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Data-Driven Quality Improvement in Zero Suicide

May 2, 2017
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Moderator

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Suicide Prevention Resource Center
Suicide Prevention Resource Center
Promoting a public health approach to suicide prevention

The nation’s only federally supported resource center devoted to advancing the National Strategy for Suicide Prevention.

www.sprc.org
#ZeroSuicide

@ZSIInstitute
@SPRCtweets
WHAT IS ZERO SUICIDE?
Zero Suicide is...

- Embedded in the *National Strategy for Suicide Prevention* and *Joint Commission Sentinel Event Alert #56*.
- A focus on error reduction and safety in health care.
- A framework for systematic, clinical suicide prevention in behavioral health and health care systems.
- A set of best practices and tools including [www.zerosuicide.com](http://www.zerosuicide.com).
Elements of Zero Suicide

Create a leadership-driven, safety oriented culture

Suicide Care Management Plan
- Identify and assess risk
- Use effective, evidence-based care
- Provide continuous contact and support

Develop a competent, confident, and caring workforce

CONTINUOUS

APPROACH

QUALITY

IMPROVEMENT
# Zero Suicide Data Elements Worksheet

<table>
<thead>
<tr>
<th>Measure</th>
<th>Numerator</th>
<th>Denominator</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Screening</td>
<td>Number of clients who received a suicide screening during the reporting period</td>
<td>Number of clients enrolled during the reporting period</td>
</tr>
<tr>
<td>2 Assessment</td>
<td>Number of clients who screened positive for suicide risk and had a comprehensive risk assessment (same day as screening) during the reporting period</td>
<td>Number of clients who screened positive for suicide risk during the reporting period</td>
</tr>
<tr>
<td>3 Safety Plan Development</td>
<td>Number of clients with a safety plan developed (same day as screening) during the reporting period</td>
<td>Number of clients who screened and assessed positive for suicide risk during the reporting period</td>
</tr>
<tr>
<td>4 Lethal Means Counseling</td>
<td>Number of clients who screened and assessed positive for suicide risk and were counseled about lethal means (same day as screening) during the reporting period</td>
<td>Number of clients who screened and assessed positive for suicide risk during the reporting period</td>
</tr>
</tbody>
</table>
Zero Suicide Website

Access at: www.zerosuicide.com
Learning Objectives

By the end of this webinar, participants will be able to:

1) Understand how data collection can be used to enhance the care that health and behavioral health care organizations provide to individuals at risk of suicide.

2) Describe the current status of quality improvement measures in the suicide prevention field.

3) Describe how one organization used data to improve suicide risk assessment practices.
Speakers

**Dr. Brian Ahmedani**  
Henry Ford Health Systems

**Dr. Richard McKeon**  
Substance Abuse and Mental Health Services Administration

**Dr. Bradley Steinfeld**  
Kaiser Permanente of Washington
Dr. Brian K. Ahmedani
Director of Psychiatry Research
Henry Ford Health Systems
Do we really need to do math?

- There’s a reason you learned math in school.
- You can use it to drive suicide prevention!
Suicide and Healthcare Settings

- Most people make a healthcare visit before suicide.
- Greatest risk for suicide is following psychiatric hospitalization (other research).
- Greatest number of suicides occur among general medical patients.
- Less than 50% of patients have MH diagnosis before suicide.
Suicide and Healthcare Settings
The Henry Ford Story

- Institute of Medicine Report: “Crossing the Quality Chasm”
- Robert Wood Johnson Foundation Grant Opportunity Finalist
  - Application for ‘Perfect Depression Care’ in Behavioral Health Services Department at HFHS
- “Blues Busters” Team & Governing Board (Led by Dr. Ed Coffey)
  - Zero Suicides becomes the goal
  - Patients, Leaders, Clinical Providers, Evaluators
- 75-80% suicide rate reduction in BHS
  - Stable suicide rate for all Health System Patients despite a ~30% increase statewide
Ongoing Evaluation

- “Quantitative” Data (we’re using numbers):
  - Needs Assessment
  - Tracking Fidelity to the Implemented Model
  - Tracking Outcomes
  - Informing Decisions about Ongoing Quality Improvement
  - Root-Cause Analysis
- “Qualitative” Data (we’re using expert voices/stories):
  - Health System Leaders and Clinicians
  - Patient Advisors (People with Lived Expertise)
Transforming Care Based on Outcome Data

- Suicide Rate per 100,000 for the full health system:
  - Mean: 6.38; p=0.23
  - BHS program may have offset 30% increase in State rate, but did not reduce overall suicide rate – Need to Expand to Primary Care
Denominators

- Track outcomes that make sense for your system:
  - Rolling rates vs. annual rates vs. person-month rates
  - All health system patients
  - All patients who screen positive for suicide
  - All behavioral health patients
  - Health plan population members
  - Utilization-based denominator (based on visits)
  - Community rates
Transforming Care Based on Process Data

- Performance on Perfect Depression Care / Zero Suicide at Henry Ford has actually been measured based on fidelity (not outcomes).
- Fidelity – Is our care TEAM completing the processes as designed?
  - Locally defined based on the chosen Zero Suicide interventions.
- This is the REAL internal evaluation tool for providers and staff.
Fidelity & Outcomes

- Zero Suicide Components can be measured for fidelity
  - % of eligible patients screened.
  - % with 7-day follow-up visit after positive screen.
  - % with safety plan.
  - % with means counseling.
  - % with behavioral health visit.
  - % with second behavioral health visit.
  - % with 24-48 hour contact after inpatient discharge.
  - % receiving specialty suicide treatment.
  - % of staff trained.

- 6- or 12-month change in:
  - Organizational Self-Study Items.
  - Workforce Survey Items.
Designing and Improving Care Based on Stakeholder Voices

• Patient Partners (and families) describe barriers and strengths.
• Providers share clinical barriers and strengths.
• Leaders describe management and system barriers and strengths.
Audience:

Using the chat box please share one key takeaway from Brian’s presentation.
Dr. Richard McKeon
Chief of the Suicide Prevention Branch
Substance Abuse and Mental Health Services Administration
SAMHSA Suicide Prevention

Clinical Quality Measure Development
Suicide Prevention and Quality Measures

- Measuring quality is playing an increasingly important role in the health care system.
- There are only two approved quality measures for suicide prevention (adult and youth risk assessment if major depression).
- There is a need for a more robust portfolio of suicide prevention quality measures.
- SAMHSA contracted with Battelle group.
A peer-reviewed literature search was conducted to identify:

- Facilitators to developing a clinical quality measure focused on an outcome of reduced suicide deaths
- Challenges to suicide prevention interventions within clinical practice
- Leading practices in suicide prevention intervention within clinical practice
- Data and metrics to evaluate clinical suicide prevention interventions
Information Gathering

Environmental Scan included gap analysis of:

• Current endorsed clinical quality measures.
• National clinical quality measure inventories.
• Local suicide prevention interventions with the same or similar constructs to those of the Zero Suicide Initiative.
Information Gathering

Key Informant Interviews and Technical Expert Panel:

• Conducted with internal and external stakeholders with expertise in suicide data, Zero Suicide, and clinical suicide prevention interventions.

• Key informants were from various backgrounds, which encompassed practice, policy, current implementers of the Zero Suicide initiative, academia, and Veterans Affairs.
Barriers

Training and Education:

• Literature review and key informant interviews pointed to gaps in, and a lack of, clinician education on how to screen for suicidal thoughts and behaviors.

• Gaps include a reported lack of confidence among clinicians on how to provide effective, collaborative care for suicidal patients.

• Without the appropriate training and education, clinicians may feel ill prepared to report on one or more suicide prevention quality measures.
Barriers

Tools and Recommendations:

• Peer-reviewed literature points to more than a dozen suicide risk screening tools.

• Several key informants and subject matter experts stated that clinicians require screening and assessment tools that can be easily integrated into the healthcare system.
Barriers

Number of Quality Measures:

• More than 250 clinical quality measures in the Merit-Based Incentive Payment System (MIPS).
• 22 clinical quality measures in the Inpatient Psychiatric Facility Quality Reporting (IPFQR) Program.
• Measures that are not harmonized with current clinical quality measures may be more difficult to institutionalize within a healthcare system.
Barriers

Data Availability and Accessibility:

• Health system administrators, and clinicians, indicate the low number of suicide deaths within their healthcare systems would prevent a meaningful assessment of suicide rates.

• Additional data barriers include underreporting and under documentation of self-harm or suicide attempts, as well as timely access to state death data.

• A clinical quality measure requiring death data may be difficult to implement at the clinician or healthcare system level.
Facilitators

National Goals, and Guidance:

• Reports such as the *National Strategy for Suicide Prevention* and the Suicide Prevention Resource Center’s (SPRC) Zero Suicide initiative have increased the emphasis on making suicide prevention a core component of healthcare.

• These reports along with others such as the National Action Alliance *Suicide Care in Systems Framework*, provide national goals, objectives, and metrics, which can facilitate the development of meaningful clinical quality measures.
Facilitators

Empirical Evidence on Risk Factors:

• Growing body of evidence shows that risk factors for suicidality include, but are not limited to:
  – Depression, veteran status, male gender, chronic pain, substance abuse, homelessness, history of self-harm, and/or a feeling helplessness.

• Acknowledgement of these risk factors by individuals, families, communities, and healthcare providers can increase the number of those at risk who access suicide screening and mental healthcare.
Facilitators

Cost Benefit:

- Suicide and suicide attempts cost the United States between $58 and $94 billion per year.
- Suicide prevention decreases years of potential life lost (YPLL), and in turn decreases productivity losses.
- Suicide attempt prevention reduces treatment costs to healthcare systems and healthcare plans.
Recommendations

Training and Education:

• Health system and clinician practice change requires an understanding of the influence providers can have on reducing the suicide rates in the United States.

• Measure implementation should be accompanied by education and outreach to increase the likelihood and impact of measure use.

• Effective dissemination of suicide prevention methods and best practices would include a combination of professional schools, specialty societies, and patient advocacy groups.
Recommendations

Consensus on Screening Tools:

• A consensus based process to standardized screening tools that are embedded in the clinician workflow will increase the likelihood that any resulting measure will have scientific acceptability and feasibility.
Recommendations

Measure Harmonization:

- Healthcare systems and clinicians report the results of hundreds of clinical quality measures to payers, regulators, and professional organizations.
- To ensure measure use, there is a need to:
  - Reduce clinician burden by harmonizing and reducing variability through alignment in current measures.
  - Ensure that any new measures are harmonized and aligned.
- Any new measures introduced into the system should meaningfully affect outcomes of care and align with current standards of care.
Recommendations

Measurement Science:

• Apply advance measurement science methods to increase the information context and effective sample size at the appropriate level of attribution.

• Ensure the reliability, validity and intended use of suicide outcome measures (e.g. mortality rates).
Recommendations

Portfolio of Clinical Quality Measures:

• Clinical quality measures offer one pathway to support providers in their work to stop suicide deaths in the United States.

• To impact the entire healthcare system, process and outcome measures are needed and should facilitate measurement within primary care, behavioral health, inpatient and outpatient settings, and health plans.

• Consider the benefit of developing composite measures, which may focus measure combinations such as, screening and assessment, or suicide attempts and suicide deaths.
Recommendations

Consensus Development Process:

• The Centers for Medicare and Medicaid Services (CMS), other large payers, and/or the American Board of Medical Specialties (ABMS) would have to support broad use of these clinical quality measures to maximize uptake.

• Approval would follow consensus endorsement through the National Quality Forum (NQF) and acceptance into federal programs and the CMS Clinical Quality Measure Inventory.
PROPOSED CLINICAL QUALITY MEASURES
Quality Measure Recommendations:

Process Measures

- Percentage of patients aged 18 years and older with a suicide risk screen completed within the last 12 months.
- Percentage of patients aged 18 years and older who score a positive result on validated suicide risk screening tool who receive an assessment during the same healthcare visit.
- Percentage of patients aged 18 years and older who score a positive result on validated suicide risk assessment tool who receive a referral to a behavioral health provider during the same healthcare visit.
Quality Measure Recommendations:
Process Measures

• Percentage of patients aged 18 years and older who receive a follow-up contact and suicide risk assessment within 72 hours of discharge from a behavioral health facility or emergency department.

• Percentage of patients aged 18 years and older with a positive screen and assessment who receive a same day shared-decision making safety plan.
Quality Measure Recommendations: Intermediate Outcome Measures

- Utilization: Percentage of patients 18 years or older with an emergency department visit or inpatient hospitalization with a suicide risk factor within the last 12 months.
Quality Measure Recommendations: Outcome Measures

- Percentage of patients 18 years and older who attempt suicide within 12 months of a healthcare visit.
- Percentage of patients 18 years and older who die by suicide within 12 months of a healthcare visit.
- Composite Measures: Percentage of patients 18 years and older who were seen by a healthcare provider within 12 months of a death resulting from suicide.
Audience:

Using the chat box please share one key takeaway from Richard’s presentation.
Presenter

Dr. Bradley Steinfeld
Assistant Director of Behavioral Health Services
Kaiser Permanente of Washington
A Little History

- Kaiser Permanente/Group Health BHS has had a long-standing committee to review patients who died by suicide.
- Historically, the majority of patients were not “active” BHS patients.
- In 2010, a shift to more of these patients being “active.”
- In 2011, we reviewed the literature, talked with other health care systems (Henry Ford, VA) to identify best practice and key elements of implementation.
Key Implementation Elements

• Keep it simple.
• Keep it consistent.
• Focus on lethal means removal as best evidence of suicide risk prevention.
• Other elements of suicide risk prevention are best practices and not necessarily evidence based.
• Get strong organizational sponsorship.
• Zero Suicide culture shift takes time.
Risk of Death by Suicide Within One Year by PHQ-9 Question 9 Rating

A patient responding “nearly every day” is 5.5 times more likely to die by suicide than patient responding “not at all”
Key Elements of Industry Best Practice

- Cultural belief that every suicide can be prevented
- Screening for suicide at every visit
- Structured suicide assessment for patients identified as at risk
- Crisis response plan including lethal weapons removal
New Suicide Risk Assessment Workflow

Pt scores 2 or 3 on PHQ Question 9

Counsel for Lethal Means Removal

Administer Columbia Suicide Severity Scale

Develop Crisis Response Plan for all pts who score ≥3 on Columbia

Enter results into EMR Flowsheet
New Suicide Risk Assessment Workflow in Primary Care

- Universal annual screening using progress tool
  - Administer PHQ9 for Depression Management
    - Pt scores 2 or 3 on PHQ9 Question 9
    - Pt scores ≥3 on Columbia Suicide Severity Scale
  - Administer Columbia Suicide Severity Scale
  - Warm hand off to Integrated BH Specialist
  - Crisis planning & Treatment Engagement
Tracking Zero Suicide Implementation: Measurement Principles

• Ideally: Data on number of suicide deaths and attempts.
• Reality: Low frequency of data, significant time lag, not immediately actionable, and often not accessible or reliable.
• Since focus was on process improvement, measures focused on process improvement.
• Should be easy to measure (integrate with EMR) and actionable (broken down to clinic/individual level as necessary).
% Behavioral Health Visits with PHQ-9

(Average 8,500 visits per month)

Target = 80%
Patients score 2 or 3 on Q9 of PHQ-9 with a suicide risk assessment (SRA)
Percent of BHS Visits
Score 2 or Greater on PHQ-9 Suicide Question
with Standardized Suicide Risk Assessment (C-SSRS)

Average Performance = 91%; Baseline Performance = 20%
Individual Tracking of SRA Performance

- Individual tracking report distributed monthly to managers
- This is used for education/reminder of standard work
- SRA Performance is part of incentive compensation for BHS medical staff

<table>
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<tr>
<th>Clinic</th>
<th>Pra Nbr</th>
<th>Discipline</th>
<th>Last Name</th>
<th>First Name</th>
<th>Csr Number</th>
<th>Encounter Date</th>
<th>CPT Code</th>
<th>PHQ-9 Q9</th>
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How Are We Doing?

Behavioral Health Specialty:

- 9% of BHS specialty patients score either 2 (5% of patients) or 3 (4% of patients) on question 9 of the PHQ-9.
- There are about 100,000 visits in BHS specialty each year, so approximately 9,000 visits a year will result in 2 or 3 on question 9, or about 25 a day.
How Are We Doing?

Primary Care:

• 1% of primary care patients who are screened for BH will have positive score on question 9 of the PHQ-9.

• 5% of primary care patients who are being monitored with PHQ-9 will have a positive score on question 9 of the PHQ-9.

• At 3 primary care clinics, 82% of patients with positive question 9 score have had C-SSRS administered.

• Estimated that a primary care physician will get a positive question 9 score 1-2 times per month.
Tracking Zero Suicide Implementation at Kaiser Permanente: Future Issues

- Initiative underway to develop standardized outcome measures throughout Kaiser Permanente nation wide.
- Need to track suicide process and outcome measures throughout the continuum of care (mental health specialty, primary care, urgent care, emergency care inpatient).
- Role of alerts/banners in EMRs.
- Tracking suicide at risk patients who do not follow-up with drop out of care.
- Need as well to look at tracking content of care related to suicide prevention treatment (adherence to DBT, CBT).
Audience:

Using the chat box please share one key takeaway from Brad’s presentation.
TYPE IN THE Q & A BOX

What questions do you have for our presenters?
Contact Information

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