

Shared Standards in Emergency Departments for People with Mental Health Needs

In 2018, mental health leaders and emergency department (ED) physician leaders across the state of Minnesota came together with ICSI as an initiative of the [MN Health Collaborative](#). The team identified that although there are established best practices for handling cardiac distress or strokes within the ED, there is a slim body of evidence when it comes to mental health issues.

These Shared Standards in Emergency Departments for People with Mental Health Needs provide guidance for health systems that is evidence-based, adaptable to local context, and aligns with CMS and accrediting agencies' requirements related to National Patient Safety goals.

Because the Standards were developed collaboratively for and by the Minnesota healthcare community, the recommendations also include practical implementation guidance. While developing the standards, organizations reviewed their own practices, shared them with the MN Health Collaborative, and iterated changes within their own practices. Wherever possible, organizations have adopted similar tools and practices to help improve patient care transitions and communication between systems in the region.

Finally, and most importantly, these leaders stressed the importance of centering the patient and family in care as a guiding principle for this work. Coming to the ED is always distressing. It can be particularly challenging for people with mental health issues who have an increased likelihood of having experienced childhood traumatic events. Their presenting crisis, as well as the ED environment itself, can trigger traumatic memories (*Molloy, 2020*). While we have noted within this document trauma-informed practices where known, evidence pertaining to EDs is slim.

There is a need for more work to develop trauma-informed care and culture in EDs. The Institute for Healthcare Improvement (IHI) noted in 2020 that a culture shift in the ED is critical to improving care for individuals with mental health conditions and substance use disorders. The need for this shift is supported by Emergency Medical Treatment and Labor Act (EMTALA) guidelines that define psychiatric emergencies presenting to the ED as medical emergencies, thus necessitating the same obligations (*Schall 2020*).

Within these standards we address three priority areas; Suicide Prevention and Intervention, Prevention and Management of Agitation, and Medical Clearance Evaluation prior to inpatient stays.

These Standards have been developed based on evidence for best practice where it exists, expert working group consensus where the evidence is insufficient, and with practical implementation guidance provided.

Suicide Prevention and Intervention: Suicide remains a leading cause of death in Minnesota and the ED is often on the front line of identifying and intervening people at risk. 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.

Prevention and Management of Agitation: A goal of these recommendations is to shift the current thinking and practices around addressing agitation from a reactive to a proactive response, to help



prevent agitation, or prevent its escalation, and provide a safer and more therapeutic environment for all patients. The Standards are intended to help organizations develop policy and procedures around agitation and violence prevention.

Medical Clearance Evaluation: The goal for implementing these medical clearance practices is to decrease wide local variation and unnecessary tests, which can result in delays for patients in receiving needed treatment. Rather than ordering routine labs for behavioral health patients needing inpatient admission, these recommendations encourage an individualized approach based on patient presentation.

Note: Working group members and contributors are listed within each respective area of standards.

References

Molloy L, Fields L, Trostian B, Kinghorn G. Trauma-informed care for people presenting to the emergency department with mental health issues. *Emerg Nurse*. 2020 Mar 10;28(2):30-35. doi: 10.7748/en.2020.e1990. Epub 2020 Feb 25.

Schall M, Laderman M, Bamel D, Bolender T. *Improving Behavioral Health Care in the Emergency Department and Upstream*. IHI White Paper. Boston, Massachusetts: Institute for Healthcare Improvement; 2020. (Available on ihi.org)

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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 population. (CDC, MDH) Non-Hispanic Black individuals, individuals with lower income, and younger individuals have experienced larger increases in suicidality (Admon, 2020).

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,
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Medical Director of Emergency
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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

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

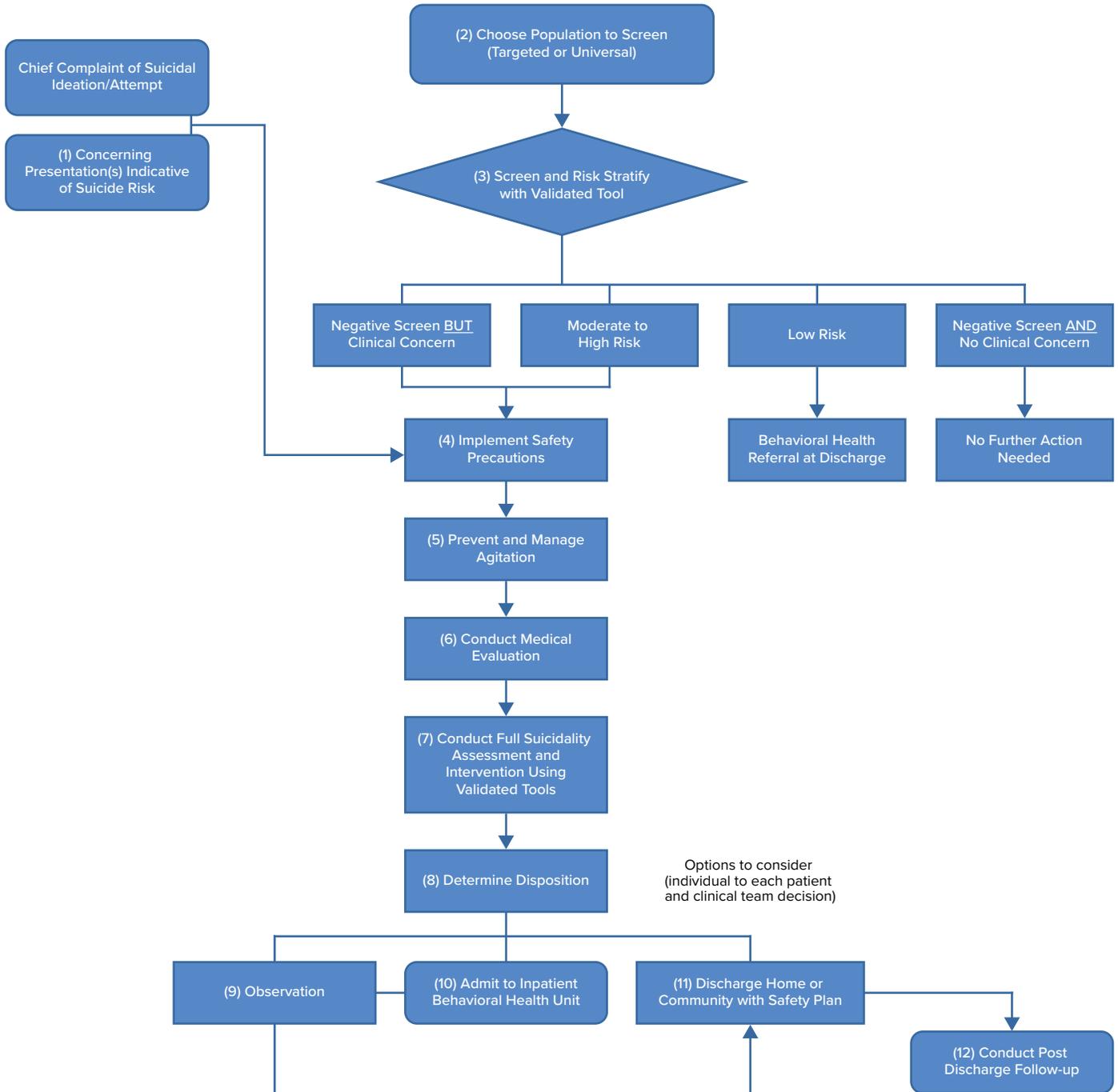
— Person who accessed the ED in mental health crisis

Also included in this document are:

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

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.



*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 assessment and intervention 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 ICAR²E 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, computer-based 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. **This alone is not sufficient; ensure safety planning and coordination of follow-up.**

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:

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

Continued Follow-up: 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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References

Admon LK, Dalton VK, Kolenic GE, Ettner SL, Tilea A, Haffajee RL, Brownlee RM, Zochowski MK, Tabb KM, Muzik M, Zivin K. Trends in Suicidality 1 Year Before and After Birth Among Commercially Insured Childbearing Individuals in the United States, 2006-2017. *JAMA Psychiatry*. 2021 Feb 1;78(2):171-176.

Centers for Disease Control and Prevention. Ten Leading Causes of Death and Injury. Data and Statistics (WISQARS Fatal and Nonfatal Injury). 2019. <https://www.cdc.gov/injury/wisqars/leadingcauses.html>

Centers for Disease Control and Prevention/National Center for Health Statistics. Suicide and Self-Harm Injury. <https://www.cdc.gov/nchs/fastats/suicide.htm>. Page last reviewed: March 1, 2021.

Da Cruz D, Pearson A, Saini P, et al. Emergency department contact prior to suicide in mental health patients. *Emerg Med J*. 2011;28: 467-471.

Gairin I, House A, Owens D. Attendance at the accident and emergency department in the year before suicide: retrospective study. *Br J Psychiatry*. 2003 Jul;183:28-33.

Hunter J, Maunder R, Kurdyak P, et al. Mental health follow-up after deliberate self-harm and risk for repeat self-harm and death. *Psychiatry Res* 2018;259:333–9.

Ilgen MA, Walton MA, Cunningham RM, et al. Recent suicidal ideation among patients in an inner city emergency department. *Suicide Life Threat Behav*. 2009;39:508-517.

Minnesota Department of Health. Suicide, Alcohol and Opioid Deaths in Minnesota. Alcohol and Other Drugs Quick Facts. <https://www.health.state.mn.us/communities/alcohol/data/suicideopioidalcohol.html>

Minnesota Department of Health. Minnesota Suicide Mortality, Preliminary 2020 Report. May 2021. <https://www.health.state.mn.us/communities/suicide/documents/2020prelimsuicidedata.pdf>

Wilson MP, Moutier C, et al. ED recommendations for suicide prevention in adults: The ICAR²E mnemonic and a systematic review of the literature. *Am J Emerg Med*. 2020 Mar;38(3):571-581.

Zeller S, Calma N, Stone A. Effects of a dedicated regional psychiatric emergency service on boarding of psychiatric patients in area emergency departments. *West J Emerg Med*. 2014;15(1):1-6. doi:10.5811/westjem.2013.6.17848

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 primary care 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:

1. 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 \geq 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*).

Evidence Summary References

Berman AL. Risk Factors Proximate to Suicide and Suicide Risk Assessment in the Context of Denied Suicide Ideation. *Suicide and Life-Threatening Behavior* 2018 Jun;48(3).

Betz ME, Arias SA, et al. Change in emergency department providers' beliefs and practices after use of new protocols for suicidal patients. *Psychiatr Serv*. 2015 Jun;66(6):625-31.

Bliokas VV, Hains AR, et al. Community-based aftercare following an emergency department presentation for attempted suicide or high risk for suicide: study protocol for a non-randomised controlled trial. *BMC Public Health*. 2019; 19.

Borges G, Bagge CL, et al. A meta-analysis of acute use of alcohol and the risk of suicide attempt. *Psychol Med*. 2017 Apr;47(5):949-957.

Boudreaux ED, Camargo CA Jr, et al. Improving Suicide Risk Screening and Detection in the Emergency Department. *Am J Prev Med*. 2016 Apr;50(4):445-453.

Brown LA, Boudreaux ED, et al. C-SSRS performance in emergency department patients at high risk for suicide. *Suicide Life Threat Behav*. 2020;50:1097-1104.

Brown GK, Currier GW, et al. Detection and classification of suicidal behavior and nonsuicidal self-injury behavior in emergency departments. *J Clin Psychiatry*. 2015 Oct;76(10):1397-403.

Busby DR, King CA, et al. Adolescents' Engagement with Crisis Hotline Risk-management Services: A Report from the Emergency Department Screen for Teen Suicide Risk (ED-STARS) Study. *Suicide Life Threat Beh*. 2020 Feb;50(1):72-82.

Claudius I, Axen S. Differences in Comorbidities Between Children and Youth With Suicide Attempts Versus Ideation Presenting to the Emergency Department. *Arch Suicide Res*. 2020 Aug 6;1-10.

Comtois KA, Kerbrat AH, et al. Effect of Augmenting Standard Care for Military Personnel With Brief Caring Text Messages for Suicide Prevention: A Randomized Clinical Trial. *JAMA Psychiatry*. 2019 May 1;76(5):474-483.

Conner KR, Duberstein PR, et al. Psychological vulnerability to completed suicide: a review of empirical studies. *Suicide Life Threat Behav*. 2001 Winter;31(4):367-85.

Darvishi, N, Farhadi, M, et al. Alcohol-Related Risk of Suicidal Ideation, Suicide Attempt, and Completed Suicide: A Meta-Analysis. *PLoS One*. 2015; 10(5): e0126870. Published online 2015 May 20.

Dimeff LA, Jobes DA, et al. Using a Tablet-Based App to Deliver Evidence-Based Practices for Suicidal Patients in the Emergency Department: Pilot Randomized Controlled Trial. *JMIR Mental Health*. 2021 Mar 1;8(3):e23022.

Dimeff LA, Jobes DA, et al. A novel engagement of suicidality in the emergency department: Virtual Collaborative Assessment and Management of Suicidality. *Gen Hosp Psychiatry*. Mar-Apr 2020;63:119-126.

Doupnik SK, Rudd B, et al. Association of Suicide Prevention Interventions With Subsequent Suicide Attempts, Linkage to Follow-up Care, and Depression Symptoms for Acute Care Settings A Systematic Review and Meta-analysis. *JAMA Psychiatry*. 2020;77(10):1021-1030.

Grupp-Phelan J, Stevens J, et al. Effect of a Motivational Interviewing-Based Intervention on Initiation of Mental Health Treatment and Mental Health After an Emergency Department Visit Among Suicidal Adolescents: A Randomized Clinical Trial. *JAMA Network Open*. 2019 Dec 2;2(12):e1917941.

Harris EC, Barraclough B. Suicide as an outcome for mental disorders. A meta-analysis. *Br J Psychiatry*. 1997 Mar;170:205-28.

Horowitz LM, Bridge JA, et al. Ask Suicide-Screening Questions (ASQ): a brief instrument for the pediatric emergency department. *Arch Pediatr Adolesc Med*. 2012 Dec;166(12):1170-6.

Horowitz, L, Ballard, E, et al. Feasibility of Screening Patients With Nonpsychiatric Complaints for Suicide Risk in a Pediatric Emergency Department. A Good Time to Talk? *Pediatr Emerg Care*. 2010 Nov; 26(11): 787–792.

Ilgen MA, Burnette ML, et al. The association between violence and lifetime suicidal thoughts and behaviors in individuals treated for substance use disorders. *Addict Behav*. 2010 Feb;35(2):111-5.

King CA, O'Mara RM, et al. Adolescent suicide risk screening in the emergency department. *Acad Emerg Med*. 2009 Nov;16(11):1234-41.

Martinengo L, Van Galen L, et al. Suicide prevention and depression apps' suicide risk assessment and management: a systematic assessment of adherence to clinical guidelines. *BMC Med*. 2019 Dec 19;17(1):231.

Martinez-Ales G, Jimenez-Sola E, et al. An Emergency Department-Initiated Intervention to Lower Relapse Risk after Attempted Suicide. *Suicide Life Threat Behav*. 2019 Dec;49(6):1587-1599.

McCabe, R, Garside, R, et al. Effectiveness of brief psychological interventions for suicidal presentations: a systematic review. *BMC Psychiatry*. 2018; 18: 120. Published online 2018 May 3.

Miller IW, Camargo CA Jr, et al. Suicide Prevention in an Emergency Department Population: The ED-SAFE Study. *JAMA Psychiatry*. 2017 Jun 1;74(6):563-570.

Newton AS, Soleimani A, et al. A Systematic Review of Instruments to Identify Mental Health and Substance Use Problems Among Children in the Emergency Department. *Acad Emerg Med*. 2017 May;24(5):552-568.

Newton AS, Hamm MP, et al. Pediatric suicide-related presentations: a systematic review of mental health care in the emergency department. *Ann Emerg Med*. 2010 Dec;56(6):649-59.

O'Connor E, Gaynes BN. Screening for and treatment of suicide risk relevant to primary care: a systematic review for the U.S. Preventive Services Task Force. *Ann Intern Med*. 2013 May 21;158(10):741-54.

Peña JB, Caine ED. Screening as an approach for adolescent suicide prevention. *Suicide Life Threat Behav*. 2006 Dec;36(6):614-37.

Powell DS, Lanzillo EC, et al. Self-reported Symptoms of Anxiety Predict Positive Suicide Risk Screening in Adolescents Presenting to the Emergency Department. *Pediatric Emerg Care*. 2020 Sep 9.

Probert-Lindstrom S, Berge J, et al. Long-term risk factors for suicide in suicide attempters examined at a medical emergency in patient unit: results from a 32-year follow-up study. *BMJ Open* 2020 Oct 31;10(10):e038794.

Roaten K, Johnson C, et al. Development and Implementation of a Universal Suicide Risk Screening Program in a Safety-Net Hospital System. *Jt Comm J Qual Patient Saf.* 2018 Jan;44(1):4-11.

Stanley, B, Brown, G, Brenner, L. Comparison of the Safety Planning Intervention With Follow-up vs Usual Care of Suicidal Patients Treated in the Emergency Department. *JAMA Psychiatry.* 2018; 75(9):894-900.

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.

Stuck AR, Wilson MP, et al. Health Care Usage and Suicide Risk Screening within 1 Year of Suicide Death. *J Emerg Med.* 2017 Dec;53(6):871-879.

Tadros A, Sharon M, et al. Coexistence of Substance Abuse among Emergency Department Patients Presenting with Suicidal Ideation. *Biomed Res Int.* 2020 Sep 29;2020:7460701.

Wilcox HC, Conner KR, Caine ED. Association of alcohol and drug use disorders and completed suicide: an empirical review of cohort studies. *Drug Alcohol Depend.* 2004 Dec 7;76 Suppl:S11-9.

Wilson MP, Moutier C, Wolf L, et al. ED recommendations for suicide prevention in adults: The ICAR²E mnemonic and a systematic review of the literature. *Am J Emerg Med.* 2020 Mar;38(3):571-581.

Zalsman G, Hawton K, et al. Suicide prevention strategies revisited: 10-year systematic review. *Lancet Psychiatry.* 2016 Jul;3(7):646-59.

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

Tool/Protocol	Description	Web Site
ICAR ² E (ACEP)	ICAR ² 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 ² E (ACEP)	ICAR ² 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/

Prevention and Management of Agitation in Emergency Departments

Released May 2021

Introduction

Agitation in patients in emergency departments (EDs) is becoming more prevalent with 1.7 million episodes annually in the United States (*Holloman, 2012*). While the extent of aggression associated with agitation has not been clearly established, some patients who are agitated are at risk of becoming aggressive and violent, and can cause physical and psychological harm to themselves, other patients and staff (*Richmond, 2012*).

It's important to note that **agitation is a symptom**, whether of mental illness, substance misuse, past trauma, or something else. Properly assessing agitation and providing supports to people who are experiencing agitation does prevent some aggressive incidents. Evidence shows that among risk factors for incidents of violence in emergency department is inadequate or nonexistent training on the management of assaultive behaviors, understaffing, and working alone (*Solorzano Martinez, 2016*).

Additionally, the ED environment itself can increase agitation: A 2020 narrative literature review found that between 46% and 89% of people who use mental health services have been exposed to past traumatic events and the ED environment can trigger fears or traumatic memories (*Molloy, 2020*).

Setting up processes to support people experiencing agitation not only is better patient care, it is critical in caring for staff. Being able to assess and intervene for people experiencing agitation also aids staff in identifying when people are at risk of aggression. A systematic review on workplace violence in the emergency department found that emergency department workers are exposed to significant rates of physical and verbal abuse. It also found that under-reporting of workplace violence in the emergency department to be common which contributes to the difficulty in accurately tracking violence (*Taylor, 2011*). Emergency departments and inpatient psychiatric units have the highest rate of violent incidents compared to other health care settings (*Joint Commission, 2018*).

Increased incidents of violence lead to staff burnout and low morale and subsequently higher turnover rate (*Joint Commission, 2018*). In addition to staff, other patients are also at risk for being victimized if agitation and aggressive behaviors are not properly assessed and managed.

Objective

Our goal for these recommendations is to shift the current thinking and practices around addressing agitation from a reactive to a proactive response: preventing agitation or escalating agitation from occurring and providing a safe and therapeutic environment for all patients. This guide is intended to help organizations develop policy and procedures around agitation and violence prevention.

“Minnesota health systems have found that collaborating to improve safety makes infinitely more sense than competing on patient or employee safety metrics. In that spirit, ICSI fostered the collaborative effort that resulted in this ED agitation management package, which can promote safety for all in one of the highest risk hospital departments.”

— JESSICA MALONE
MN, RN, PHN
Clinical Care Improvement
Manager Psychiatry
Service Line,
Hennepin Healthcare

In the absence of high-quality evidence, this group seeks to provide practical guidance to ED providers. Implementation of these practices may vary, depending on patient populations and ED resources. We have provided questions throughout to help leaders discover possible areas for systems improvement.

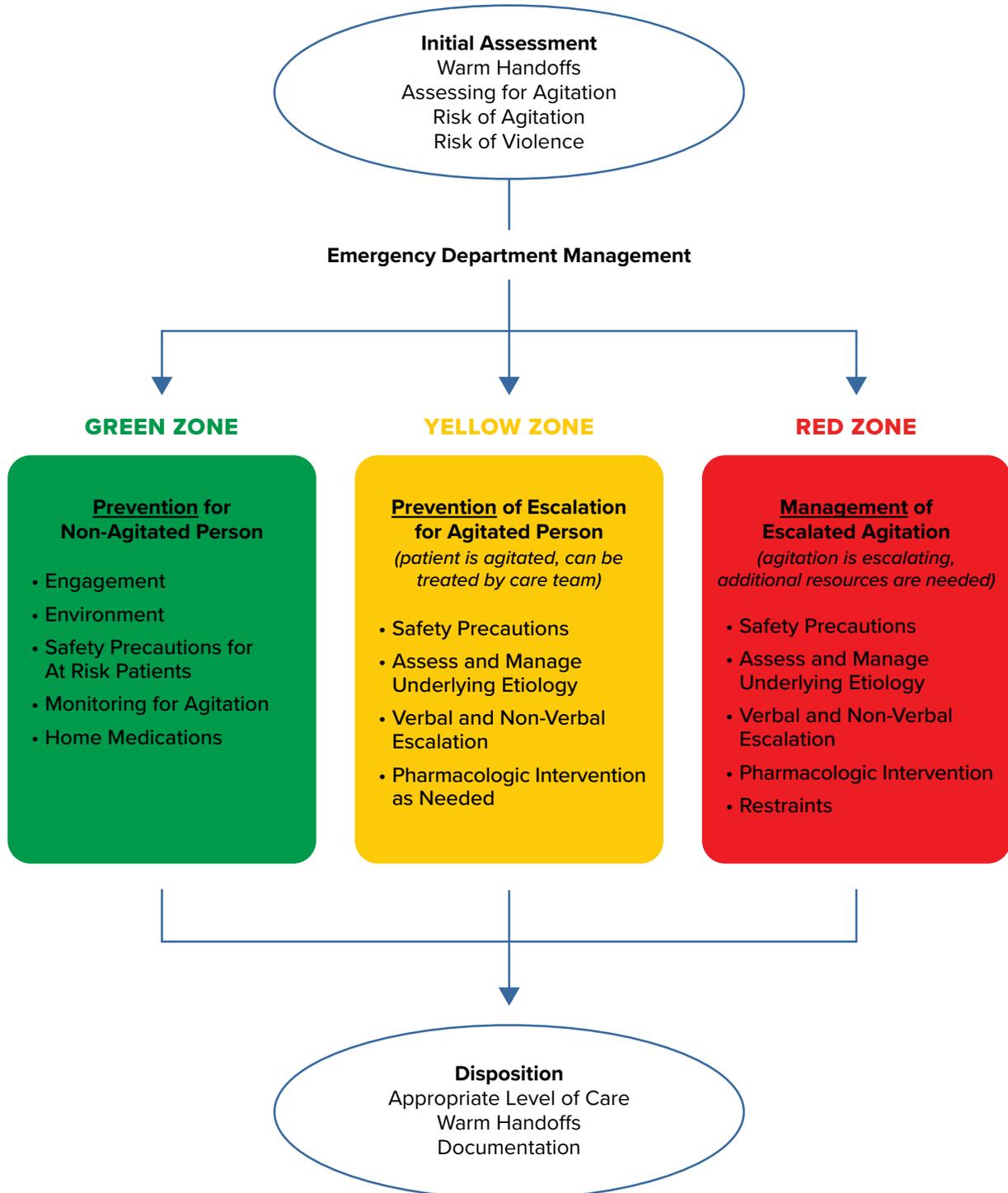
Scope:

This document focuses on the adult population (18 years of age and older) who present in the Emergency Department. For populations younger than 18 years of age, refer to Project BETA which has published recommendations for Best Practices for Evaluation and Treatment of Agitated Children and Adolescents (BETA) in the Emergency Department (Gerson, 2019).

Literature:

It is important to note that literature on agitation in the ED, particularly regarding interventions, is limited. The following document is based on expert work group consensus as well as that of Project BETA, a work group convened by the American Association of Emergency Psychiatrists. Several organizations in the working group have applied BETA work in their EDs with success. We have referenced the Project BETA papers throughout this paper (papers are available for free download at the link provided). [See references sections for full citations.](#)

Reactive to Proactive Response Framework



Recommendations

Note: Literature on agitation in the ED, particularly regarding interventions, is limited. The following document is based on expert work group consensus as well as that of Project BETA, a work group convened by the American Association of Emergency Psychiatrists.

Initial Assessment

1. Warm Handoffs from Law Enforcement/First Responders

Note: There was no literature found to support guidance on this topic. The expert work group consensus is based on the existing practices and expert opinion and includes the following:

- A “heads up” from law enforcement/ambulance prior to arrival to ED. This will give time for the ED staff to prepare for an arrival of a patient and provide an understanding on the level of care and resources needed upon arrival. This could potentially help reduce delays in rooming and getting patients to appropriate level of care.
- This “heads up” should include thorough collateral information and documentation of events leading to presentation including understanding/knowledge of persons close to the patient which may be helpful during the assessment to disposition process.
- Suggested key questions to include in the “heads up” for patients in psychiatric or substance abuse distress arriving to the ED:
 - What was the reason for the call and who made it?
 - Any suicidal concerns or threats to others?
 - Risk for overdose?
 - Other intoxicants/substance abuse?
 - Was patient cooperative and any medication needed for sedation/anxiolysis?
 - Had to utilize restraints?
 - Has patient been placed on hold?
 - Any other medical complaints, reported trauma or concerns thereof?
 - Known psychiatric history?
 - Where was patient picked up and what is home living situation?
 - Any witnesses for potential collateral contact information?

QI: How do our staff and law enforcement/first responders work together to support patients' care transitions?

2. Assessing for Agitation/Risk of Agitation on Arrival

On arrival to the ED, it is useful to evaluate the patient to determine if they are: 1) currently agitated, 2) at risk for agitation and/or 3) at risk for violent behavior. There are tools that may be used to assess current state of agitation or risk of violence in the ED. It is important to note that assessment tools can help, but should not be used in place of clinical judgement.

Summary of Agitation Assessment Tools

- **Behavioral Activity Rating Scale (BARS)** is a scale for measuring behavioral activity in acutely agitated patients. It is validated for measurement of behavioral activity in acutely agitated patients with psychosis (Swift, 2002). The initial BARS score is based not only on the patient's presentation, but also on his behavior before arrival to the ED, hence a reliable report from transport, where applicable, is beneficial. Any score other than a 4 should trigger an evaluation by a clinician and establish the urgency of that evaluation (Nordstrom, 2012; Richmond, 2012). The following link from Project BETA paper (Nordstrom, 2012) provides BARS scoring table and algorithm for management: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3298208/>
- **OASS (Overt Agitation Severity Scale)** is validated in young adult psychiatric inpatient patients (Kopecky, 1998).
- **OASS (Overt Aggression Severity Scale)** measures aggressive behaviors in adults and children. On the Overt Aggression Scale (OAS), aggression is divided into four categories: verbal aggression, physical aggression against objects, physical aggression against self, and physical aggression against others. In addition, specific interventions related to each aggressive event can be recorded on the OAS (Silver, 1991; Yudofsky, 1986). The full scale is available in Silver & Yudofsky, 1991.

Project BETA and Assessment

The Project BETA consensus statement does not endorse a specific tool; however, it finds the Behavioral Activity Rating Scale (BARS) easy to use reliably by both medically trained providers and those who are not medically trained (Nordstrom, 2012).

Assessing for Risk of Violence in ED

Evidence shows association of the following patient-related risk factors with incidents of violence in emergency department: 1) male patient, 2) younger age, 3) mental health patients who are not taking their medications, 4) patients brought in by police, or brought in by ambulance, 5) patients who presented to the ED involuntarily and had a criminal history (Cabilan, 2019).

Additional factors for risk of violence toward staff include: environmental factors such as poor security, delays in service, and working closely with potentially dangerous individuals; and staff factors such as inadequate or nonexistent training on the management of assaultive behaviors, understaffing, and working alone (Solorzano Martinez, 2016).

Summary of Risk of Violence Assessment Tools

- **Brøset Violence Checklist (BVC)** uses six common behaviors (confusion, irritability, boisterousness, verbal and physical threats, and attacking objects) to predict an acute episode of violence in hospitalized psychiatric patients. The scoring levels are: Zero suggests that risk of violence in the next 24 h is low; 1–2 corresponds to moderate risk; and a score of ≥ 3 is high risk

of violence. A study of 109 patients in inpatient psychiatric units found BVC to predict violence within the next 24-hour period with moderate sensitivity and good specificity (Almvik, 2000). A recent systematic review further confirmed this finding (Cabilan, 2019). This tool is copyrighted and can be requested at: <https://www.frenzs.org/bvc-broset-violence-checklist/>

- **Violence/Aggression Assessment Checklist (VACC)** – is an adaptation of BVC specifically for ED. It assists in predicting imminent violent behavior within the next 24 hours by assessing for six behaviors: confused, irritable, boisterous, physically threatening, verbally threatening, attacking objects. This tool is available at: https://www.theroyal.ca/sites/default/files/2019-08/Violence_Aggression_Assessment_Checklist.pdf
- **MIAHTAPS** is a violence risk assessment tool developed by HealthPartners Regions Hospital. It assesses for seven indicators of behaviors and past history: **M**-altered mental status, **I**-irritable, **A**-agitated, **H**-history of violence, **T**hreatening verbally, **A**ttacking, throwing objects, **PS**-pacing and/or staring. It combines information from Broset, BARS and STAMP. The tool is available upon request from HealthPartners – Regions Hospital in St. Paul, MN.
- **Violence Risk Screen Decision Support in Triage (VRSDSiT)** – developed in Australia. An ED tool for nursing staff to use at triage. It starts with a question “At risk of violence/or aggression?” which prompts nurse to determine presence of risk factors such as involvement in assault, intoxication, acute mental health symptoms, brought in by police, history of violence and behavioral cues (i.e., uncooperative, hostile, intrusive or making verbal or physical threats). If the answer is yes, the patient is flagged as at risk for violence. This tool has moderate sensitivity and good specificity (Cabilan, 2019). In the tool dissertation report, the triage nurse used clinical judgement to determine if there was risk for violence. This process was found to be feasible, acceptable to clinical staff, integrated into current triage processes, and reflected the public’s expectations of care. Communication of risk was facilitated using the existing clinical information system and normal work flow within the ED. Overall, there was a reduction in time staff engaged in responding to aggression; access to care was unchanged. However, there was an increase in the use of coercive practices following implementation of this risk screening process (Daniel, 2015).

Reference: Daniel C. An evaluation of violence risk screening at triage in one Australian emergency department (Dissertation). Melbourne: The University of Melbourne, 2015.

- **STAMP** assessment tool provides indicators for violent behavior using five observable behaviors that indicate danger to others. STAMP mnemonic (**S**taring and eye contact, **T**one and volume of voice, **A**nxiety, **M**umbling, and **P**acing). While a case study identified these observable behaviors to indicate a potential for violence at presentation at an emergency department (Luck, 2007), a recent scoping review found no specificity, sensitivity or predictive value of this tool (Cabilan, 2019). A variation of this tool STAMP – EDAR (Staring and eye contact, Tone and volume of voice, Anxiety, Mumbling, and Pacing - Emotions, Disease Process, Assertive/non-Assertive, Resources) had the same finding in the review (Cabilan, 2019).

The tool is available in Luck 2007 article.



Q: What is our process for assessing agitation, risk of agitation, and risk of violence in the ED?

ED Management

Green Zone (Prevention for Non-Agitated Patient)

1. Engagement

A 2020 narrative literature review found that between 46% and 89% of people who use mental health services have been exposed to past traumatic events and the ED environment can trigger fears or traumatic memories (Molloy, 2020). Applying the principles of trauma-informed care can potentially minimize this experience in these patients while in ED (Molloy, 2020).

Trauma-informed care and cultural considerations are important parts of patient care. It is important that staff have training in non-violent crisis intervention and early recognition/de-escalation of agitation that consider patient cultural preferences and historical and present traumas that may guide approach to care decision-making. There are no specific tools related to trauma-informed care and agitation in the ED. The following resource may be helpful: Trauma Informed Care – Implementation Resource at <https://www.traumainformedcare.chcs.org/>



**How might we better engage and support patients in the ED?
Do we effectively use the trauma-informed care frameworks?
Are there common trauma that our patients may have experienced
that we should better understand? (Migrants from war zones, racism...).**

2. Environment

When possible, the least restrictive environment is preferable. Consider having food and beverage available, particularly for patients with extended stays.

An alternative to the stressful ED environment is EmPATH and other types of observational units, designed for patients with behavioral health needs. It is an area separate but adjoined to the regular ED where patients can be assessed and treated by behavioral health professionals in an environment that is more calming.

There are conflicting thoughts about posting signs about agitation/violence. While outlining unacceptable behaviors may help, there are also concerns that it could encourage that behavior in patients who are seeking interaction with law enforcement.

In the UK, signage about the process and time expectations within EDs have been helpful in decreasing agitation and violence (Griffiths, 2013).



What can we do differently to make our environment both safe and therapeutic?

3. Safety Precautions for At Risk Patients

Although non-agitated patients do not pose an immediate threat, it may be prudent to consider safety precautions for patients with a history of agitation or other symptoms/behaviors that concern staff. Such precautions may include separate rooming, scrubs, and/or a sitter. Systems differ in the use of these precautions routinely or a case-by-case basis. Both the safety of the patient, the safety of other patients, and the safety of staff all need to be considered when deciding what precautions are warranted.

It is important to consider any negative impact these precautions may have on the patient and whether they may provoke agitation.

QI: What routine safety precautions have been taken for non-agitated patients who may be at higher risk of agitation?

4. Monitoring for Agitation

Patients should be monitored throughout their ED stay for new or changing agitation. This can be done clinically and/or with the aid of a tool such as BARS.

QI: How do we monitor for agitation during the ED stay?

5. Home Medications

Delay or omission of a patient's regular medications may lead to agitation. It is the consensus of this work group that wherever possible, giving home medications (in particular, those related to behavioral health) should be considered by the treatment team while the patient is in the ED.

QI: How often are home medications delayed or omitted, particularly for behavioral health patients? What policies are in place regarding home medications?

Yellow Zone (Prevention of Escalation in Agitated Patient)

1. Safety Precautions

For the agitated patient, safety precautions are especially important. This involves considering the safety of the patient, other patients, and staff.

Patient considerations:

Decide whether the patient should be changed into hospital scrubs/clothes and whether a sitter is needed. Refer to organizational policies and regulatory requirements when deciding on this.

Physical environment considerations: *(Stowell, 2016)*

- Easily accessible alarm systems
- Doors that open outward, cannot be locked from inside, allow easy access from the outside in event of emergency
- Barrier-resistant doors, which contain a small compact door within the door
- Location close to staff areas
- Unobstructed viewing window

QI:

What additional safety precautions are taken for agitated patients? Are there changes you need to make in the physical environment that would increase safety while considering trauma informed care principles?

2. Assess and Manage Underlying Etiology

The patient should be assessed for underlying medical and psychiatric conditions that may cause or contribute to the agitation. Labs and imaging should be based on clinical judgment. The following is differential diagnosis:

Differential Diagnosis Underlying Agitation *(Nordstrom, 2012)*

Medical	Psychiatric	Intoxication
<ul style="list-style-type: none"> • Head trauma • Encephalitis, meningitis, or other infection • Encephalopathy (particularly from liver or renal failure) • Exposure to environmental toxins • Metabolic derangement (e.g., hyponatremia, hypocalcemia, hypoglycemia) • Hypoxia • Thyroid disease • Seizure (postictal) • Toxic levels of medications (e.g., psychiatric or antiseizure) 	<ul style="list-style-type: none"> • Psychotic disorders • Mania • Agitated depression • Anxiety disorders 	<ul style="list-style-type: none"> • Alcohol • Club or recreational drugs (cocaine, ecstasy, ketamine, bath salts, inhalants, methamphetamines)

- **Labs and imaging should be based on individual patient presentation.** See [Medical Clearance Evaluation](#) for more information.
- Information from both medical and psychiatric evaluation should be thoroughly documented.
- To ensure legal compliance, EDs should be aware of latest laws in their area around involuntary treatment and commitment, salutatory reporting requirements based on information obtained during assessment, and duty to warn others of the risk.

QI: What routine labs or other evaluation protocols are there for a patient presenting with agitation? Do these need updating? Are they individualized per patient presentation?

3. Verbal and Non-Verbal De-Escalation

Verbal de-escalation is a method to calm the agitated patient and gain patient's cooperation in the evaluation and treatment of the agitation and reduce involuntary medication, seclusion, and physical restraints. Non-verbal de-escalation includes interpersonal non-verbals and the physical environment.

The following are Project BETA guidelines on preparing to conduct verbal de-escalation (*Richmond, 2012*).

1. *Physical Space Should Be Designed for Safety*

Main points:

- Use moveable furniture to help create a safe environment. Emergency departments may also use stationary furniture, so that the patient cannot use the objects as weapons. However, Project BETA also cautions that latter may create a false sense of security.
- Avoid extremes in sound, wall color, and temperature of the environment as these can exacerbate sensory stimulation.
- Ensure adequate exits.
- Remove or secure objects (pens, sharp objects, table lamps, etc.) that may cause injuries to others. Monitor objects that cannot be removed.

2. *Staff Should Be Appropriate for the Job*

Main points:

- Clinicians must be good at multitasking and be able to respond quickly to changing patient priorities.
- Temperament for working with patients who are agitated.
- Self-awareness such that staff members are able to recognize their own negative reactions or behaviors toward agitated patient's behaviors. Staff should be able to recognize when they are engaging into behaviors (e.g., arguing, tendency to retaliate, or become defensive) that can only worsen their interaction with the patient.
- Ability to seek additional help when they are no longer able to deal with an agitated patient.
- Any provider can learn de-escalation skills. The essential skillset includes a helpful attitude, starting with positive regard for the patient and the capacity for empathy. Clinicians need to also be able to differentiate when cognitive issues, intellectual disability, delirium, psychosis, intoxication or personality disorder affect patient's ability to conform to instructions.

3. *Staff Must Be Adequately Trained*

Main points:

- Practice by role playing. Also consider practicing skills with non-agitated patients who are unable to follow directions because of cognitive issues or other conditions.
- Use verbal loop with patients by mirroring/reflecting what they are saying. Persistence is key. It is important to not give up after a few tries of verbal loops. If patient is not responding to de-escalation efforts, the clinicians should persist in repeating it, especially in situations where patient is not showing signs of becoming violent.
- Successful de-escalation can be successfully done in 5-10 minutes, depending on patient complications.
- Some patients may not be able to engage in de-escalation efforts due to delirium or other conditions.

4. *An Adequate Number of Trained Staff Must Be Available:*

Main point:

- The de-escalation team should consist of 4 to 6 team members made up of nurses, clinicians, technicians, and police and security officers, if available.

5. *Use Objective Scales to Assess Agitation*

Main points:

- Use an objective scale such as BARS to assess for level of agitation.
- Base the initial BARS score not only on the patient's presentation, but also on the behavior before arrival at the emergency facility. Any score other than a 4 should trigger an evaluation by a clinician and the urgency established.

6. *Clinicians Should Self-Monitor and Feel Safe When Approaching the Patient*

Main point:

- Much of the clinician/patient communication occurs via body language, especially tone of voice. It is important for clinician to remain calm in their interaction with agitated patient in order to be effective.

7. *10 Domains of De-Escalation Exist that Help Clinicians' Care of Agitated Patients*

- Domain I: Respect Personal Space*
- Domain II: Do Not Be Provocative*
- Domain III: Establish Verbal Contact*
- Domain IV: Be Concise*
- Domain V: Identify Wants and Feelings*
- Domain VI: Listen Closely to What the Patient Is Saying*
- Domain VII: Agree or Agree to Disagree*
- Domain VIII: Lay Down the Law and Set Clear Limits*
- Domain IX: Offer Choices and Optimism*
- Domain X: Debrief the Patient and Staff*

Detailed recommendations for each of the domains are explained in [Richmond et al \(2012\)](#).

Additional De-Escalation Tips Found useful and contributed by Members of the ICSI Working Group

- Keep body language alert, but relaxed. Don't fold your arms in front of your chest or hands in your pockets (this makes it unsafe if someone strikes as you would have decreased reaction time). Have hands positioned in front of you, with palms upwards (this shows the other person you are not hiding anything in your hands, as well as keeps your hands and arms ready to deflect any physical blows).
- Avoid movements that could be perceived as threatening (e.g. hands at the hip).
- Angle lower body/feet 45 degrees from the person. This allows you to protect your "sensitive areas" but also sets up your feet to swiftly move sideways if you need to deflect any physical blows. This is also less intimidating than a completely forward stance.
- Stay two arms lengths away; it gives space to the agitated patient and keeps your body safe as well.
- Maintain a neutral face, do your best to appear calm and level headed. Your increased anxiety can increase the anxiety in the patient. Avoid facial expressions and overreacting.
- If safe, maintain eye level positioning. If the patient is sitting, you sit. If the patient is standing, you stand.
- Limit overall touching. Agitated patients can view touching as hostile, even if the touch is meant to calm someone (i.e., limit touching someone's shoulder when agitated even though this is a natural reaction we make to comfort someone)
- Have awareness of positioning in a room to avoid feeling trapped/backed into a corner and providing a sense of safe exit (staff and patient).
- You can acknowledge and emphasize with a patient's feelings but not excuse the behaviors (i.e., I understand why you would be upset, but it is not okay to threaten me).
- Don't argue with an escalated patient. If their tone is heightened, a patient is less likely to respond to logic or argument.

QI: **How are staff trained in verbal and non-verbal de-escalation? Do staff feel it is sufficient? Are there cultural or other norms in the population(s) you serve that need to be considered in your de-escalation plans and training?**

4. Pharmacologic Interventions

Nonpharmacologic approaches, such as verbal de-escalation and reducing environmental stimulation (quiet room, low lighting), should be attempted, if possible, before medications are administered.

Patients should be engaged in the process of determining the mode of medication delivery (oral vs. intramuscular). If the patient is able to cooperate and there is no contraindication to use, oral medications are preferred over intramuscular ones.

This work group endorses Project BETA recommendations on medication use (*Wilson, 2012*), however, the implementation of these may be facility and situation dependent. Therefore, the work group believes that the individual organizations should have the flexibility in how they implement these recommendations.

Please see Project BETA Recommendations (*Wilson, 2012*) for full discussion on medication use, including medication table and algorithm for pharmacologic management. The document provides treatment protocols for agitation associated with delirium, agitation due to intoxication, agitation with psychosis in patient with known psychiatric disorder, and undifferentiated agitation.

Since the Project BETA 2012 guideline, a 2016 systematic review by Korczak et al (2016) was published looking at medication used to sedate agitation in patients in the emergency department. It included seven studies with 1,135 patients; reason for patient agitation was not reported (*Korczak, 2016*).
Conclusions:

- **Need for repeat sedation:**
 - Four studies were included in the analysis comparing the need for repeat sedation between antipsychotics and benzodiazepines. Antipsychotics were found to be more effective, as fewer repeat doses needed to be given.
 - When benzodiazepines were compared with combination therapy (antipsychotics and benzodiazepines), two studies showed that combination therapy requires less repeat sedation than when benzodiazepines were given alone.
 - Antipsychotics were compared with combination therapy in only one study and not analyzed further.
- **Adverse events:** Benzodiazepines were more likely to lead to adverse events, primarily involving the respiratory system.



What are the organizational policies and procedures around giving medication for agitated patients? Do these need to be updated to reflect current evidence? Do these encourage patient choice, where possible?

Red Zone (Management of Escalated Agitation)

1. Team Response & Safety Precautions

For a patient with escalating agitation, aggression or violent behavior, additional staff may be needed. Often this may happen in the form of a “code,” where additional staff from the ED or elsewhere in the hospital may assist. Safety precautions, as outlined above for agitated patients, should be put in place if not already done so.

Project BETA guidance: (*Richmond, 2012*)

- Important to differentiate between different types of aggression (instrumental or non-emotional, using threat of violence to get what one wants, fear-driven, irritable which can be either chronically angry patients or patients who have had boundaries violated) and apply appropriate de-escalation interventions based on type. Detailed explanation of aggression types and interventions can be found in [Richmond et al \(2012\)](#).
- Patients that do not respond to de-escalation interventions may need to be restrained, if escalate to violence.



How does our behavioral health ‘code’ team operate? What works well and what needs improvement? Are all on the team trained in assessing aggression types and using appropriate techniques? How are team members quickly briefed before engaging with the patient?

2. Assess and Manage Underlying Etiology

If patient presents in the red zone with escalating agitation and threat of aggression, then assessment and management of underlying etiology should be done. See details in yellow zone. This assessment and management may warrant repeating if patient’s agitation is worsening.

3. Verbal and Non-Verbal De-Escalation

See details in yellow zone on guidance for verbal and non-verbal de-escalation.

4. Seclusions and Restraints

These interventions should be used as a last resort. There are multiple potential implications for both patients and staff including, increased likelihood of patient disengagement and lessened success of forming a collaborative relationship, increased incidence of injury (physical and psychological) to both patients and staff, psychological distress, safety and adverse events of medications, and financial and legal consequences for health care organizations (*Knox, 2012*).

In general, use of forced restraints and seclusions is regulated by the Centers for Medicare and Medicaid Services (CMS) and health care organizations are legally mandated to follow and incorporate CMS guidelines into their policies and procedures. These policies should consider patient rights and legal implications of use of restraints and seclusions. The regulations also include requirements for staff training on verbal de-escalation, management of aggressive behavior and types of restraints that may be used or how to apply them (*Knox, 2012*). Organizations should be up to date on the latest CMS regulations and state and national laws and adjust their policies and procedures accordingly.

The goal for every organization should be to reduce the use of forced seclusions and restraints. According to Project BETA, the following approaches to achieve this goal may be used: (Knox, 2012)

Note: Italicized copy is directly from Project BETA.

- *Change in organization culture where restraint is viewed as a treatment failure*
- *Implementation of an administrative quality management review process aimed at improving outcomes in managing aggressive behavior*
- *Regular staff feedback*
- *Early identification and intervention using de-escalation techniques, and*
- *The use of protocols or aggressive management algorithms to guide clinical interventions.*

CMS has adopted the following definitions for restraints and seclusions: (Knox, 2012)

- *Seclusion is the involuntary confinement of a patient alone in a room or area from which the patient is physically prevented from leaving. Seclusion may be used only for the management of violent or self-destructive behavior.*
- *A restraint is any manual method, physical or mechanical device, material, or equipment that immobilizes or reduces the ability of a patient to move his or her arms, legs, body, or head freely.*
- *A drug is considered a restraint when it is used as a restriction to manage the patient's behavior or restrict the patient's freedom of movement and is not a standard treatment or dosage for the patient's condition.*
- *Seclusion and restraint must be discontinued at the earliest possible time.*
- *Within 1 hour of the seclusion or restraint, a patient must be evaluated face-to-face by a physician or other licensed independent practitioner or by a registered nurse or physician assistant who has met specified training requirements.*

Specific to patient 's rights: (Knox, 2012)

- *Seclusion or restraint may be used only when less restrictive interventions have been determined to be ineffective to protect the patient, a staff member, or others from harm.*
- *All patients have the right to be free from restraint or seclusion, of any form, imposed as a means of coercion, discipline, convenience, or retaliation by staff.*
- *Restraint or seclusion may only be imposed to ensure the immediate physical safety of the patient, a staff member, or others.*

Project BETA guidelines on the use of seclusions or restraints: (Knox, 2012)

- *The least restrictive intervention should be chosen and the goal of treatment is to minimize time in forced seclusion or restraint.*
- *For patients who are not actively violent, start with verbal de-escalation. If medication is offered, try to involve patients in decision making on medications.*
- *If the patient is not a danger to others, seclusion should be considered. However, if the patient would be a danger to himself while in seclusion, restraint is appropriate.*
- *If the patient is an immediate danger to others, restraint is indicated.*

- *If the restrained patient will engage in a reasonable dialog, verbal de-escalation efforts should continue, including getting the patient's input on medication. Either way, medication should be administered to calm a patient who has been placed in restraints.*
- *A quiet, unlocked seclusion room should be used if restraint is not indicated and the patient is willing to sit; if not, then forced seclusion is indicated.*
- *Seclusion with decreased stimulation may help some patients regain control while others may need a combination of ongoing verbal de-escalation and medications.*
- *All patients in restraint or seclusion should be monitored to assess response to medication and to prevent complications from these interventions.*
- *When the patient has regained control, a more thorough evaluation can be done, followed by further treatment planning and determining disposition.*

Disposition

1. Appropriate Level of Care

Considerations for moving patients to different levels of care:

- Determine which patients are appropriate for inpatient psychiatric admission vs. discharge to the community. Refer to the MN Health Collaborative recommendations on [Medical Clearance](#) and [Suicide Prevention and Intervention in the ED](#) on possible guidance.
- Group home patients – can they go back or do they need to move to a different care setting?
- Which patients may be safely discharged home?
- EmPATH and other types of observational units – is it possible to hold patients there until a spot in the community becomes available?
- Be aware of all the resources in the community.
- Continue to build partnerships with mental health and other community resources, where these are available.

QI: What are our three biggest challenges in disposition? What knowledge or relationships do we need to address these challenges?

2. Hand-offs and Documentation

Warm handoffs are critical for a patient with agitation. Standardized questions may help with intra- and inter-organizational communication.

QI: What information is critical in a handoff? How can the patient's behavior during their time in the ED be helpfully summarized (e.g., What de-escalation techniques were effective)? What needs to be documented in the chart?

References

Project BETA for Adults:

1. Holloman GH Jr, Zeller SL. Overview of Project BETA: Best practices in Evaluation and Treatment of Agitation. *West J Emerg Med.* 2012 Feb;13(1):1-2. <https://pubmed.ncbi.nlm.nih.gov/22461914/>
2. Nordstrom K, Zun LS, Wilson MP, Stiebel V, Ng AT, Bregman B, Anderson EL. Medical Evaluation and Triage of the Agitated Patient: Consensus Statement of the American Association for Emergency Psychiatry Project BETA Medical Evaluation Workgroup. *West J Emerg Med.* 2012 Feb;13(1):3-10. <https://pubmed.ncbi.nlm.nih.gov/22461915/>
3. Stowell KR, Florence P, Harman HJ, Glick RL. Psychiatric Evaluation of the Agitated Patient: Consensus Statement of the American Association for Emergency Psychiatry Pproject BETA Psychiatric Evaluation Workgroup. *West J Emerg Med.* 2012 Feb;13(1):11-6. <https://pubmed.ncbi.nlm.nih.gov/22461916/>
4. Richmond JS, Berlin JS, Fishkind AB, Holloman GH Jr, Zeller SL, Wilson MP, Rifai MA, Ng AT. Verbal De-Escalation of the Agitated Patient: Consensus Statement of the American Association for Emergency Psychiatry Project BETA De-escalation Workgroup. *West J Emerg Med.* 2012 Feb;13(1):17-25. <https://pubmed.ncbi.nlm.nih.gov/22461917/>
5. Wilson MP, Pepper D, Currier GW, Holloman GH Jr, Feifel D. The Psychopharmacology of Agitation: Consensus Statement of the American Association for Emergency Psychiatry Project BETA Psychopharmacology Workgroup. *West J Emerg Med.* 2012 Feb;13(1):26-34. <https://pubmed.ncbi.nlm.nih.gov/22461918/>
6. Knox DK, Holloman GH Jr. Use and Avoidance of Seclusion and Restraint: Consensus Statement of the American Association for Emergency Psychiatry Project BETA Seclusion and Restraint Workgroup. *West J Emerg Med.* 2012 Feb;13(1):35-40. <https://pubmed.ncbi.nlm.nih.gov/22461919/>

Project BETA for Children and Adolescents:

Gerson R, Malas N, Feuer V, Silver GH, Prasad R, Mroczkowski MM. Best Practices for Evaluation and Treatment of Agitated Children and Adolescents (BETA) in the Emergency Department: Consensus Statement of the American Association for Emergency Psychiatry. *West J Emerg Med.* 2019 Mar;20(2):409-418. <https://pubmed.ncbi.nlm.nih.gov/30881565/> Epub 2019 Feb 19.

Other:

Almvik, R., Woods, P., & Rasmussen, K. The Brøset Violence Checklist: Sensitivity, specificity, and interrater reliability. *Journal of Interpersonal Violence*, 2000 15(12), 1284–1296. <https://psycnet.apa.org/record/2000-12306-003>.

Cabilan CJ, Johnston AN. Review article: Identifying occupational violence patient risk factors and risk assessment tools in the emergency department: A scoping review. *Emerg Med Australas.* 2019 Oct;31(5):730-740. <https://pubmed.ncbi.nlm.nih.gov/31368230/>. Epub 2019 Jul 31.

Frueth BC, Knapp RG, Cusack KJ, et al. Patients' reports of traumatic or harmful experiences within the psychiatric setting. *Psychiatr Serv.* 2005;56:1123–1133. <https://pubmed.ncbi.nlm.nih.gov/16148328/>

- Gates DM, Ross CS, McQueen L. Violence against emergency department workers. *J Emerg Med.* 2006;31:331–337. <https://pubmed.ncbi.nlm.nih.gov/16982376/>
- Griffiths, A. *Signage system designed for hospitals reduces violence by 50 percent.* dezeen. 2013 Dec. <https://www.dezeen.com/2013/12/02/hospital-redesign-by-pearsonlloyd-reduces-violence-and-aggression/>
- Joint Commission, The. *Sentinel Event Alert.* 2018 April. Issue 59.
- Kopecky HJ, Kopecky CR, Yudofsky SC. Reliability and validity of the Overt Agitation Severity Scale in adult psychiatric inpatients. *Psychiatr Q.* Winter 1998;69(4):301-23. <https://pubmed.ncbi.nlm.nih.gov/9793109/>
- Korczak V, Kirby A, Gunja N. Chemical agents for the sedation of agitated patients in the ED: a systematic review. *American Journal of Emergency Medicine* 2016;34:2426-2431.
- Lam LT. Aggression exposure and mental health among nurses. *Aust e-J Adv Ment Health.* 2002;1:89–100. <https://www.tandfonline.com/doi/abs/10.5172/jamh.1.2.89>
- Luck L, Jackson D, Usher K. STAMP: components of observable behaviour that indicate potential for patient violence in emergency departments. *J Adv Nurs.* 2007 Jul;59(1):11-9. <https://pubmed.ncbi.nlm.nih.gov/17543010/> Epub 2007 Jun 3.
- Molloy L, Fields L, Trostian B, Kinghorn G. Trauma-informed care for people presenting to the emergency department with mental health issues. *Emerg Nurse.* 2020 Mar 10;28(2):30-35. doi: 10.7748/en.2020.e1990. Epub 2020 Feb 25.
- Silver JM, Yudofsky SC. The Overt Aggression Scale: overview and guiding principles. *J Neuropsychiatry Clin Neurosci.* Spring 1991;3(2):S22-9.
- Solorzano Martinez AJ. Managing Workplace Violence With Evidence-Based Interventions: A Literature Review. *J Psychosoc Nurs Ment Health Serv.* 2016 Sep 1;54(9):31-6. <https://pubmed.ncbi.nlm.nih.gov/27576226/>
- Stowell KR, Hughes NP, Rozel JS. Violence in the Emergency Department. *Psychiatr Clin North Am.* 2016 Dec;39(4):557-566. <https://pubmed.ncbi.nlm.nih.gov/27836151/> Epub 2016 Sep 28.
- Swift, RH., Harrigan, EP., et al. Validation of the Behavioural Activity Rating Scale (BARS): a novel measure of activity in agitated patients. *J Psychiatr Res.* 2002 Mar-Apr;36(2):87-95. <https://pubmed.ncbi.nlm.nih.gov/11777497/>
- Woods, P., Almvik, R. The Broset Violence Checklist (BVC). *Acta Psychiatr Scand Suppl.* 2002;(412):103-5. <https://pubmed.ncbi.nlm.nih.gov/12072138/>
- Yudofsky SC, Silver JM, Jackson W, Endicott J, Williams D. The Overt Aggression Scale for the objective rating of verbal and physical aggression. *Am J Psychiatry.* 1986 Jan;143(1):35-9. <https://pubmed.ncbi.nlm.nih.gov/3942284/>

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Medical Clearance Evaluation in the ED for People with Mental Health Needs

Updated May 2021 | Original Release September 2018

In 2018, MN Health Collaborative partners developed and adopted shared standards for medical clearance evaluation in Emergency Departments (EDs), including labs needed, to ensure a person is medically stable for transition to inpatient psychiatric facilities.

Implementing these medical clearance practices decreases wide local variation which at times results in unnecessary tests and delays in patients receiving needed treatment.

These recommendations are part of a larger effort of ICSI effort with MN Health Collaborative partners to develop and implement shared standards for patients with mental health needs in the ED. This set of standards currently has three parts; in addition to Medical Clearance Evaluation it also includes shared standards for Suicide Prevention and Intervention, and Agitation and Violence Prevention.

“Our work to reduce unnecessary labs was a result of our collaboration made possible with ICSI and systems thinking. Thank you.”

— KURT ISENBERGER, MD
Medical Director of
Regions Hospital
Emergency Department

May 2021 Update

An updated review of literature found additional evidence supporting reduction of routine laboratory testing in EDs. While the MN Collaborative recommendations herein remain unchanged, a brief evidence update follows, including a study conducted by HealthPartners, one of the participants in MN Health Collaborative.

1. Researchers at HealthPartners conducted a retrospective cohort study looking at the effect of a change in hospital policy that eliminated routine screening laboratory tests for psychiatric admission (Zwank, 2020). Prior policy included requiring standard admission order set for inpatient psychiatric admission, including orders for complete blood count (CBC), basic metabolic panel, urinalysis, basic urine drug screen, and urine pregnancy test when applicable. After the policy change, these lab tests were no longer routinely required and instead were ordered at the discretion of the ED provider or at the request of the admitting psychiatric service.

The study included 1,910 patients (886 pre-implementation and 1,024 post-implementation) and found:

- The median number of lab tests ordered during the hospital stay decreased.
 - A large decrease in lab ordering in the ED was somewhat offset by a less pronounced increase in lab ordering of nearly all the same lab tests during the inpatient stay. However, total overall lab ordering decreased significantly.
- The proportion of patients with no blood lab orders increased from 22% to 40% and the proportion of patients with no lab orders increased from 9% to 20%.

- The median total lab charges decreased from \$445 to \$312, resulting in a total cost savings of \$136,192.
 - Mean ED length of stay decreased by 5.5 hours.
 - No increases in consultations or transfers were noted.
 - No patients died or were transferred to the ICU during the hospital stay.
2. A 2018 systematic review of three observational studies including a total of 629 patients could not determine the clinical utility of protocolized laboratory screening tests for medical clearance of psychiatric patients in the ED. The prevalence of clinically significant results was low, that is, no patient's treatment plan or disposition was changed because of an individual laboratory test result (Conigliaro, 2018).

The following MN Health Collaborative recommendations for Medical Clearance Evaluation are based on evidence-based guidelines published by the American College of Emergency Medicine (ACEP) and the American Academy of Emergency Psychiatry (AAEP), as well as consensus recommendations by the expert working group based on local community context.

Recommendations

MN Health Collaborative partners are adopting the following:

1. For emergency department patients with primary psychiatric complaints, diagnostic evaluation should be directed by the patient's history and physical examination. Routine laboratory testing does not need to be performed. (ACEP)
2. *Routine* laboratory testing* should not be required by facilities accepting patients for psychiatric treatment. Laboratory evaluation should be based on individual patient history and exam. (Collaborative Consensus)

(*It is critical to distinguish between tests needed in the ED and tests that can be done at the inpatient facility. The ED is responsible for tests that assist in acute ED management as well as help determine patient disposition. If labs are already being obtained in the ED, the ED provider may choose to include labs that would be helpful for inpatient management. **However, these labs should not delay disposition.** Courtesy labs that may benefit an inpatient facility may include: 1) therapeutic drug levels of psychoactive agents 2) pregnancy test 3) ECG for patients on psychoactive agents with QTc implications 4) CBC/CMP)

3. Further medical evaluation should be considered for patients who have (1) new-onset psychiatric symptoms after the age of 45 years, (2) advanced age (65 years of age and older), (3) cognitive deficits or delirium, (4) positive review of systems indicative of a physical etiology, such as cough and fever, (5) focal neurological findings or evidence of head injury, (6) substance intoxication, withdrawal, or exposure to toxins/drugs, (7) decreased level of awareness, or (8) other indications, such as abnormal vital signs that direct further assessment. (AAEP)

Note regarding age: There is no evidence on age as an independent risk factor. For organizations that wish to use the SMART tool (created by Sierra Sacramento Valley Medical Society), note that the tool uses >55 years of age and <12 years of age as warranting consideration.

4. When Urine Drug Screen (UDS) is obtained for a psychiatric patient, it should not delay disposition. The patient may be transferred to another facility with a pending UDS. (Collaborative Consensus)

*Note: ACEP recommends that **routine** UDS should not be performed as part of the ED assessment of the psychiatric patient*

5. For patients with alcohol intoxication, the psychiatric assessment of the patient should be based on the patient's cognitive abilities, rather than a specific blood alcohol level. Clinicians should consider using a period of observation to determine if psychiatric symptoms resolve as the episode of intoxication resolves. (ACEP)
6. If there is disagreement between the receiving facility and ED on evaluation and/or disposition of the patient with psychiatric complaints, **the receiving psychiatry clinician and referring ED clinician should discuss the case** via phone. (Collaborative Consensus)

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A special thanks to Michael Zwank, MD, of HealthPartners Regions Hospital, for his assistance in clarifying and understanding of 2020 routine labs study findings.

References

Conigliaro A, Benabbas R, Schnitzer E, et al. Protocolized Laboratory Screening for the Medical Clearance of Psychiatric Patients in the Emergency Department: A Systematic Review. *Acad Emerg Med* 2018 May;25(5):566-576. doi: 10.1111/acem.13368. Epub 2018 Mar 9.

Zwank MD, Rupp PE, Salzman JG et al. Elimination of Routine Screening Laboratory Tests for Psychiatric Admission: A Quality Improvement Initiative. *Psychiatr Serv* 2020 Dec 1;71(12):1252-1259. doi: 10.1176/appi.ps.202000121. Epub 2020 Oct 27.

ACEP guideline:

American College of Emergency Physicians. Care of the psychiatric patient in the emergency department, a review of the literature. October 2014. Available at: <https://www.acep.org/how-we-serve/sections/emergency-medicine-practice-management--health-policy/news/september-2015/psychiatric-patients-in-the-emergency-department/>

AAEP guidelines:

Anderson EL, Nordstrom K, Wilson MP, et al. American Association for Emergency Psychiatry Task Force on Medical Clearance of Adults Part I: Introduction, Review and Evidence-Based Guidelines. *Western J Emerg Med* 2017;18(2):235-242. doi:10.5811/westjem.2016.10.32258.

Wilson MP, Nordstrom K, Anderson EL, et al. American Association for Emergency Psychiatry Task Force on Medical Clearance of Adult Psychiatric Patients. Part II: Controversies over Medical Assessment, and Consensus Recommendations. *Western J Emerg Med* 2017;18(4):640-646. doi:10.5811/westjem.2017.3.32259.



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