Source and Credits

- This presentation is based on the November 2019 AHRQ WebM&M Spotlight Case
  - See the full article at https://psnet.ahrq.gov/webmm
  - CME credit is available
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Objectives

At the conclusion of this educational activity, participants should be able to:

- Recognize the types of distractors that may prevent suicide risk assessments from being completed.

- Compare and contrast the differences between suicide screening and suicide risk assessment.

- Discuss evidence-based suicide prevention strategies and treatment modalities.

- Explain the ICAR^{2}E mnemonic for Suicide Prevention and how ED providers can use this tool.

- List three elements of a basic quality improvement plan to ensure suicide risk assessments are completed in emergency departments and medical hospitals.

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MISSED OPPORTUNITIES FOR SUICIDE RISK ASSESSMENT

Two cases illustrate ways that EDs and
medical hospitals can miss
opportunities to conduct a
suicide risk assessment to save lives

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Case 1: Missed Opportunities for Suicide Risk Assessment

- 46-year-old homeless male, found in the parking lot of the ED expressing suicidal ideation (SI) and brought into the ED
- Triage nurse entered a positive suicide screen in ED flowsheet triggering an evaluation by Psychiatric Emergency Services (PES)
- Medical record indicates multiple chronic diseases and recent CT scan revealing a suspicious lesion, possibly lung cancer
- Patient is well-known "frequent flyer", multiple ED visits associated with excessive alcohol consumption and SI
- Patient had 6 ED visits in prior 3 months
  - Half expressing SI
  - On one visit, he stated that he had tried to hang himself the day before

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- Initial evaluation by ED physician, but suicide assessment not noted

- Prior to being seen by PES, patient was intubated due to acute hypoxia; he was extubated within 12 hrs

- Subsequently, nursing flowsheet had two documented assessments stating no SI

- No psychiatric evaluation was carried out

- ED staff arranged for boarding home placement; patient was discharged with Valium for DTs, cardiac medications, and antibiotics for a respiratory infection

- Two days later hospital was notified by a relative the patient was found deceased, of unknown cause, behind a retail store

Case 2: Missed Opportunities for Suicide Risk Assessment

- 76-yr-old male with history of hypertension and depression, brought to hospital via ambulance after wife reported he was unconscious after three days of altered level of consciousness

- Admitting diagnosis: alcohol intoxication with possible withdrawal seizures

- Patient intubated and placed on continuous EEG monitoring

- Neurology noted moderate-severe encephalopathy due to meds

- Drug screen negative except abnormal levels of Fluoxetine, Amitriptyline, and Nortriptyline

- Social worker reviewed case in the ED but did not see the patient after he was admitted

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Case 2: Missed Opportunities for Suicide Risk Assessment (2)

- Patient extubated on day two

- Internal Medicine noted a social service evaluation for alcohol abuse intervention was being considered but not ordered

- After extubation, patient wanted to go home; became agitated, cursing, stating, "it is wasting time" and "I should not be here"

- No suicide risk assessment conducted by nursing or social services staff after patient extubated and able to communicate

- Patient left hospital against medical advice and found dead by a neighbor the next day from a self-inflected gunshot wound to head

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MISSED OPPORTUNITIES FOR SUICIDE RISK ASSESSMENT

The Commentary

By Glen Xiong, MD & Debra Kahn, MD

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Systems Approach to Change

In both cases, patients did not receive adequate suicide risk assessment

Lewandowski W, Adamle K. Substantive areas of clinical nurse specialist practice: a comprehensive review of the literature. Clin Nurse Spec. 2009;23:73-90. https://www.ncbi.nlm.nih.gov/pubmed/19225287

Key Systems Issues for Case 1

- Verbal denial of suicidal ideation after a suicide attempt is insufficient reason to forgo an in-depth suicide risk assessment
  - Suicide risk assessment should be based on a synthesis of overall presentation, mental status, and suicide risk factors versus what patients say at one point in time
  - While checklists are often a helpful tool in patient safety, in cases of SI, a "checkbox" approach can cause clinicians to miss opportunities for comprehensive assessment
  - Hospitals should train a diverse group of disciplines so that a continuum of expertise is available, depending on severity of suicide risk
  - Ethnic, cultural, and spiritual consultation and translation services should be enlisted to overcome cultural and linguistic barriers
- Past history of suicide attempt is highest risk factor for future suicide death; that history should have triggered additional evaluations on subsequent visits with SI

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Key Systems Issues for Case 2

- Both suicide attempt and requests to leave against medical advice are triggers for psychiatric consultation, assessment of suicide risk, and medical decision-making capacity

- Psychiatric consultation services routinely conduct both types of evaluations

- Timing of patient's request to leave against medical advice may influence whether a psychiatric consultation is requested; hospital policies should be put in place to ensure appropriate responses

- Detaining Case 2 patient would have required a swift involuntary hospitalization evaluation and law enforcement involvement

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ENSURING CLINICAL COMPETENCE

Essential steps to ensure appropriate management in SI

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Critical steps to ensure appropriate management in SI

1. Suicide Screening

2. Prioritizing Suicidal Ideation and Attempts on Medical History/Problem List

3. Suicide Risk Assessment

4. Suicide Risk Reduction and Treatment Planning

5. Problematic Alcohol Use and Suicide Risk

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1. Suicide Screening

- Centers for Disease Control ranks suicide (intentional self-injury) the 10th leading cause of death

- Studies indicate that suicide attempters are frequently seen in healthcare settings within a month prior to their suicide attempt

- The Joint Commission implemented several suicide prevention programs as part of 2019 National Patient Safety Goal (NPSG) 15.01.01 for medical hospitals and behavioral health care organizations

Kochanek KD, Murphy SL, Xu JQ, Arias E. Deaths: Final data for 2017. National Vital Statistics Reports; vol 68 no 9. Hyattsville, MD: National Center for Health Statistics. 2019. [Available at] https://www.cdc.gov/nchs/data/nvsr/nvsr68/nvsr68_09-508.pdf

Ahmedani, B. K., Simon, G. E., Stewart, C., Beck, A., Waitzfelder, B. E., Rossom, R., . . . Solberg, L. I. (2014). Health care contacts in the year before suicide death. *Journal of General Internal Medicine*, *29*(6), 870–877. [Available at] https://link.springer.com/article/10.1007/s11606-014-2767-3

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1. Suicide Screening (2)

The Joint Commission: National Patient Safety Goal (NPSG)

- 2016: Universal suicide screening in all settings

- 2019: Adds prevention programs and targets medical hospitals and behavioral health organizations

4 Key Components (July 2019):

- Environmental assessment

- Suicide assessment of patients who screen positive

- Staff training

- Follow-up care

Dateline @ TJC: https://www.jointcommission.org/dateline_tjc/national_patient_safety_goal_expands_focus_on_suicide_prevention/
R3 Report: https://www.jointcommission.org/assets/1/18/R3_18_Suicide_prevention_HAP_BHC_5_6_19_Rev5.pdf

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1. Suicide Screening (3)

- Standardized assessment tools have been developed and validated
- Protocols for further assessment and referral to treatment must be linked to screening outcomes to ensure patient safety
- Tools include:
  - SAFE T

  https://www.integration.samhsa.gov/images/res/SAFE_T.pdf
  - Columbia Suicide Severity Assessment

  http://cssrs.columbia.edu/
  - Suicide Prevention Resource Center

  http://www.sprc.org/settings/primary-care/toolkit

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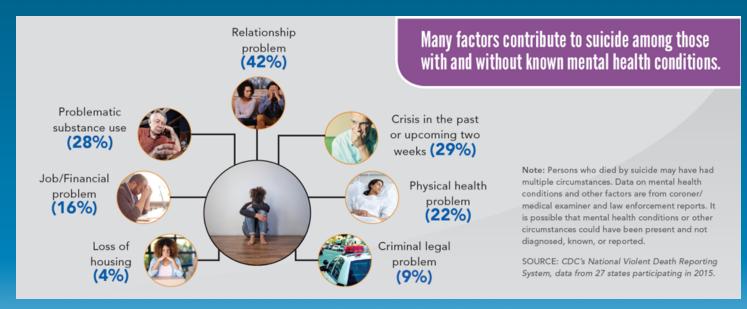Morbidity and Mortality Rounds on the Web

2. Prioritizing Suicidal ideation/ Attempt on Medical History/ Problem List

- Suicidal ideation or attempt should be entered on Problem List

  - Include an appropriate plan that carries over onto Progress Note

  - More likely to be seen by nursing staff and primary medical teams

  - Suicide item on problem list should carry forward until an appropriate risk assessment has been completed

- Easy to de-prioritize suicide ideation and attempt amidst acute medical conditions such as

  - Hypoxia requiring intubation (Case 1)

  - Alcohol withdrawal seizures with associated encephalopathy (Case 2)

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3. Suicide Risk Assessment (1)

- Patients identified with elevated suicide risk should have a thorough suicide risk assessment including:
  - Collecting a wide variety of patient data
  - Synthesizing it in a way that helps characterize acute risks, chronic risks, and factors that are amenable to treatment

Relationship problem (42%)

Problematic substance use (28%)

Job/Financial problem (16%)

Loss of housing (4%)

Crisis in the past or upcoming two weeks (29%)

Physical health problem (22%)

Criminal legal problem (9%)

Many factors contribute to suicide among those with and without known mental health conditions.

Note: Persons who died by suicide may have had multiple circumstances. Data on mental health conditions and other factors are from coroner/ medical examiner and law enforcement reports. It is possible that mental health conditions or other circumstances could have been present and not diagnosed, known, or reported.

SOURCE: CDC's National Violent Death Reporting System, data from 27 states participating in 2015.

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3. Suicide Risk Assessment (2)

- Suicide risk factors can be divided into 4 groups
  - Static factors (such as a history of childhood trauma, prior suicide attempts, gender, ethnicity, family history of suicide)
  - Dynamic factors (such as an active psychotic or mood episode, social stressors, level of engagement in treatment, alcohol or drug intoxication or withdrawal)
  - Acute factors (pain, insomnia, anxiety)
  - Protective factors (commitments to loved ones, pets, community)
- Dynamic and acute risk factors are modifiable and serve as the targets for further treatment

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3. Suicide Risk Assessment (3)

- Publicly available standardized assessment tools have been integrated into the EMR by some health systems

  - SAFE-T Pocket Book for Mental Health Professionals. National Suicide Prevention Lifeline. [Available at] https://www.integration.samhsa.gov/images/res/SAFE_T.pdf

  - The Columbia-Suicide Severity Rating Scale, Posner K, Brown GK, Stanley B, et al. (2011); initial validity and internal consistency findings from three multisite studies with adolescents and adults. Am J Psychiatry, 168: 1266-1277. [Available at] http://cssrs.columbia.edu/

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3. Suicide Risk Assessment (4)

- As highlighted in these two cases
  - Many patients cannot give reliable answers to a screening questions when first admitted due to altered mental status, medical acuity, or intoxication
  - While positive screening results should trigger protocols for observation and further risk assessment, lack of results due to non-responsiveness also need to be tracked with prompts for additional screening at regular intervals
  - Reliable third-party information should be considered, especially when a patient cannot communicate
  - This additional information can be obtained via review of ambulance run sheets, family or friend input, outside providers, and previous hospital notes

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4. Suicide Risk Reduction and Treatment Planning (1)

- Interventions for ED or medically hospitalized patients found to be high risk for suicide include:
  - Video observation
  - 1:1 observation
  - Minimization of environmental (ligature) risks
  - Provision of safe dining equipment
  - Room sweeps
  - Securing of personal items
- Treatment for depression, psychosis, anxiety, pain, or other acute medical illness may help to decrease acute suicide risks and can begin during the hospital stay

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4. Suicide Risk Reduction and Treatment Planning (2)

- The Brown-Stanley safety plan is a collaborative document that providers can work through with suicidal patients in crisis:
  - Providers work with patients to understand their warning signs of a suicidal crisis
  - Identify internal coping skills
  - List supportive contacts, name professionals who can be of assistance
  - Identify reasons to live
  - Find ways to make their environments safe

- Successful completion of this exercise can be therapeutic for patients and provides useful information regarding a patient's social resources, coping skills, and environmental safety

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4. Suicide Risk Reduction and Treatment Planning (3)

- Recognizing/treating depression and restricting access to firearms are evidence-based strategies to prevent suicide

- Restricting access to lethal means, including potentially lethal medications, and avoiding hot-spots for suicide by jumping are emphasized

- Family members should be engaged to "mobilize" social support:
  - Ensure firearms and dangerous medications are secured
  - Emphasize the importance of outpatient behavioral health follow-up

- Therapeutic interventions:
  - Modest benefits have been documented for cognitive behavioral therapy (CBT) and dialectical behavioral therapy (DBT)

- More research is needed to determine best intervention(s) for medical hospital settings, multi-modal treatments are likely to be necessary

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4. Suicide Risk Reduction and Treatment Planning (4)

- Care after an ED visit or acute medical hospitalization comprises a continuum of services:
  - Outpatient clinics
  - Partial hospitalization programs (intensive outpatient programs)
  - Assertive community models
  - Acute psychiatric hospitals
- Psychiatric hospitalizations most helpful for patients needing a safe environment to continue treatment of acute issues until acute suicide risk subsides
  - Treatment should be in least restrictive environment
  - Intensity of treatment should match severity/acuity of the psychiatric disorders
  - Psychiatric hospitalization may not mitigate long-term risk factors such as poor social support, addiction, and lack of secure housing

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5. Problematic Alcohol Use and Suicide Risk (1)

- Alcohol use was associated with both cases

- Problematic alcohol use is a known risk factor for suicidal ideation, attempts and deaths regardless of age, gender, and race/ethnicity

- Patients with recurrent problematic alcohol use utilize the health system to treat the physical sequelae but often do not get treatment for recurrent alcohol use disorder

- Evidence-based medications for "maintenance treatment" of alcohol use disorders are underutilized after treatment of acute alcohol withdrawal

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5. Problematic Alcohol Use and Suicide Risk (2)

- Clinicians feel relatively helpless when patients with problematic alcohol use present as "frequent flyers"

- Patients may require treatment planning that takes a long-term perspective that includes prevention of future readmissions and extension of treatment beyond the ED and hospital

- Both cases illustrate that hospital-based, collaborative, multidisciplinary, systems approaches are critically needed to address the dual problem of high-risk, problematic alcohol use and suicidality

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MISSED OPPORTUNITIES FOR SUICIDE RISK ASSESSMENT

Improving Current Systems

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Improving our Systems

- The American College of Emergency Physicians and the American Foundation for Suicide Prevention created a suicide prevention tool (ICAR^{2}E) for ED providers

- Tool is consistent with fundamentals of patient safety and can be incorporated into the PDSA (plan, do, study, act) cycle for quality improvement

- The acronym succinctly captures the points made in this Commentary:
  - **I**dentify suicide risk
  - **C**ommunicate *across disciplines and service*
  - **A**ssess for life threats (and ensure safety *especially from firearms and dangerous medications*)
  - **R**isk assessment for suicide *based on a synthesis of multiple risk factors*
  - **R**educe suicide risks *by treating modifiable risk factors*
  - **E**xtend care beyond the ED by using a continuum of behavioral health and community services

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Key Quality Improvement Actions

- Problem: Lack of suicide assessment for high risk patients

- Goal: Create ED systems to ensure evidence-based risk tools are used to identify patients for follow up suicide assessments

- Main root causes of problem:

  – Inadequate knowledge of screening tools to assist in identifying and managing high risk patients, particularly problematic alcohol use

  – Lack of systematic procedures to ensure psychiatric follow up in situations with medical comorbidities or other emergencies

  – Poor communication processes and follow up between disciplines

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Key Quality Improvement Actions (2)

- Using ICAR^{2}E as guide, quality improvement plan should include:
  - <u>Implement</u> risk screening evidence-based tools, embed in EMR
  - Educate multidisciplinary staff on the issue and built in <u>communication</u> tools
  - Educate staff that <u>risk</u> assessments are *a synthesis of multiple risk factors*
  - <u>Reduce</u> immediate life threats (*firearms and dangerous medications*)
  - Treat <u>modifiable</u> risk factors
  - <u>Extend</u> care by involving families, close friends, and community based behavioral health services

- Each step can be its own Plan-Do-Study-Act cycle

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Take-Home Points

- Suicide is a common cause of death and a patient safety problem

- Suicide screening is indicated for patients who receive medical care in EDs and medical hospitals

- Patients who present with possible suicide attempts from medication overdose, alcohol intoxication, or repeated ED visits associated with suicidal ideation, gestures, or attempts should *all* receive a comprehensive suicide risk assessment

- Even if they deny suicidal thoughts, a more in-depth suicide risk assessment is required

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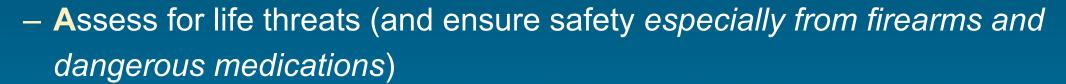
Take-Home Points (2)

- Suicide risk assessment is a comprehensive evaluation based on a synthesis of multiple acute, chronic, static, and modifiable risk factors

- Evidence-based suicide prevention strategies include restricting access to firearms, lethal medications, and hot-spots for suicide by jumping

- Aftercare treatment for suicidal ideation or attempt may include a continuum of services offered through outpatient clinics, partial hospitalization, crisis residential programs, and acute psychiatric hospitals

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Take-Home Points (3)

- Intensity of treatment should match the severity and acuity of the psychiatric disorders that underlie the suicide risks
- Treatment for depression, psychosis, anxiety, pain, or other acute medical illness may help to decrease acute suicide risks and can begin during the hospital stay
- Recurrent problematic alcohol use accompanied by suicidal ideation increases the risk of suicide after hospitalization and deserves special multidisciplinary treatment approaches
- Standardized assessment tools such as the SAFE T and Columbia Suicide Risk Assessment tool are available in the public domain

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Take-Home Points (4)

- **ICAR²E*** stands for:
  - **I**dentify suicide risk
  - **C**ommunicate *across disciplines and service*
  - **A**ssess for life threats (and ensure safety *especially from firearms and dangerous medications*)
  - **R**isk assessment for suicide *based on a synthesis of multiple risk factors,*
  - **R**educe suicide risks *by treating modifiable risk factors*
  - **E**xtend care beyond the ED by using a continuum of behavioral health and community services

* ICAR²E Tool is freely available for download from the American College of Emergency Physicians at https://www.acep.org/patient-care/iCar2e/ and the Full Guide is available for download at https://www.sprc.org/sites/default/files/EDGuide_full.pdf