharp objects, pills or other lethal means
- Consider constant 1:1 observation, audio/video monitoring, patient changing into a gown
  if at high or imminent risk of suicide
- Follow organizational policies on patient and staff safety
- Ensure regulatory agencies' requirements around patient and staff safety

## 5. Prevent and Manage Agitation

**Recommendation:** Assess for patient agitation and manage. Some suicidal patients may also be agitated or become agitated while in the ED, so it is imperative to create an environment to prevent agitation or manage it before moving on to medical clearance evaluation and full suicidality assessment and intervention.

For more information on agitation prevention and management, see the **Prevention and Management of Agitation in the ED.** 

## 6. Conduct Medical Evaluation

**Recommendation:** Patients at suicide risk should have a comprehensive history and physical exam, with additional laboratory testing as needed to assess for underlying medical etiologies. Additionally, consider any prescription medications patient is taking that may be contributing to their condition (e.g., check for any FDA black box warnings).

For information on how to do this, see Medical Clearance Evaluation in the ED.

## 7. Conduct Full Suicidality Assessment and Intervention Using Validated Tools

**Recommendation:** If screen indicates risk of suicide, a comprehensive assessment and intervention is needed. Use an evidence-based tool or protocol to aid in the clinical assessment of patients with suicidal thoughts and/or behaviors and provide evidence-based interventions.

• If the screen is negative but there is clinical concern, full assessment and intervention may be warranted. (See #1, Concerning Presentations Indicative of Suicide Risk.)

The purpose of an assessment is not only to understand potential risk or imminent risk of suicide to keep patients safe at the moment, rather, it is key in intervening and actually managing and reducing the risk of suicide.

An assessment gains further insight into the patient's thoughts and behaviors, and risk and protective factors.

Risk and protective factors associated with suicide risk:

- **Risk factors:** Prior suicide attempts, substance abuse, mood disorders, access to lethal means (the strongest contributors); Other factors to consider include recent or current anxiety (especially in the youth), agitation, sleep problems, family history of mental disorder, current co-morbid diagnoses. Evidence is emerging on the contribution of life stressors (e.g., financial, legal, relationship problems, current social isolation/withdrawal).
- **Protective factors:** Effective mental health care that draws upon psychological theories and techniques including safety planning intervention, restricting access on lethal means, available family support, follow-up contact as part of an intervention.

For easily accessible resources, particularly in EDs where access to mental health providers and specialists is limited, we recommend one or more of the following validated tools to assist with clinical assessment and intervention:

- Suicide Assessment Five-step Evaluation and Triage (SAFE-T) Interview (which includes Safety Planning Intervention, below)
- Safety Planning Intervention
- Columbia-Suicide Severity Rating Scale (C-SSRS) Risk Assessment in conjunction with Safety Planning Intervention (above)

Additional tools/protocols to supplement the above may include training in Counseling Access to Lethal Means (CALM) and Coping Long Term and Active Suicide Program (CLASP-ED) protocol.

Click here for more information on this topic in the Evidence Summary.

## For a more comprehensive assessment and intervention, we recommend staff training in evidence-based protocols\* such as:

- Linehan Risk Assessment and Management Protocol (LRAMP)
- · Collaborative Assessment and Management of Suicide (CAMS)
- Family Intervention for Suicide Prevention (FISP) youth (10-18 years old) only

\*These protocols incorporate evidence-based practices for suicide prevention such as comprehensive suicide risk assessment, stabilization planning, lethal means safety counseling, and learning of coping skills and behaviors.

Click here for link to Resources Table for an overview of these tools/protocols.

## **Emerging Intervention: Computer-Assisted Assessment and Interventions**

There is ongoing research on integrating specialized, staff and time intense evidence-based suicide prevention interventions such as Collaborative Assessment and Management of Suicidality (CAMS) into a computer-assisted tool or intervention to use with patients who present to the ED in a suicidal crisis. Computer-assisted tools or interventions are seen as a potential way for delivering this intervention in less time and resource way that are just as effective. While early data show some efficacy, more studies with larger numbers of participants are needed.

Click here for more information on this topic in the Evidence Summary.

## Implementation Considerations:

- Choose tools and create protocols based on your population, organizational make-up and resources and which resources are in your community for referral.
- For health systems with limited or no behavioral health services, an option to consider is using county crisis services or telemedicine.

## 8. Determine Disposition

**Recommendation:** Disposition is to be determined by the ED team in conjunction with whomever completes the full suicide assessment and intervention. Disposition decisions should be a collaborative team effort which includes the patient and their loved ones.

The most common disposition options include:

- · Observation in the ED
- · Admission to inpatient behavioral health unit
- Discharge to home or community with safety plan

The clinical team should not base their disposition decisions solely based on the results of the screening and risk assessment scores. These tools help guide and structure the clinical team's interview with the patient and patient's family/friends in understanding patient's suicide risk, protective and other factors that may impact disposition decision. The decisions should be guided by a combination of clinical interview, standardized suicide risk assessment, and the context of the patient's and family's situation.

## 9. Observation

**Recommendation:** Clinical reassessment and compassionate stabilization need to continue throughout observation. Reassessment with the C-SSRS is not indicated during ongoing observation and care. Collaborative Assessment and Management of Suicidality (CAMS) is one tool to consider. An advantage of observation is that it provides a moving vs. point in time assessment of patient's condition. This may help provide insight for clinical staff in determining appropriate next level of care or whether patient may be safely discharged. After observation period, determine appropriate next level of care (either admit to inpatient behavioral health unit or discharge to home or community if safe).

 In Minnesota, several organizations are adding EmPATH units adjacent to the ED. An EmPATH unit or similar type of observational unit can help decrease boarding time and reduce unnecessary inpatient stays (Zeller 2014).

## Implementation Considerations:

- If there is access to behavioral health services, behavioral health specialists should continue to provide assessment and intervention during observation period.
- If there is limited or no access to behavioral health services, consider connecting with local county crisis teams, community organizations and chaplains to find additional support for patients with prolonged ED stays; leverage telemedicine to access these services if none are available on site.
- Leverage technology (e.g., cell phone apps, computer-based psychoeducation and computer-assisted interventions) to provide ongoing crisis support during time in observation.
- Do not conduct routine lab orders for patients with suicidal ideation/attempt. Labs should only be obtained as indicated medically necessary by history and physical. (See Recommendations for Medical Clearance Evaluation.)

## 10. Admit to Inpatient Behavioral Health Unit

**Recommendation:** Admission to inpatient behavioral health is warranted for patients at high risk for suicide attempt and/or likely to attempt suicide, patients who do not participate in the assessment and intervention process, or when outpatient management is not possible or feasible.

Factors to consider include:

- · Estimation of suicide risk level
- Capacity of person to follow through on safety plan
- · Availability of support system
- Ability to restrict access to lethal means

Once decision is made to transfer patient to inpatient unit, stabilization should continue until transfer is complete. Labs should only be obtained that are medically necessary. See MN Health Collaborative Recommendations for Medical Clearance Evaluation in the ED.

### Implementation Considerations:

 Communicate with inpatient team to determine potential interventions in the ED while patient waits for placement.

- If there is access to behavioral health services, behavioral health specialists should continue to stabilize patients while in ED.
- If there is limited or no access to behavioral health services, consider connecting with local county crisis teams, community organizations, and/or chaplains to find additional support for patients with prolonged ED stays.
- Leverage technology to provide ongoing crisis support, including cell phone apps, computerbased psychoeducation and computer assisted interventions. (See evidence summary for more information on computer assisted interventions)
- Do not conduct routine lab orders for patients with suicidal ideation/attempt. Labs should only be obtained as indicated medically necessary by history and physical. (See Recommendations for Medical Clearance Evaluation)

## 11. Discharge Home or Community with Safety Plan

**Recommendation:** For patients who are being discharged from the ED:

- Counsel patient to reduce access to firearms (if they own any) and other lethal means.
- Conduct safety planning using a validated tool such as the safety planning intervention (if not already completed). Reconsider disposition plan to discharge if patient cannot credibly commit to a safety plan. The patients take the safety plan with them and the plan should include the following components: (based on the template from Stanley B and Brown G Department of Veterans Affairs; see also Resource Table for link)
  - 1) Warning signs (thoughts, images, mood, situation, behavior) that a crisis may be developing.
  - 2) Internal coping strategies Things that I can do to take my mind off problems without contacting another person (relaxation technique, physical activity).
  - 3) People and social settings that provide distraction.
  - 4) People for whom I can ask for help.
  - 5) Professionals or agencies I can contact during a crisis.
  - 6) Making the environment safe.
  - 7) Reason(s) for living The one thing that is most important to me and worth living for.
- · Communicate the lethal means and safety plans to patient's family or friends if possible
- · Provide medication if indicated.
- Address substance abuse, and any underlying mental health conditions during the discharge planning process.
- Coordinate a follow-up appointment with either primary care or outpatient behavioral health.
- Provide a sheet for the patient and family with emergency crisis hotline numbers to contact
  if the patient is feeling suicidal. <u>This alone is not sufficient; ensure safety planning and
  coordination of follow-up.</u>

## Implementation Considerations:

- Consider a standard template for discharge to ensure integrity of the process.
- Expedite the follow-up appointment, particularly for higher risk patients.

## 12. Conduct Post Discharge Follow-up

**Recommendations:** Follow-up is indicated as the time following an ED visit is a time of high risk. Follow-up may be conducted in multiple ways:

<u>Bridging (immediate) Follow-up:</u> Try to follow up with patient within 24 hours to provide a supportive bridge to their outpatient appointment.

<u>Continued Follow-up:</u> Follow-up phone calls to further review and enhance Safety Planning intervention have been shown to be beneficial for suicide prevention.

Non-Demand Follow-Up (Caring Contact): Mail a letter or postcard or follow-up with a phone call to express concern and care for the patient's well-being and a desire to stay in touch without setting any expectations for patients to provide anything in return.

• The evidence from randomized controlled trials shows significant preventive effect of letters and postcards regarding suicidal behaviors. For at risk patients who refuse ongoing care within the health care system and only receive letters or postcards, the preventive effect is significant for at least two years; whereas for at risk patients who receive letters or postcards in addition to ongoing care, the effect can last up to five years. In the studies, the first contact was generally made a month after discharge. The contacts were then continued monthly for the first four to eight months and then every two to three months depending on the study.

## Implementation Considerations:

- Consider what staff is needed to do post-discharge follow-up.
- Develop organizational process for this follow-up.
- Build communications pathways with other community partners to ensure wrap-around support for patients across the continuum of care.

Click here for more information on this topic in the Evidence Summary.

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## **Evidence Summary:**

## Suicide Prevention and Intervention in the ED

This section summarizes available evidence for some of the recommendations. Recommendations where evidence was not available are based on expert work group consensus and best practice.

## **Universal vs. Targeted Screening**

## **Relevant Resources:**

Roaten, 2018 (observational study); Stuck, 2017 (observational study); Boudreaux, 2016 (observational study); King, 2009 (observational study); Pena, 2006 (systematic review)

## **Overall Summary**

Low quality evidence shows that universal screening for suicide risk identifies more patients at risk of suicide and is feasible to conduct in the Emergency Department (ED) for both adults and adolescents.

There is insufficient or inconclusive evidence that universal screening for suicide risk in the ED effects suicidal outcomes such as ideation and/or behaviors.

## **Review of Universal Screening**

Universal Screening: Suicide Risk Identification and Feasibility

The ED-SAFE study involved 1376 adult patients across eight EDs in the United States. The rate of screenings increased from 26% in Phase 1 of the study, which included only those patients with behavioral health needs, to 84% in Phase 3 of the study, which included all patients presenting in the ED. Detection of suicide risk increased from 2.9% in Phase 1 to 5.7% in Phase 3 which was further confirmed during patient interviews (*Boudreaux*, 2016). In the same study, a survey of 1289 providers found increasing proportions of providers who felt universal screening would result in more psychiatric consultations, while decreasing proportions believed it would slow down clinical care as long as adequate resources are provided (*Betz*, 2015).

A 2018 study of the development and implementation of a universal suicide risk screening program in 328,064 adult encounters in a large safety net health care system found that 6.3% of the screens were positive in the ED, 1.6% in the inpatient units and 2.1% in the outpatient clinics. Thus, the odds of a positive suicide screening in the ED was 4.29 times higher than the inpatient units and 3.13 times higher than the outpatient clinics. The study also suggested that universal screening was not burdensome to the system and could be managed effectively as long as the clinical resources are allocated appropriately (Roaten, 2018).

A 2009 observational study of 298 adolescents seeking pediatric or psychiatric emergency services found that the suicide risk screening demonstrated utility in identifying 1) adolescents at elevated risk for suicide who presented to the ED with unrelated medical concerns and 2) a subgroup of adolescents who may be at highly elevated risk for suicide due to the combination of depression, alcohol abuse, suicidality, and impulsivity (*King*, 2009). An observational study of 266 adolescents and their parents visiting the ED for non-psychiatric concerns found suicide screening of non-psychiatric patients in the ED is feasible in terms of acceptability to parents, prevalence of suicidal thoughts and behaviors, practicality to ED flow, and patient opinion (*Horowitz*, 2010).

## Universal Screening: Suicidal Outcomes

A 2006 systematic review of two randomized trials of suicide screening for adolescents had mixed findings on suicide outcomes. One trial had fewer suicide attempts in the group that received screening than in the control group; the other trial reported no difference between the groups (*Pena*, 2006).

A retrospective observational study of 95 patients who were last seen in the ED within 12 months of death by suicide found increased suicide screening rates after the implementation of the universal suicide risk screening protocol, but not significantly reduced risk of suicide within one year of the encounter (Stuck, 2017).

## **Additional Considerations**

U.S. Preventive Services Task Force (USPSTF) does not have recommendations regarding suicide risk screening in the ED; however, a 2013 systematic review found insufficient evidence to determine the benefits of screening in <u>primary care</u> populations. They did not, however, identify any serious harms from screening (O'Connor, 2013).

## **Screening with Validated Tools**

#### Relevant resources:

Brown, 2020 (observational study); The Columbia Lighthouse Project, 2017 (evidence summary); Newton, 2017 (systematic review)

## **Overall Summary**

Evidence supports use of C-SSRS and ASQ tools to screen for suicide risk. C-SSRS has been validated for children and adults (5 years and older) available for multiple settings (including ED) and languages. ASQ has been validated for children and young adults (10-24 years of age). Important to note, some recent evidence suggests there may be cases in the ED where screeners may not always fully capture the intensity of suicidal ideation which can lead to false negatives.

## **Current Evidence**

A body of evidence supports the psychometric properties of C-SSRS question domains on suicidal attempts, ideation and behaviors used to screen for suicide risk (*The Columbia Lighthouse Project*, 2017). However, a 2020 study on psychometric properties on use of C-SSRS in the ED with patients at high risk for suicide showed mixed results. Reliability ranged from acceptable for suicidal ideation and suicidal attempts subscale, however, the Intensity of Ideation and Suicidal Behavior subscales were poor (*Brown, 2020*).

The screening tools include direct indices of suicide such as current ideation, behaviors and attempts, but not the indirect indices of suicide such as current anxiety/agitation and sleep problems, current interpersonal problems or job/financial strain, current co-morbid diagnoses, current social isolation/withdrawal, and a family history of mental disorder that can lead individuals to die by suicide even if they deny suicidal ideation. A chart review of 157 patients who died by suicide found that those who denied having suicidal ideation when last asked prior to death were quite similar in charted diagnoses, symptoms, behaviors, and environmental circumstances to those who died who responded affirmatively to having suicidal ideation (Berman, 2018).

A 2017 systematic review of six studies of instruments to identify suicide risk in pediatric population presenting in pediatric ED for psychiatric or non-psychiatric concerns found that the Ask Suicide-Screening Questions (ASQ) is highly sensitive (98%) and has strong evidence for ruling out suicide risk (Newton, 2017). ASQ is a brief four-item self-report screen validated for use in pediatric ED for patients with psychiatric and non-psychiatric concerns that screens for current thoughts of being better off dead, current wish to die, current suicidal ideation, and past suicide attempts (Horowitz, 2012).

## **Full Assessment & Intervention Using Validated Tools**

#### **Relevant Resources:**

Doupnik, 2020 (systematic review and meta-analysis), McCabe, 2018 (systematic review); Stanley, 2018 (randomized controlled trial); Borges, 2017 (meta-analysis); Miller, 2017 (sequential design study); Zalsman, 2016 (systematic review); Brown, 2015 (observational study); Darvishi, 2015 (meta-analysis); Wilcox, 2004 (review); Harris, 1997 (systematic review).

## **Overall Summary**

The following risk factors (moderate-high quality of evidence) contribute significantly to suicide risk: prior suicide attempts, substance abuse, mood disorders, and access to lethal means.

Some evidence is available on the contribution of recent or current anxiety as a factor, especially in the youth.

The evidence is growing on significance of agitation and sleep problems, family history of mental disorder, current co-morbid diagnoses, and life stressors such as current interpersonal problems, job/financial strain, and current social isolation/withdrawal to the suicide risk.

The following protective factors (moderate-high quality of evidence) that significantly reduce suicide risk: effective mental health care that draws upon psychological theories and techniques including safety planning intervention, restricting access on lethal means, available family support, follow-up contact as part of an intervention.

Evidence supports the use of standardized assessment tools to aid in clinical assessment of suicidal patients.

Interventions that incorporate the risk and protective factors assessment information have been shown to be effective in reducing suicide risk. Some of the interventions were studied specifically in the ED settings or with patients after attending the ED, while others were studied across different health care settings. Interventions with evidence of effectiveness specific to the ED are:

- Brief interventions (during or after ED visit) that combine early therapeutic
  management based on psychological theory and techniques, information provision,
  and safety planning intervention,
- 2. Follow-up contact post-ED discharge, and
- 3. Family-based interventions (found to be effective in suicidal adolescents).

#### **Risk Factors**

## Prior Suicide Attempts, Mood disorders and Substance Abuse

A 21-32-year follow up study of suicidal patients seen in ED published in 2020 looked at possible differences in clinical risk factors for risk of dying by suicide among suicide attempters in the short-term vs. long term perspective. The results over time showed that 7.2% of suicide attempters at baseline died by suicide and 53% of these deaths were within five years of the baseline suicide attempt. The severity of suicide attempt at baseline was the most significant factor within the first five years after an attempted suicide. A diagnosis of psychosis or major depression at baseline suicide attempt and a history of suicide attempts prior to baseline attempt were the most relevant risk factors in the very long-term (greater than five years) (*Probert-Lindström*, 2020).

A 2015 meta-analysis of 31 studies found a significant association between alcohol use disorder and suicidal ideation, suicide attempt and completed suicide (*Darvishi, 2015*). A systematic review of 249 studies found that patients with mood disorders attempted suicide and those who had abused alcohol were at an increased risk of dying by suicide (*Harris, 1997*). A follow-up review that included 42 additional studies specific to association of alcohol use disorder and drug use disorder to suicide mortality found a statistically significant direct effect of alcohol use disorder, opioid use disorder, intravenous drug use, mixed drug use and heavy drinking on suicide mortality (*Wilcox, 2004*). A meta-analysis of seven studies found that acute use of alcohol (without alcohol use disorder) was associated with an increased likelihood of a suicide attempt and is dose dependent (blood alcohol level>0.00 risk averages three to six times higher for an attempt and blood alcohol level>=0.08 increases the risk of suicide attempt by 38 times) (*Borges, 2017*).

A more recent 2020 observational study of 427 patients, 12 years of age and over, looked at how often suicidal ideation patients presenting in the ED had co-existing substance abuse and psychiatric diagnosis found that 92% of patients had a psychiatric diagnosis of which depression was the most common (67%). More than one psychiatric diagnosis was reported in 51% of patients, while 8% had no reported underlying psychiatric diagnosis. Substance abuse was reported in 58% of patients, including marijuana (42%) and opioids (41%). Polysubstance abuse was reported in 42%. Approximately half of the patients had three or more ED visits in the previous 12 months (*Tadros, 2020*).

A retrospective analysis of suicide-related claims of 169,047 encounters in the ED with youth aged 5-19 years old found higher odds of concurrent anxiety, personality disorders, and alcohol-related diagnoses and lower odds of a comorbid psychosis diagnosis, attention deficit hyperactivity disorder, and other substance-related diagnoses in the population of suicide attempters compared to patients with suicidal ideation alone (*Claudius*, 2020).

Anxiety seems to be associated with suicide risk in adolescent patients. A study of 522 patients aged 10-21 years old seen in the ED found that patients who self-reported recent anxiety symptoms were five times more likely to screen positive for suicidal ideation and behavior. Patients who presented with non-psychiatric complaints and were also screened for suicide risk were also five times more likely to screen positive for suicide risk if they endorsed recent anxiety (*Powell, 2020*).

## Access to Lethal Means

A systematic review of 30 studies found that availability of firearms in households increased the risk of suicides and there is a large evidence base that restricting access to lethal means would mitigate the suicide risk (Zalsman, 2016). In addition to firearms, this review found emerging evidence that changing packaging of analgesics, and restricting access to hot-spots for "suicide by jumping" also helped mitigate the risk (Zalsman, 2016).

#### Violent Behavior

There is some low-quality evidence from case control studies showing that violent behavior in the past year increases the risk of completed suicide in all people, with or without acute alcohol use or alcohol use disorder (*Ilgen, 2010; Conner, 2001*). More high-quality studies are needed to better understand this risk factor.

## Mental Health Conditions

A 2018 report by CDC using 2015 data from 27 states found that 54% of suicide decedents were not known to have mental health condition at the time of suicide. Decedents without known mental health conditions were less likely to have any problematic substance use compared to those with known mental health conditions. Additionally, those without known mental health conditions were more likely to have experienced any life stressor (such as relationship problem, eviction, legal problems) and a recent or impending (within the preceding or upcoming two weeks, respectively) crisis thought to have contributed to suicide.

Physical health problems and job/financial problems were contributing stressors both among those with known and unknown mental health conditions.

Finally, those without known mental health conditions were less likely to have a history of suicidal ideation or prior suicide attempts compared with those with known mental health conditions (Stone, 2018).

More studies are needed to understand if more broad screening is needed for mental health conditions or better attention to those without known mental health conditions.

## Life Stressors

A chart review of 157 patients who died by suicide found that those who denied having suicidal ideation when last asked prior to death were quite similar in charted diagnoses, symptoms, behaviors, and environmental circumstances to those who died who responded affirmatively to having suicidal ideation (Berman, 2018). Those were current anxiety/agitation and sleep problems, current interpersonal problems or job/financial strain, current co-morbid diagnoses, current social isolation/withdrawal, and a family history of mental disorder.

## **Validity of Standardized Assessment**

A 2015 observational study of 254 patients in three psychiatric emergency departments found statistically significant agreement between clinical and standardized assessments for both suicide attempts and non-suicidal self-injury behavior. Of note, 18% of patients determined to have made a suicide attempt in the past week by standardized assessment were not identified as such by clinical assessment. In addition, participants who were classified as making a recent suicide attempt by both clinical and standardized assessments reported a significantly higher mean rating on lethality (as measured by C-SSRS) than those for whom only the standardized assessment detected attempts (*Brown, 2015*).

#### **Essential Interventions**

Below is a summary of studies on effectiveness on suicide prevention and intervention in the ED:

A 2020 systematic review and meta-analysis of 14 studies (with a total 4270 patients) published between 2000-2019 found that brief suicide prevention interventions in acute care settings were associated with reduced subsequent suicide attempts and increased chances of linkage to follow-up care (Doupnik, 2020).

- The most common components of interventions were care coordination, safety planning, brief follow-up contacts, brief motivational interviewing, brief therapeutic interventions, and specific interventions such as Family Interventions and Teen Options for Change.
- Overall, there was no significant reduction in depression symptoms from these interventions.

EDs were the most frequent acute setting in the studies with some set in mental health urgent care or with hospitalized patients and the VA. Patient populations included were adolescents, adults, active duty military and veterans.

A 2018 systematic review of four controlled studies with a total of 3412 patients in the ED found high-quality evidence that brief psychological interventions that combine early therapeutic engagement, information provision, safety planning intervention and follow-up contact for at least 12 months reduced incidence of suicide and suicide attempts (McCabe, 2018).

The effectiveness of safety planning intervention (brief clinical intervention that combines evidence-based strategies to reduce suicidal behavior through a prioritized list of coping skills and strategies in the ED) plus a follow-up telephone call post-discharge home was further confirmed by findings from a 2018 cohort study of 1640 veterans who visited the VA ED for a suicide-related concern. In that study, patients were provided with safety planning intervention in the ED. For post-discharge home follow-up (over six months after their ED visit), they were contacted at least twice to monitor suicide risk, review and revise their safety plan, and support treatment engagement. This study found that the patients who received safety planning intervention plus follow up had a reduction in suicidal behavior and increased treatment engagement following ED discharge compared to those who received usual care (Stanley, 2018).

The ED-SAFE study of adult 1376 patients in the ED who had a suicide attempt or ideation within the week prior to the ED visit found that those who received intervention based on CLASP-ED protocol (see Resources for description) compared to those patients who received treatment as usual had small but meaningful reductions in suicide risk with a relative reduction of 20% and number-needed-to-treat (NNT) 22. Participants in the intervention phase had 30% fewer suicide attempts than participants in the treatment as usual or screening alone phase (Miller 2017). This study had limitations in that it was a sequential design and not a randomized controlled trial. Additionally, patients in treatment as usual group also received some intervention due to ethical concerns of not providing information to patients in that group (Miller, 2017). A follow up study on cost-effectiveness found that a universal screen combined with a telephone-based intervention for those at risk for suicide cost about \$500 per patient with reduced number of suicide attempts and deaths by about 10% within 12 months of initial ED visit compared with universal screen added to treatment as usual. The authors estimated that if 25% of suicide deaths were averted through use of universal screening plus intervention, the society would benefit in about \$840 million in cost savings annually (Dunlap, 2019).

In adolescent populations, interventions involving family are efficacious in managing suicidal risk. A 2016 systematic review found that family-based interventions reduced suicidal ideation and suicide risk factors and enhanced protective factors compared with routine care in suicidal adolescents (*Zalsman*, 2016). A brief family-based crisis intervention with suicidal adolescents in the ED showed reduced psychiatric hospitalization and suicide attempts at 3-month follow-up (*Zalsman*, 2016).

Mixed results on motivational-based interventions for adolescents. A single randomized controlled trial of adolescents aged 12 to 17 years who screened positive on the Ask Suicide Screening Questions (ASQ) during a non-psychiatric ED visit compared an intervention group that received the Suicidal Teens Accessing Treatment After an Emergency Department Visit (STAT-ED) intervention which consisted of motivational interviewing to target family engagement, problem solving, referral assistance, and limited case management to a control group that received the enhanced usual care (EUC) intervention which consisted of brief mental health care consultation and referral. The results showed similar rates of mental health treatment initiation, similar rates of treatment attendance at 2 month follow-up. The two groups also did not have significant difference in suicidal ideation and depression symptoms at any point during the 6-month follow-up timeframe. However, STAT-ED participants had significantly higher rates of mental health treatment initiation and more completed appointments (*Grupp-Phelan, 2019*).

## **Additional Interventions**

## **Psychotherapies**

A mix of studies (systematic reviews, meta-analyses, randomized trials and quasi-experimental studies) found evidence that problem-solving therapy, cognitive behavioral therapy (CBT) and dialectic behavioral therapy (DBT) are effective (in comparison to treatment as usual or minimal treatment) in reducing suicidal ideation and behavior in adolescents, adults (with mixed results), and patients with schizophrenia and patients with borderline personality disorder (*Zalsman, 2016*). DBT was found to reduce suicidal ideation and behavior in adolescents and women with borderline personality disorder (*Zalsman, 2016*). Specific to adolescents, a therapy approach that combines improved parenting skills, community, school, and peer support, and engagement in pro-social activities was associated with a reduction of suicidal attempts when compared with hospitalization (*Zalsman, 2016*).

## Social Support Strategies

Studies assessing social support strategies in different populations and settings showed inconsistent effects on suicide attempts and ideation, but positive effects on depressive symptoms (Zalsman, 2016).

#### Social Connectedness

Center for Disease Control and Prevention (CDC) promotes connectedness between individuals, family members, community organizations, and social institutions for suicide prevention (U.S. Centers for Disease Control and Prevention).

## **Emerging Interventions**

Some evidence is available and is mixed. See more details below.

#### Computer-Assisted Interventions in the ED

There is ongoing research on integrating specialized, staff and time intense evidence-based suicide prevention interventions such as Collaborative Assessment and Management of Suicidality (CAMS) into a computer-assisted tool or intervention to use with patients who present to the ED in a suicidal crisis. Computer-assisted tools or interventions are seen as a potential way for delivering this intervention in less time and resource way that are just as effective. While early data show some efficacy, more studies with larger numbers of participants are needed.

One of these interventions is Jaspr Health, a tablet-based app to complete a comprehensive suicide risk assessment, build a crisis stability plan, undergo lethal means counseling, and learn behavioral skills to improve their capacity to tolerate future crises. An unblinded pilot randomized controlled trial of 31 patients who were acutely suicidal and seeking psychiatric crisis services upon presentation to the ED found a statistically significant increase in receiving the four evidence-based suicide prevention interventions and overall satisfaction ratings with patient ED experience. In addition, significant decreases in distress and agitation, along with significant increases in learning to cope more effectively with current and future suicidal thoughts, were observed among participants using Jaspr Health compared with those receiving care as usual (Dimeff, 2021).

Another small study with 24 patients of an avatar-based prototype "Dr. Dave" virtual CAMS (v-CAMS), a patient facing tool found the tool acceptable and had positive perceptions of care among patients. In the same study, 21 providers used a clinical decision support tool to aid with discharge disposition planning and found positive experience with the tool (Dimeff, 2020).

Among youth specifically, a study called Emergency Department Screen for Teens at Risk for Suicide (ED-STARS) has been launched in a network of hospital emergency departments (EDs) across the country to develop and test a personalized, computer-based suicide risk screening tool for teenagers. Additionally, the tool will develop algorithms to predict which youth are most likely to attempt suicide. The ultimate goal is to develop a brief and personalized screening tool in which each question presented to a teen is based on the individual's previous responses to help with risk stratification and triage.

#### Crisis Hotline Risk Management for Teens

A report from the Emergency Department Screen for Teen Suicide Risk (ED-STARS) study of 234 teens aged 12-18 years old found that utilizing a crisis hotline for risk management might lead to greater teen engagement and information sharing with telephone crisis counselors on coping strategies. An average call length was 12.6 minutes. Importantly, the engagement did not vary by race, gender, age or clinical characteristics of youth (Busby, 2020).

#### Phone Apps

A 2019 systematic review looked at the prevalence and quality of mobile phone apps in Apple and Google app stores. There were 20 depression management apps (of which eight were chatbots), three depression management and suicide prevention apps, and 46 suicide prevention apps. Only five out of all total 69 apps in the stores incorporated all six suicide prevention strategies. Six apps including two apps available in both app stores and downloaded more than one million times each, provided an erroneous crisis helpline number. Most apps included emergency contact information (65/69) and direct access to a crisis helpline through the app (46/69) (Martinengo, 2019).

## Post Discharge Follow-up

## **Relevant Resources:**

Bliokas, 2019 (observational study); Comtois, 2019 (randomized controlled trial); Martínez-Alés, 2019 (observational study); Carter, 2013 (randomized controlled trial); Motto, 2001 (randomized controlled trial).

## **Overall Summary**

The evidence from randomized controlled trials shows a significant preventive effect of letters and postcards on suicidal behaviors. These are sent to at-risk patients following post-discharge to express concern, care, and a desire to stay in touch without setting any expectations for patients to provide anything in return. For at-risk patients who refuse ongoing care within the health care system and only receive letters or postcards, the preventive effect is significant for at least two years; whereas, for at-risk patients who receive letters or postcards in addition to ongoing care, the effect can last up to five years. In the studies, the first contact was generally made a month after discharge. The contacts were then continued monthly for the first four to eight months and then every two to three months depending on the study.

There is also evidence that an early appointment within seven days after discharge, scheduled while patient is still in the ED can have positive effect on the relapse rate among patients who attempted suicide.

The initial results of utilizing text messaging for Caring Contacts show inconsistent results, therefore caution is needed if utilizing this method.

Research on transitions to community-based aftercare after ED visit is emerging.

## **Current Evidence**

A 2013 randomized controlled trial of 772 patients aged 16 years and over who were treated in the hospital for self-poisoning found that those patients who received standard treatment and were sent eight postcards in the 12 months post-discharge had significantly reduced self-poisoning event rates and reduced psychiatric admissions event rates after five years compared to the control group that received standard treatment only (*Carter, 2013*).

A 2001 randomized controlled trial of 843 patients who were hospitalized for a depressive or suicidal state and refused ongoing care post-discharge found that patients who were contacted by letter eight times in the first year post-discharge and then four times every year over the next four years (for a total of 24 letters over five years) had significantly lower suicide rates for the first two years and lower suicide rate in all five years of the study compared to patients in the control group that received no contact (Motto, 2001).

A 2019 observational study of 1775 patients treated in the ED for suicide attempt found that an additional early appointment within seven days after discharge, scheduled before discharge, can reduce suicide reattempt risk by 24% (Martínez-Alés, 2019).

Emerging evidence for utilizing text messaging for Caring Contacts shows inconsistent results. A 2019 randomized controlled study of 658 military personnel who reported suicidal ideation and had attempted suicide at baseline studied the effectiveness of augmenting standard military health care with Caring Contacts delivered via text message over 12 months. The study found no statistically significant difference between those who received the Caring Contacts via text messages and those who received the

standard care only in current suicidal ideation and suicide risk incidents (hospitalization or medical evacuation) at point of contact. There was also no significant effect on likelihood or severity of current suicidal ideation or likelihood of a suicide risk incident; and no effect on emergency department visits. However, participants who received Caring Contacts were at lower risk of experiencing any suicidal ideation between baseline and follow-up than those receiving standard care alone and also had fewer suicide attempts since baseline (Comtois, 2019).

Emerging research on transition to community-based aftercare after emergency department visit. A study was launched in 2019 to investigate effective interventions that incorporate outpatient mental health clinicians and peer workers to help the transition from ED to community for patients seen in the ED for suicide attempt or at high risk for suicide (*Bliokas*, 2019).

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## **Overview of Tools and Protocols:**Suicide Prevention and Intervention in the ED

Tool/Protocol	Description	Web Site
ICAR <sup>2</sup> E (ACEP)	ICAR <sup>2</sup> E, which stands for Identify suicide risk; Communicate; Assess for life threats and ensure safety; Risk assessment (of suicide); Reduce the risk (of suicide); and Extend care beyond the ED.	https://www.acep.org/patient-care/iCar2e/
Columbia Suicide Severity Rating Scale (C-SSRS) Screener	Validated in pediatric (age 5 years and older) and adult populations for screening for suicide risk in various settings including the emergency department.	http://cssrs.columbia.edu/
Ask-Suicide Screening Questions (ASQ)	For patients ages 10 to 24 years. Addresses feelings of being a "burden" which can be especially relevant to pediatric populations.	https://www.nimh.nih.gov/labs-at-nimh/ asq-toolkit-materials/index.shtml
Adult ASQ Toolkit	This page contains toolkits for Emergency Department, Inpatient Medical/Surgical Unit, Outpatient Primary Care/Specialty Clinics. Also included are translations of the tools.	https://www.nimh.nih.gov/research/ research-conducted-at-nimh/asq-toolkit- materials/adults-asq-toolkit#emergency
C-SSRS Risk Assessment	Includes assessment of risk and protective factors. Does not provide intervention guidance.	http://cssrs.columbia.edu/
C-SSRS screener in combination with SAFE-T interview	This includes screening questions on suicidal thoughts and behaviors. SAFE-T interview includes questions on patient's current and past mental health status, presenting symptoms, and family history of suicidal behaviors and mental health diagnoses, assesses for the risk and protective factors, and provides guidelines for suicide risk stratification and development of appropriate interventions to lower suicide risk level. It provides guidance on safety planning.	http://cssrs.columbia.edu/documents/ safe-t-c-ssrs/

Tool/Protocol	Description	Web Site
Safety Planning Intervention (SPI)	Safety Planning Intervention provides suicidal patients with coping strategies to use to decrease the suicide risk which are created in a collaborative effort between patients and providers. These strategies become part of patient's treatment or care plan that patients can use during a crisis. The safety plan includes (a) recognizing the warning signs of an impending suicidal crisis; (b) using your own coping strategies; (c) contacting others in order to distract from suicidal thoughts; (d) contacting family members or friends who may help to resolve the crisis; (e) contacting mental health professionals or agencies; and (f) reducing the availability of means to complete suicide.	http://www.suicidesafetyplan.com/ About_Safety_Planning.html https://sprc.org/resources-programs/ patient-safety-plan-template
Linehan Risk Assessment and Management Protocol (LRAMP)	LRAMP is suicide risk assessment and management protocol. It helps patients and clinicians identify pertinent information about the patient's current suicidal thoughts and behaviors, mental health history, past suicidal behaviors, and suicide risk and protective factors. Based on the assessment, it provides guidance on development of treatment or care plan as an intervention to lower the risk of suicide.	http://depts.washington.edu/uwbrtc/resources/assessment-instruments/
Collaborative Assessment and Management of Suicide (CAMS)	It is a collaborative effort between patients and providers to assess for suicide risk, provide suicide specific treatment planning, tracking of an on-going risk and clinical outcomes and disposition. It can be used both as a one-session brief intervention for suicide risk or an ongoing treatment on a longer-term basis.	https://cams-care.com/about-cams/

Tool/Protocol	Description	Web Site
Family Intervention for Suicide Prevention (FISP)	It is a cognitive behavioral family intervention for youth ages 10-18 years presenting in the ED with suicidal ideation or after a suicide attempt. It uses the ED visit as an opportunity to decrease the short-term risk of repeated suicidal ideation and behavior by building the coping skills of youth and their families, enhancing motivation for follow-up mental health treatment, and improving linkage to outpatient follow-up treatment services after discharge from the ED. It has three core components: (1) ED staff training; (2) Youth and family crisis therapy session; and (3) Care linkage telephone contacts. Both the therapy session while in the ED and follow-up contacts aim to increase motivation for accessing follow-up care and to provide linkages to appropriate care and services. Follow-up contacts begin within the first 48 hours after discharge and continue until the youth is linked to care (usually at one, two, and four weeks after discharge).	https://www.sprc.org/resources-programs/family-intervention-suicide-prevention-fisp
Counseling Access to Lethal Means (CALM)	Clinicians use this protocol to work with patients on reducing access to lethal means, particularly firearms and medications. It includes goal setting for reducing access and developing a plan that is acceptable to both clinicians and patients.	https://www.sprc.org/resources-programs/calm-counseling-access-lethal-means
Coping Long Term and Active Suicide Program (CLASP) ED Protocol	CLASP-ED was implemented in the ED-SAFE study and has three major components: 1) three individual, in-person meetings, 2) one significant other/family meeting and 3) 11 brief (15-30 min) phone contacts with the patient and his/her significant other. It combines case management, individual psychotherapy, and significant other involvement (if available). The phone calls focus on identifying suicide risk factors, clarifying values and goals, safety and future planning, facilitating treatment engagement/adherence and facilitating patient/significant other problem solving.	https://www.sprc.org/resources-programs/ed-safe-materials

Tool/Protocol	Description	Web Site
Teen Options for Change	A protocol for adolescents between ages 14-19 years that uses motivational interviewing techniques to develop a personalized action plan. Adolescents also receive a handwritten follow-up note and a telephone check-in two to five days after their ED visit to support and facilitate action plan implementation. While this approach shows promising results, the evidence base is still emerging.	https://www.ncbi.nlm.nih.gov/ pubmed/25321886
ICAR <sup>2</sup> E (ACEP)	ICAR <sup>2</sup> E stands for Identify suicide risk; Communicate; Assess for life threats and ensure safety; Risk assessment (of suicide); Reduce the risk (of suicide); and Extend care beyond the ED.	https://www.acep.org/patient-care/iCar2e/



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