The Emergency Department Safety Assessment and Follow-up Evaluation (ED-SAFE) study: The Impact of Implementing Universal Suicide Risk Screening

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Butler Hospital
Warren Alpert Medical School of Brown University
**ED-SAFE Steering Committee**

<table>
<thead>
<tr>
<th>Investigator</th>
<th>Institution</th>
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<tbody>
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<td>Edwin Boudreaux, PhD (PI)</td>
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# ED-SAFE Investigators

<table>
<thead>
<tr>
<th>Investigator</th>
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<tbody>
<tr>
<td>Marian Betz, MD, MPH</td>
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Overview

• Clinical epidemiology for suicide in the emergency department (ED)

• Suicide screening and intervention challenges in the ED

• Addressing the challenges: Emergency Department Safety Assessment and Follow-up Evaluation (ED-SAFE)
Overview

- Clinical epidemiology for suicide in the emergency department (ED)
- Suicide screening and intervention challenges in the ED
- Addressing the challenges: Emergency Department Safety Assessment and Follow-up Evaluation (ED-SAFE)
Emergency department visits for attempted suicide and self-inflicted injury, 1993-2008

- Annual average from 1997-2001 = 412,000 (Doshi et al., Ann Emerg Med, 2005)
- 1993-2008 = 420,000 (Ting et al., 2011)
- 2015 = 575,000 (CDC, 2017)

- ED rate per 1,000
  - 1993: 1.85
  - 2008: 5.38

*Ting et al., 2011*
Suicide in America: Magnitude of the Problem

- Up to 1 in 5 people who die by suicide visited an ED in the 4 weeks prior to their death (Ahmedani et al., 2014)

- Suicide risk is prevalent among ED patients but it may go undetected, especially among those presenting with non-psychiatric chief complaints.

- Universal screening

- Adaptable to acute care settings

- Joint Commission; National Patient Safety Goal 15
Overview

• Clinical epidemiology for suicide in the emergency department (ED)

• Suicide screening and intervention challenges in the ED

• Addressing the challenges: Emergency Department Safety Assessment and Follow-up Evaluation (ED-SAFE)
Suicide Screening in the ED

Opportunities for improved care of suicidal patients in EDs:
- Screening and recognition
- Assessment/risk stratification
- Provider knowledge and attitudes
- Range of definitive treatment options in ED itself
- Connection after ED discharge
- Aftercare & referral to specialty services
Intervention Challenges in the ED

- Screener length
- Who will complete the screening
- Staff buy-in
- Integration into clinical workflow/EHR
- Availability of mental health services/clinical back-up
Overview

• Clinical epidemiology for suicide in the emergency department (ED)

• Suicide screening and intervention challenges in the ED

• Addressing the challenges: Emergency Department Safety Assessment and Follow-up Evaluation (ED-SAFE)
Emergency Department Safety Assessment and Follow-up Evaluation (ED-SAFE)

- National Institutes of Mental Health Grant (NIMH): U01MH088278
Study Considerations

- 8 general medical EDs with no dedicated Psychiatric Emergency Service

- Universal screening completed by primary nurse as part of routine care once patient is in the treatment area

- Suicide assessment at triage (targeted screening) was not changed

- Each site determined how to handle positive screens
Methods

Phase 1: Treatment as Usual

Provide usual and customary screening and care

Phase 2: Universal Screening

Use Patient Safety Screener, sites handle positive screens per usual and customary care

Phase 3: Intervention

Brief ED intervention and Post-ED advising

Screening introduced

Methods

Intro: Because some topics are hard to bring up, we ask the same questions of everyone.

1. Over the past 2 weeks, have you felt down, depressed, or hopeless?
   - Yes
   - No
   - Refused
   - Patient unable to complete

2. Over the past 2 weeks, have you had thoughts of killing yourself?
   - Yes
   - No
   - Refused
   - Patient unable to complete

3. Have you ever attempted to kill yourself?
   - Yes
   - No
   - Refused
   - Patient unable to complete

3a. . . . If Yes to item 3, ask: when did this last happen?
   - Within the past 24 hours (including today)
   - Within the last month (but not today)
   - Between 1 and 6 months ago
   - More than a six months ago
   - Refused
   - Patient unable to complete

Interpretation

Depressed mood

At least active ideation, general thoughts without thoughts of ways, intent, or plan

Lifetime attempt

If within the last 6 months, considered recent attempt

This project was supported by Award Number U01MH088278 from the National Institute of Mental Health. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institute of Mental Health or the National Institutes of Health.
Main Objective: To examine the feasibility of implementing universal suicide risk screening in the ED and its impact on detection of suicide risk.

- Data from 2009-2014
- All adult patients who entered the ED
  - 12:00pm-10:00pm
  - 40hrs/wk
  - At least one weekend day per month
Screening Evaluation: Methods

• Any documented thoughts or behaviors related to intentional self-harm, including suicidal and non-suicidal, on patient chart?
  • 0, No screening for self-harm documented
  • 1, No self harm present (patient screened but denied any past or current self-harm ideation/behavior)
  • 2, Yes, current self-harm (patient screened and endorsed self-harm ideation/behavior currently)
  • 3, Yes, past self-harm ideation/behavior only (patient screened and endorsed self-harm ideation/behavior in past, but not currently)
  • 4, Yes, self-harm, unknown time (patient screened and endorsed self-harm ideation/behavior, but unclear if past or current)
## Screening Evaluation: Results

<table>
<thead>
<tr>
<th>Site #</th>
<th>Phase 1: total # charts screened</th>
<th>Phase 2: total # charts screened</th>
<th>Phase 3: total # charts screened</th>
<th>Total # charts screened</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8,066</td>
<td>5,155</td>
<td>12,052</td>
<td>25,273</td>
</tr>
<tr>
<td>2</td>
<td>15,950</td>
<td>8,079</td>
<td>17,998</td>
<td>42,027</td>
</tr>
<tr>
<td>3</td>
<td>6,798</td>
<td>4,801</td>
<td>7,541</td>
<td>19,140</td>
</tr>
<tr>
<td>4</td>
<td>9,934</td>
<td>8,873</td>
<td>12,571</td>
<td>31,378</td>
</tr>
<tr>
<td>5</td>
<td>14,870</td>
<td>2,867</td>
<td>4,569</td>
<td>22,306</td>
</tr>
<tr>
<td>6</td>
<td>15,174</td>
<td>11,065</td>
<td>13,633</td>
<td>39,872</td>
</tr>
<tr>
<td>7</td>
<td>10,786</td>
<td>7,868</td>
<td>10,021</td>
<td>28,675</td>
</tr>
<tr>
<td>8</td>
<td>12,679</td>
<td>8,507</td>
<td>6,935</td>
<td>28,121</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>94,257</strong></td>
<td><strong>57,215</strong></td>
<td><strong>85,320</strong></td>
<td><strong>236,792</strong></td>
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Key Results 1:
Documented screenings for suicide risk significantly increased
Key Results 2: Detection of suicidal ideation or behavior significantly increased

<table>
<thead>
<tr>
<th>Phase</th>
<th>Detection rate</th>
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<tbody>
<tr>
<td>Phase 1</td>
<td>2.9%</td>
</tr>
<tr>
<td>Phase 2</td>
<td>5.2%</td>
</tr>
<tr>
<td>Phase 3</td>
<td>5.7%</td>
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Key Results 3:
Time series plots revealed significant site heterogeneity in slope, or rate of adoption, and final screening percentage.
Patient Safety Screener toolkit

- To be launched June 2018

- Prepared in partnership with the Suicide Prevention Resource Center

- Intended to:
  - Support clinicians and institutions to apply the PSS-3 in practice
  - Encourage the adoption and implementation of primary screening for suicide in acute care settings

http://www.sprc.org/micro-learnings/patientsafetyscreener
Patient Safety Screener toolkit

- Contains a microlearning video on how to use the PSS-3

- Accompanying materials include:
  - Tip sheets on implementation
  - Job aids
  - Training guidance
  - Role play videos
Use this pocket card as a job aid or training tool when implementing universal suicide screening in acute care settings.

The Patient Safety Screener can be used during the Triage or Primary Nursing Assessment in acute care settings. Ask all three screening questions. Do not skip items.

**Introduction**

“Now I’m going to ask you some questions that we ask everyone treated here, no matter what problem they are here for. It is part of the hospital’s policy, and it helps us to make sure we are not missing anything important.”

<table>
<thead>
<tr>
<th>Depression</th>
<th>1. Over the past 2 weeks, have you felt down, depressed, or hopeless?</th>
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<tbody>
<tr>
<td></td>
<td>□ Yes  □ No  □ Refused  □ Patient unable to complete</td>
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<tr>
<th>Suicidal ideation</th>
<th>2. Over the past 2 weeks, have you had thoughts of killing yourself?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>□ Yes  □ No  □ Refused  □ Patient unable to complete</td>
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<tr>
<th>Suicide attempt</th>
<th>3. Have you ever attempted to kill yourself?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>□ Yes  □ No  □ Refused  □ Patient unable to complete</td>
</tr>
<tr>
<td>...3a. If yes to item 3, ask: when did this last happen?</td>
<td></td>
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| □ Within the past 24 hours (including today) | □ More than 6 months ago |
| □ Within the last month (but not today) | □ Refused |
| □ Between 1 and 6 months ago | □ Patient unable to complete |

**TIPS**

- Ask all questions exactly as worded
- Do not bundle or re-word questions
- Treat the patient with empathy

**Patient Safety Screener (PSS-3) Pocket Card**

The Patient Safety Screener 3 (PSS-3) has been validated in prospective studies and is detailed in Boudreaux et al. (2015)
Conclusions

• Suicide rates continue to rise and an increasing number of suicidal patients are seeking treatment in the ED

• Using a performance improvement approach, it is feasible to dramatically increase suicide risk screening and detection during routine care

• Improved screening practices will help better detect suicide risk and facilitate necessary care
Questions?

Resources


