Detecting and Managing Suicidal Ideation in Medical Settings

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Senior Investigator, VISN 19 Suicide MIRECC
Future of Mental Health Services

• Most mental health problems never reach MHS
  – Detection
  – Stigma
  – Access

• Need for care in other settings
  – How?
  – Integrated care
Suicide Prevention

• Suicidal ideation is common in other settings
  – Most who die by suicide not engaged with MH
  – JCAHO is driving organizations to identify risk
• Goal? Attempts? NSSI? Completions?
• Suicide risk assessment is “art”
  – Sensitivity without specificity, ie, non-zero
• No proven brief interventions
• Limited access to specialists
• Lack of confidence leads to disinterest
Indicated Screening, Primary Care

Detection rates 21-52%

- French GP’s prescribing antidepressants \(^1\)
  - 52% detection
- US FP/IM, 4 sites, 298 taped standard pts \(^3\)
  - 30.6% inquired about SI
- US HMOs, 21 practices, 880 pts, 232 SI \(^2\)
  - 20.5% detection in usual care
  - 40.7% after depression QI team

Work Force Preparation

Qualifications are low and training is poor

- Psychiatry: 91% - mean 3.6 hrs, 27% skills
- Psychology: 50%
- Social Work: less that 25%
- Marriage and Family Therapists: 6%
- Counselors: 2%
- No state Continuing Education requirements

Questions

• Should other health care settings screen
  – Mandated?
  – USPSTF says “insufficient evidence”

• Universal, selected or indicated
  – Target?
  – How frequently?

• Risk stratification
  – Minimum assessment, threshold
  – Immediate interventions, access to specialty care
  – Legal issues
Collaboration

• Obstetrics and Gynecology
  – Abby O. Lozano, M.D. and Cheryl Chessick, M.D.

• Family Medicine
  – Rob Keeley, M.D., M.P.S.H., Kim Nordstrom, M.D.,
    Matt Engel, M.P.H. and David Brody, M.D.

• Emergency Medicine
  – Emmy Betz, M.D. and Michael H. Allen, M.D.
Disclaimer

• The contents of this presentation do not necessarily represent the views of the Department of Veterans Affairs or the United States Government.

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PROMISE Clinic

- Perinatal Resource Offering Mood Integrated Services and Evaluation Clinic

- Multidisciplinary clinic—Psychiatry, OBGYN, Midwifery, Psychology, Nursing

- 263 women screened
Referral Process

• Pts initially seen and screened by OBGYN or Midwifery
• EPDS at initial evaluation
• Referred to PROMISE clinic if positive screen, suicidal ideation, history of psychiatric disease, medication management
Screening Tools

Edinburgh Postnatal Depression Scale (EPDS)

Q10: The thought of harming myself has occurred to me.
Patient Health Questionnaire (PHQ-9)

Q9: “Thoughts that you would be better off dead, or of hurting yourself in some way”

<table>
<thead>
<tr>
<th>patient health questionnaire (PHQ-9)</th>
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<tbody>
<tr>
<td>Over the past 2 weeks, how often have you been bothered by any of the following problems? (use “✓” to indicate your answer)</td>
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<tr>
<td>1. Little interest or pleasure in doing things</td>
<td>0</td>
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<tr>
<td>2. Feeling down, depressed, or hopeless</td>
<td>0</td>
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<tr>
<td>3. Trouble falling or staying asleep, or sleeping too much</td>
<td>0</td>
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<tr>
<td>4. Feeling tired or having little energy</td>
<td>0</td>
</tr>
<tr>
<td>5. Poor appetite or overeating</td>
<td>0</td>
</tr>
<tr>
<td>6. Feeling bad about yourself—or that you are a failure or have let yourself or your family down</td>
<td>0</td>
</tr>
<tr>
<td>7. Trouble concentrating on things, such as reading the newspaper or watching television</td>
<td>0</td>
</tr>
<tr>
<td>8. Moving or speaking so slowly that other people could have noticed, or the opposite—being so fidgety or restless that you have been moving around a lot more than usual</td>
<td>0</td>
</tr>
<tr>
<td>9. Thoughts that you would be better off dead, or of hurting yourself in some way</td>
<td>0</td>
</tr>
</tbody>
</table>

**add columns:**
- 0
- 1
- 2
- 3

**TOTAL:**

10. If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

- Not difficult at all
- Somewhat difficult
- Very difficult
- Extremely difficult
Suicidal Ideation Study

115 screened with PHQ-9

- 94 had no SI (82%)
  - 43 returned for f/u (45.7%)
  - 51 did not return for f/u (54.3%)

- 21 had SI (18%)
  - 12 returned for f/u (50.0%)
  - 7 did not return for f/u (33.3%)

2 referred out

6 had f/u at UCH (85.7%)
1 had f/u at referral site

Demographics

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>%</th>
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<tbody>
<tr>
<td>Caucasian</td>
<td>52.4%</td>
</tr>
<tr>
<td>African American</td>
<td>19%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>14.3%</td>
</tr>
<tr>
<td>unknown</td>
<td>9.5%</td>
</tr>
<tr>
<td>other</td>
<td>4.8%</td>
</tr>
</tbody>
</table>

| Avg. pregnancies       | 2.61  |
| Lifetime spontaneous abortion | 33%    |
| Lifetime preterm delivery | 28.5% |
| Antepartum             | 76.2% |
| Avg. weeks pregnant    | 20.78 |
| Postpartum             | 23.8% |
| Avg. weeks postpartum  | 5.2   |

A. O. Lozano, S. Appleton, C. Chessick, J. Sheeder, E. Schwartz, S. Scott, R. Werthwein, S. Dimidjian
Prevalence of SI

• Approximately 10 to 20% of women experience depression either during pregnancy or in the first 12 months postpartum.

• 5-14% of women expressed suicidal ideation during the perinatal period (Lindahl et al. 2005)
High Risk Patients

• History of major mental illness
• Past history of self harm
• Long treatment history
• Multiple medical issues (pain/polypharmacy)
• History of loss of child
• Isolation/poor social support
Interventions

1. Family involvement
2. Formal safety plan
3. Collaborate with providers
4. Patient navigator
Problems Encountered

1. Stigma
2. Poor patient follow up
3. Poor communication with ED
4. Limited clinic resources
5. Limited community resources
Next Steps

• Increase education on maternal depression
• Train OBGYN department regarding screening/management of SI
• Increasing clinic capacity
• Identify common factors that we can affect (possible maternity home group model?)
• Pilot program: EDPS during 2\textsuperscript{nd} trimester, delivery, and 6 wks postpartum; goal of screening in all trimesters
To Screen Or Not To Screen?

• Screening limited by availability of mental health resources

• If no resources, assess:
  ✓ Imminent danger? Means? Intent?
  ✓ Safety plan?

• If still concerned, send to Emergency Department
Suicide Screening in Primary Care

Robert Keeley, MD, MPSH
Matthew Engel, MPH
45% of suicide decedents worldwide have visited primary care in the previous month, 75% in last year (Luoma 2002)

About 16-20% within 1 week (Pirkis 1998)

Up to 41% may have had an inpatient psychiatric stay in the year previous

About 11% may have visited community-based mental health services in previous month, and 4% in previous day
Suicide and Primary Care

• Older decedents more likely overall to have visited primary care in previous month
  – 58% of persons aged 55 years or older
  – 23% of persons aged 35 and younger
  – Limitation – old data, study written in 2002

• We screen for many other leading causes of death (colon cancer, hypertension), so WHY NOT screen systematically for suicidal risk?
Screening in Primary Care

- Most of primary care clinicians screening for suicidal ideation do so as part of a screen for major depression.
- USPSTF recommends screening for major depression ONLY IF effective depression interventions with monitoring are available.
- Depression is a risk factor for suicidal ideation, but not necessarily a leading risk factor for suicidal behavior.
Current Approaches to Screening in Primary Care

- Lack of formal evidence-based recommendations explicit to suicidal ideation
- No gold standard screening instrument
- Q9 from the PHQ-9
  - Over the last 2 weeks, how often have you had thoughts you would be better off dead, or of hurting yourself in some way?
Challenges to Screening in Primary Care

• Lack of standardized screening instrument
• Limited research evidence that screening for suicidal ideation prevents suicide
• In some settings there is a lack of adequate interventions for high risk patients
• Persistent stigma that screening may induce suicidal ideation
Competing demands

“If you actually took the time to do all of the ‘recommended preventive services’ with every patient and have all of the necessary conversations and address all of the concerns necessary, you would be working 18 hours a day”

-Agency for Health Research and Quality Clinical Advisor
Screening at Denver Health

• The Denver Health (DH) System of community clinics cares for about 30% of the population in Denver

• DH Primary Care does not screen all patients
  – New systematic alcohol (CAGE) and drug abuse screen, but no SI screen
  – Focused screening in the context of identified emotional/psychosocial distress
Behavioral Health Integration at Denver Health

• 5 of 9 community clinics have behavioral health clinicians (BHCs, Ph.D., Psy.D.)

• BHCs screen for suicidal ideation on all patients referred to them for emotional distress
  – assessment of suicidal ideation versus nonsuicidal morbid ideation
  – If suicidal ideation then assess risk and protective factors
Screening by Primary Care Clinicians

• Anecdotal information
• Some screening for patients with mental disorder, emotional distress, substance abuse
• Relatively clear protocol for the rare patient at high risk or with active ideation
  – Contact on-call psychiatrist and/or transfer patient to the psychiatric emergency room
  – Place 72 hour mental health hold if necessary
Screening as part of a depression RCT at Denver Health

• 3027 different English-speaking persons aged 18+ contacted between 4/1/10 and 3/31/12 2 days prior to a primary care visit

• Invited to participate in a process to determine eligibility for a depression study

• Excluded immediately for current depression treatment, bipolar d/o, no phone, and life-threatening physical comorbidity
Screening as part of a depression RCT at Denver Health

- 1161 screened with a 2-question instrument (PHQ-2) assessing anhedonia and depressed mood
- 443 scoring above threshold (2+ points out of 6, at least 2 points on either question)
- 389 took full PHQ-9
  - Q9 used as a screen for suicidal ideation
Screening as part of a depression RCT at Denver Health

- 97 (25% of 389) endorsed any 2-week ideation
- Similar to 33% with any SI, recent VA study (Yano EM 2012)
- Further assessment with 5-question MacArthur instrument
MacArthur Suicide Risk Assessment Questions

1. In the past month, have you made any plans or considered a method that you might use to harm yourself?
2. Have you ever attempted to harm yourself?
3. There’s a big difference between having a thought and acting on a thought. Do you think you might actually make an attempt to hurt yourself in the near future?
4. In the past month have you told anyone that you were going to commit suicide, or threatened that you might do it?
5. Do you think there is any risk that you might hurt yourself before you see your doctor the next time?

*If ‘yes’ to any question then stratify to high risk.*
Increasing Assessment for Suicidality in Primary Care?

- Most primary care clinicians do not routinely assess/screen for suicidality (Graham 2011)
  - On-site Mental Health services increase confidence to screen
  - Female providers with lower confidence in assessing and treating suicidality
  - Increasing confidence during residency for primary care clinicians may increase screening
Unanswered Questions

• Need better, more recent U.S. data on rates of contact with mental health and with primary care over months prior to death

• Need more data on “mechanisms of action” in contacts between health care providers and at-risk individuals, and on potential protective processes (Luoma 2002)
Suicide Screening in Emergency Departments

Emmy Betz, MD, MPH
Assistant Professor, Emergency Medicine
University of Colorado School of Medicine
Joint Commission NPSG 15

- NPSG.15.01.01
- **Identify patients at risk for suicide**
- Applies to psychiatric hospitals and patients being treated for emotional or behavioral disorders in general hospitals, including EDs
- Conduct a risk assessment that identifies specific patient characteristics and environmental features that may increase or decrease the risk for suicide.
- Address the patient’s immediate safety needs and most appropriate setting for treatment.
- When a patient at risk for suicide leaves the care of the hospital, provide suicide prevention information (such as a crisis hotline) to the patient and his or her family.

Current Local Practices

- As of March 19, 2012, all patients at the UCH ED screened

<table>
<thead>
<tr>
<th>Question</th>
<th>Action</th>
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<tbody>
<tr>
<td>1. Over the past 2 weeks, have you felt down, depressed, or hopeless?</td>
<td>□ Yes □ No □ Refused □ Patient unable to complete</td>
</tr>
<tr>
<td>2. Over the past 2 weeks, have you had thoughts of killing yourself?</td>
<td>□ Yes □ No □ Refused □ Patient unable to complete</td>
</tr>
<tr>
<td>3. Have you ever attempted to kill yourself?</td>
<td>□ Yes □ No □ Refused □ Patient unable to complete</td>
</tr>
<tr>
<td>4. If Yes to item 3, ask: when did this last happen?</td>
<td>□ 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</td>
</tr>
<tr>
<td>5. Do you have a plan to hurt or kill yourself?</td>
<td>□ Yes □ No □ Refused □ Patient unable to complete □ Physician notified □ Security notified</td>
</tr>
</tbody>
</table>
Emergency Dept Safety and Follow-up Eval Study: ED SAFE

**Aims:** Test Universal Screening and Telephonic Intervention

**Screening Introduced**

**Treatment As Usual**
- Provide usual and customary screening and care

**Screening Alone**
- Use Patient Safety Screener, sites handle positive screens per usual and customary care

**Intervention Introduced**

**Brief ED Intervention**
- (1) Question, Persuade, Refer (QPR) by primary nurse
- (2) Mental health evaluation (if appropriate)

**Post-ED Counseling**
- (1) Coping Long-term with Attempted Suicide Program (CLASP-ED)
- (2) Up to 7 sessions with patient, 4 with significant other

**Screening Evaluation**

**Primary Outcome**
- (1) Rate of detection of ideation/behavior

**Secondary Outcomes**
- (1) Receipt of a personalized safety plan
- (2) Behavioral health engagement
- (3) Suicide behavior

**Care-chain Evaluation**

**Primary Outcome**
- (1) Suicide behavior

**Secondary Outcomes**
- (1) Receipt of a personalized safety plan
- (2) Behavioral health engagement
Occult SI in 3-11.6% of ED Visits

**Single Sites, Various Indices of SI**

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<tr>
<th>Study</th>
<th>Definition of Ideation</th>
<th>Freq (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boudreaux (2005)</td>
<td>Thoughts of, wanted to commit suicide</td>
<td>20/243   (8)</td>
</tr>
<tr>
<td>Boudreaux (2006)</td>
<td>Thoughts of, wanted to commit suicide</td>
<td>11/178   (6)</td>
</tr>
<tr>
<td>Boudreaux (2008)</td>
<td>Thoughts of, wanted to commit suicide</td>
<td>12/476   (3)</td>
</tr>
<tr>
<td>Claassen (2005)</td>
<td>Thoughts of death, better off dead, Thinking about or wanted to kill self</td>
<td>185/1590 (11.6)</td>
</tr>
<tr>
<td></td>
<td>Planning detected by providers</td>
<td>134/1590 (8.4)</td>
</tr>
<tr>
<td>Ilgen (2009)</td>
<td>Better off dead, hurting self (PHQ9, #9)</td>
<td>447/5641 (8)</td>
</tr>
</tbody>
</table>
Occult SI in 3-11.6% of ED Visits

Multicenter

<table>
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<tr>
<th>Study</th>
<th>Definition of Ideation</th>
<th>Freq (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allen (2010)</td>
<td>CSSRS Passive SI</td>
<td>79/1068  (7.5)</td>
</tr>
<tr>
<td></td>
<td>CSSRS Active SI</td>
<td>24/1068  (2.25)</td>
</tr>
<tr>
<td></td>
<td>Any SI and history or attempt</td>
<td>12/1068  (3.3)</td>
</tr>
<tr>
<td>ED-SAFE Retro</td>
<td>Any mention of suicidal behavior</td>
<td>23 / 800 (2.9)</td>
</tr>
<tr>
<td>ED-SAFE TAU</td>
<td>Any mention of suicidal behavior</td>
<td>2771 / 94,385 (2.9)</td>
</tr>
</tbody>
</table>
Current Practice

- ED-SAFE retrospective (n=800):
  - 5% all ED patients screened
  - 2.9% of all ED patients had SI or behavior
    - Only 36% were evaluated by a mental health professional

- Patients screened:
  - 90% reported psychiatric problem at triage
  - 59% had current or past SI or behavior
  - 21% reported self-harm behavior at triage
  - 33-36% had documentation of alcohol or drug abuse
  - 92% had 1+ characteristic suggesting ↑ suicide risk
    - male, age 65+, psych complaint, history of substance misuse

Does screening identify high risk patients?

• ED-SAFE Treatment as usual (n=94,385)
  – Screened: 26% of all ED patients screened
  – SI or suicidal behavior: 2.9%
    • same as retrospective!

• Local (UCH) changes with universal screening:
  – Screened: Increased from 16% to 68%
  – Documented self-harm: No change (also 3%!)
Care of Suicidal Patients in EDs

• Begins with assessment by ED physician

• If ED physician concerned, next step varies:
  – On-site psychiatry or trained social workers
    (available 24/7 vs limited hours)

  versus

  – Off-site psychiatry or mental health team
  
  • This is more common in rural & smaller hospitals, and
    causes issues because of delays in patient care and
    concerns about long lengths of stay
Problems

• Limited inpatient beds and outpatient resources
  → long ED waits for suicidal patients under less-than-ideal circumstances

• Limited mental health professional availability
  – Especially in rural areas or at smaller hospitals

• With time pressures and growing volume, these issues add to provider frustration
Problems

- **Provider training**
  - ED physicians trained to ask about SI or suicidal behavior but *not* trained in risk assessment
  - Traditionally have left further risk stratification up to mental health experts

- **ED-SAFE Provider Survey (n=631)**
  - Confident in skills to screen for suicidal thoughts or behavior...but not in skills for risk assessment, counseling, safety plans or finding referral resources
  - Also concerns about staffing, support by leadership, and clinical priorities
Provider Self-Confidence in Skills for Care of ED Patients, By Provider Type (n=631)

From ED-SAFE Provider Survey (phase 1); *P≤0.05, **P≤0.01, ***P≤0.001 under Pearson chi-square
Provider Opinions of Local ED Environment; by Provider Type (n=631)

- **Mental Health Staffing is Sufficient***: From ED-SAFE Provider Survey (phase 1); *P≤0.001 under Pearson chi-square

- **ED Leadership Supports Suicide Interventions***

- **Suicidal Patient Treatment is a Top Clinical Priority**

*P≤0.001 under Pearson chi-square
Next Steps: Many Challenges

- Need to decide who will do suicide screening and assessment
  - Lot of variation in the need
    - Kaiser in CA lowest prevalence, public hospitals in CO highest
  - Lot of variation in ED capability
    - ED culture, provider knowledge, attitudes
      - Very focused generally, not comfortable with mental health
    - Size, academic, public/private, urban/rural, capitation
  - Whoever it is will need more training!

- Need evidence-based ED tools for
  - Rapid risk assessment
  - Stratification and thresholds for hospital versus referral
  - ED treatment

- Need better access to inpatient or outpatient mental health resources
Risk Scoring: Delirium

- Older ED patients, $\geq 1$ delirium risk factors
- Screen 165 to detect 23 and miss 1

Discussion

• Where should screening occur?
• What does that look like?
• Low versus high risk?
• What do we need to take care of people?
• Training?