



# Developing Caring for Adult Patients with Suicide Risk: A Consensus Guide for Emergency Departments



## Technical Report

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## TABLE OF CONTENTS

<b>BACKGROUND</b> .....	1
RATIONALE FOR FOCUSING ON ED SETTINGS .....	1
THE NEED FOR A CONSENSUS-BASED GUIDE FOR EMERGENCY DEPARTMENTS.....	4
BRIEF PROJECT OVERVIEW.....	6
SELECTION OF A CONSENSUS FRAMEWORK AND APPROACH.....	7
EXPERT PANEL COMPOSITION .....	8
EXPERT PANEL COMMITMENT .....	9
<b>STUDY ONE: DECISION SUPPORT TOOL</b> .....	10
STUDY ONE PURPOSE .....	10
STUDY ONE DESIGN .....	10
Study Design Group .....	10
Review of Suicide Risk Assessment Tools to Identify Common Items for DST or “Secondary Screening” .....	11
Suicide Risk Assessment Item Matrix and Selection.....	12
Suicide Risk Assessment Final Item List .....	13
Development of Rating Criteria and Scaling.....	16
Defining Consensus.....	17
STUDY ONE IMPLEMENTATION .....	17
STUDY ONE FINDINGS.....	23
Participant Characteristics .....	23
Primary/Secondary Affiliation.....	24
Expert Panel DST Item Ratings.....	25
Study One Consensus Ratings.....	26
Ranking Prioritization Criteria.....	27
Findings by Rank Order .....	28
Optimal Assessment Tool Length for ED Setting .....	29
Goals of Risk Assessment in ED Settings.....	29
Examination of Round One Comments .....	30
Examination of Round Two Discussion.....	30
Missing Items .....	31
DST DEVELOPMENT PROCESS.....	32
SDG and Panel Webinars .....	32

Areas Requiring Further Analysis.....	32
<b>STUDY TWO: BEST PRACTICES</b> .....	34
STUDY TWO DESIGN .....	34
Study Design Group .....	35
DRAFT DST.....	35
Review of Brief Interventions and Discharge Planning Best or Promising Practices.....	37
Selection of Brief Interventions and Discharge Planning Best or Promising Practices .....	37
Development of Rating Criteria and Scaling.....	38
Defining Consensus.....	40
STUDY TWO IMPLEMENTATION .....	40
Study Two – Round One .....	41
Study Two – Round Two .....	43
Study Two – Round Three.....	44
STUDY TWO FINDINGS .....	45
Participant Characteristics .....	45
Primary/Secondary Affiliation.....	46
Draft DST Ratings .....	46
Expert Panel Ratings for Brief Interventions .....	47
Study Two Consensus Ratings.....	48
Ranking Prioritization Criteria.....	50
Findings by Rank Order .....	50
SDG and Panel Webinars .....	51
<b>REFERENCES</b> .....	52
<b>APPENDICES</b> .....	57

## BACKGROUND

This report describes the process used to develop *Caring for Patients with Suicide Risk: A Consensus Guide for Emergency Departments* (ED Guide). The ED Guide was developed by the Suicide Prevention Resource Center (SPRC), a national center promoting a public health approach to suicide prevention funded by the Substance Abuse and Mental Health Services Administration (SAMHSA). It is a research-informed product, and its key components were developed through consensus by a multidisciplinary panel of 60 experts. The ED Guide is designed to help emergency department (ED) providers make decisions about the care and discharge of patients with suicide risk. Its main goal is to improve patient outcomes after discharge.

The components of the ED Guide are:

- Key components of caring for adult patients with suicide risk in EDs
- Decision Support Tool (DST)
- ED-based interventions
- Discharge planning checklist
- Patient-centered care guidelines
- Information on related topics, such as documentation, working with crisis centers, and intoxication and substance use disorders
- Tools and resources to support implementation of the ED Guide

### RATIONALE FOR FOCUSING ON ED SETTINGS

In 1999, the U.S. Surgeon General issued the first *Call to Action to Prevent Suicide* (U.S. Public Health Service, 1999). This seminal document set the foundation for and laid out a charge to develop a National Strategy for Suicide Prevention, which was realized in 2001 with the release of a strategy comprising 11 goals and 68 objectives (U.S. Department of Health and Human Services, 2001). In the 14 years since the release of the National Strategy, our understanding of the scope, breadth, burden, and consequences of suicide as a leading public health issue has increased exponentially. Recent data reveal that:

- In 2009, the number of deaths from suicide surpassed the number of deaths from motor vehicle crashes in the United States (Centers for Disease Control [CDC], 2013; Rockett et al., 2012).
- The annual, age-adjusted suicide rate among persons aged 35–64 years increased 28.4% from 13.7 per 100,000 population in 1999 to 17.6 in 2010 (CDC, 2013).
- U.S. EDs respond to over 800,000 visits for self-inflicted injuries annually (CDC, 2011).

In fact, suicide was the 10th leading cause of death for all ages in 2013, claiming more than 41,000 lives at an average of 112 individuals per day (CDC, 2013).

In 2012, the U.S. Surgeon General and the National Action Alliance for Suicide Prevention (NAASP), with support from SAMHSA, produced the revised *2012 National Strategy for Suicide Prevention: Goals and Objectives for Action*.<sup>1</sup> The revised National Strategy established 13 goals and a series of corresponding objectives.

The ninth goal of the revised National Strategy aims to “promote and implement effective clinical and professional practices for assessing and treating those identified as being at risk for suicidal behaviors.” This goal also covers the development, adoption, and dissemination of guidelines, policies, and procedures for assessing suicide risk, guiding clinical practice and continuity of care, promoting the safe disclosure of suicidal thought and behaviors by patients, and effectively engaging families and concerned others. Objective 9.6 of the revised National Strategy specifically calls for the development of “**standardized protocols for use within emergency departments based on common clinical presentation to allow for more differentiated responses based on risk profiles and assessed clinical needs**” (U.S. Department of Health and Human Services, 2012).

Data from the revised National Strategy and other sources bear out the need for standardized protocols in ED settings:

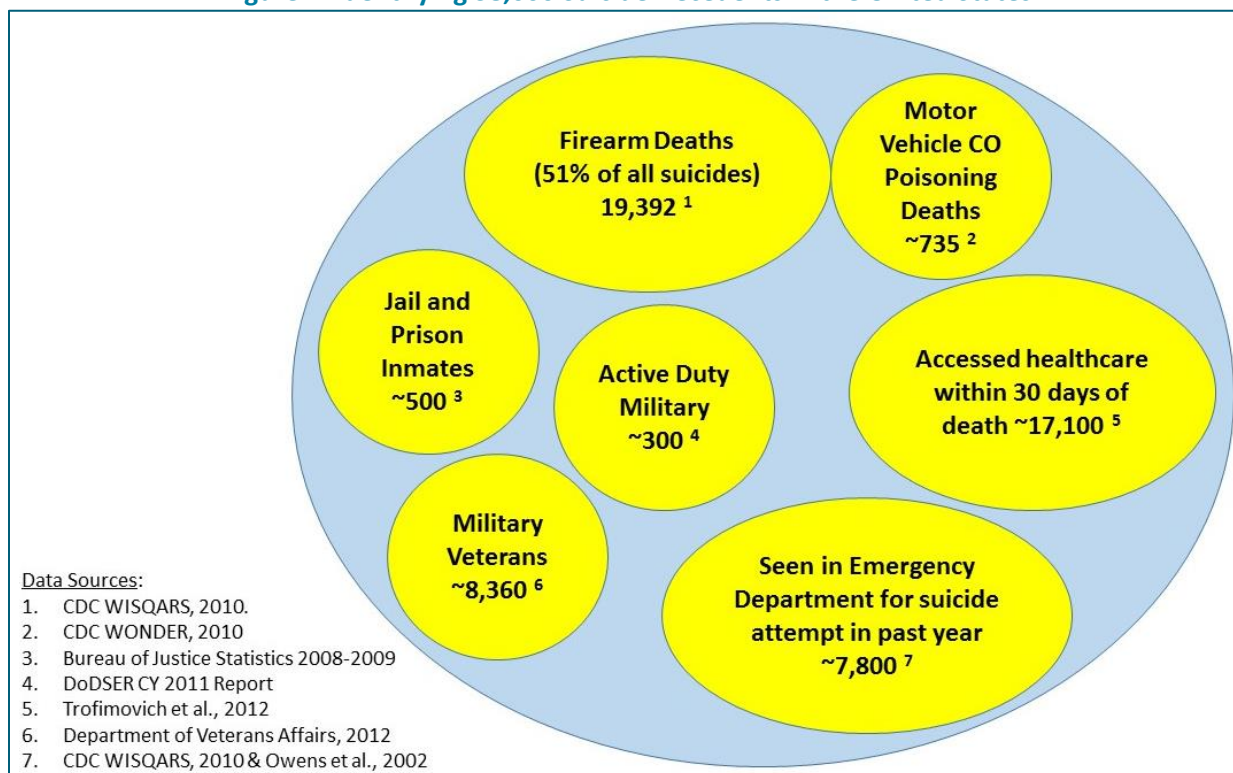
- EDs are key settings for providing services to persons with high suicide risk, particularly those who have attempted suicide (U.S. Department of Health and Human Services, 2012).
- There were an estimated 483,586 patients seen in EDs for self-inflicted injury in 2011 as tracked by the National Electronic Injury Surveillance System (NEISS) operated by the U.S. Consumer Product Safety Commission (CPSC) (Crosby, 2014).
- Individuals who present at the ED may be at elevated risk of suicide compared to those in the general population (Claassen & Larkin, 2005).
- Approximately 8% of patients seeking routine care in the ED reported some form of suicidal ideation within the past two weeks (Ilgen et al., 2009).
- The risk of suicide attempts and death is highest within the first 30 days after a person is discharged from an ED or inpatient psychiatric unit, yet as many as 70% of suicide attempt patients of all ages never attend their first outpatient appointment. (Knesper, 2010).
- Approximately one third of suicide decedents (Ahmedani et al., 2014) and two thirds of people with a recent suicide attempt (Han, Compton, Gfroerer, & McKeon, 2014) visited an ED for any reason in the year prior to their attempt or death.

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<sup>1</sup> <http://www.surgeongeneral.gov/library/reports/national-strategy-suicide-prevention/>

EDs were also identified as a key setting for targeting suicide prevention interventions by NAASP’s Research Prioritization Task Force (RPTF) in its 2014 publication, *A Prioritized Research Agenda for Suicide Prevention: An Action Plan to Save Lives*.<sup>2</sup> Established in response to goal 12 of the revised National Strategy for Suicide Prevention (promote and support research on suicide prevention), the RPTF was tasked with “developing a prioritized approach for allocating funds and monitoring future suicide research to ensure that available resources target research with the greatest likelihood of reducing suicide morbidity and mortality” (NAASP, 2014). The goal of the research agenda is to reduce suicide deaths and attempts by 20% in five years. As part of the development of the agenda, the RPTF collected information on where suicidal individuals are most commonly encountered and the estimated number of deaths and attempts that could be prevented if these individuals were reached with an intervention. As shown in **Figure 1**, among an estimated 38,000 suicide decedents in the United States in 2010, approximately 17,100 accessed health care within 30 days of death and approximately 7,800 were seen in an ED for a suicide attempt in the past year (NAASP, 2014, p. 8).

**Figure 1: Identifying 38,000 Suicide Decedents in the United States**



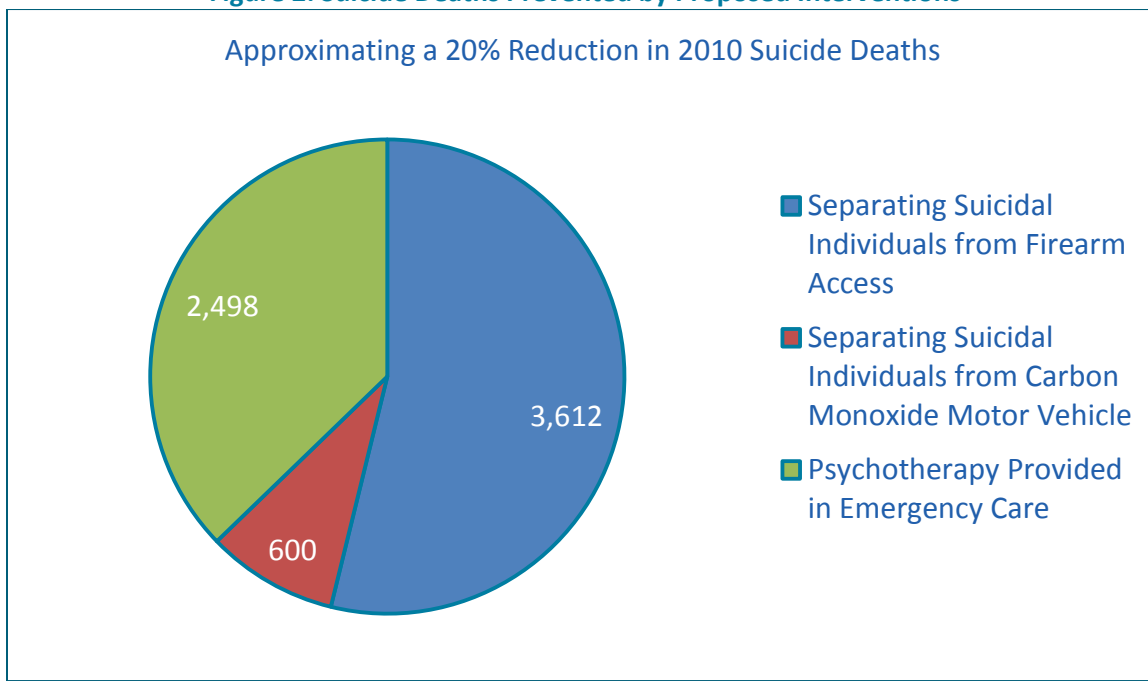
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In a parallel analysis, the RPTF used population estimates to model reductions in suicide deaths as a result of implementing different interventions such as “parity coverage for mental health care, adding a car safety feature, improving firearm safety, providing brief psychotherapy treatments in emergency care, and implementing a school-based prevention program.” As

<sup>2</sup> <http://actionallianceforsuicideprevention.org/sites/actionallianceforsuicideprevention.org/files/Agenda.pdf>

shown in Figure 2, it is estimated that approximately 2,500 suicide deaths using 2010 numbers could have been prevented by providing brief psychotherapy treatments in emergency care settings (NAASP, 2014, p. 8).

**Figure 2: Suicide Deaths Prevented by Proposed Interventions**



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## THE NEED FOR A CONSENSUS-BASED GUIDE FOR EMERGENCY DEPARTMENTS

In response to the revised National Strategy for Suicide Prevention and the work of NAASP’s RPTF on the *Prioritized Research Agenda for Suicide Prevention* (including the works cited therein), SPRC launched the current initiative focused on ED settings through its cooperative agreement with SAMHSA. The specific focus of the ED Guide—addressing the needs of ED patients who are identified as having some suicidal ideation (SI) through secondary screening, suicide prevention interventions for patients who will be discharged, discharge planning, and strategies to promote continuity of care—was selected as part of a lengthy planning and conceptualization process that involved multiple individuals from SPRC, its partners, suicide prevention experts (particularly those working in ED settings), and SAMHSA staff.

As a first step in the process, SPRC staff conducted an environmental scan to assess current efforts, resources, and priority areas within suicide prevention in ED settings. This consisted of (1) querying national experts on suicide prevention in EDs through two in-person meetings and a series of one-on-one telephone conversations; (2) researching existing models, practices, programs, and resources currently in use; and (3) conducting a review of peer-reviewed journal articles.



One of the major influences on the conceptualization of the current project was the Emergency Department Safety Assessment and Follow-up Evaluation (ED-SAFE) study funded in 2010 by the National Institute of Mental Health (NIMH) (Boudreaux et al., 2013). In a series of discussions with SPRC, the principal investigator for the ED-SAFE study and its steering committee identified secondary screening (i.e., to assess need for further evaluation and disposition for patients with SI) as a major area of need.

A second influence on the development of the current project was two studies by Borges and colleagues on SI and probability of suicide attempt. Borges and colleagues (2006) describe the development of a risk index for 12-month suicide attempt among suicide ideators using data from the National Comorbidity Survey Replication (NCS-R). A four-category risk index was created that ranged from *Very Low Risk* (no history of prior suicide attempt and no more than 2 of the 11 risk factors) to *High Risk* (history of one or more prior suicide attempts and 3–11 other risk factors). As shown in Table 1, the proportion of people with SI who are in the *Low* or *Very Low* risk groups (51.5% and 19.0%, respectively) have much lower probability of attempts (0.0% and 3.5%, respectively) compared to people with SI who are in the *Intermediate* or *High* risk groups.

**Table 1: Distribution of the Summary Risk Index and Associations with 12-Month Suicide Attempts Among Ideators (n = 236)**

Risk Group	Prevalence Among Ideators	Probability of Attempt
Very Low	19.0%	0.0%
Low	51.5%	3.5%
Intermediate	16.2%	21.3%
High*	13.7%	78.1%

\* High-risk group accounted for 67.1% of all suicide attempts. Used with permission from Matthew Nock.

These findings were later replicated using data on 108,705 adults from 21 counties who were interviewed using the World Health Organization’s Composite International Diagnostic Interview (Borges et al., 2010).

**The importance of these two studies is that they highlight the need for improving an ED provider’s ability to better distinguish between high- and low-risk groups among patients with some SI, so the high-risk group can receive appropriate care and resources and the other groups can receive necessary evaluations and/or needed support post-discharge to prevent them from migrating into a higher-risk category.** This point is reiterated in the work of Ronquillo, Minassian, Vilke, and Wilson (2012) who note, “Practice patterns for evaluation and treatment of suicidal ideation vary widely in EDs across the county . . . Although a brief screening of suicide risk in the ED does not have the sensitivity to accurately determine which patients are at highest risk of suicide after leaving the ED, patients at lowest risk may be identified. In these low-risk patients, psychiatric holds and real-time psychiatric consultation

while in the ED may not be needed, facilitating more expeditious dispositions from the ED” (p. 837).

The inclusion of discharge planning and continuity of care into the ED Guide was largely influenced by Knesper’s (2010) extensive review and analysis of the literature in his report, *Continuity of care for suicide prevention and research: Suicide attempts and suicide deaths subsequent to discharge from the emergency department or psychiatry inpatient unit*. As Knesper writes, “The accumulating research in suicide had made it increasingly clear that for those who experience suicidal crises and receive acute care interventions in hospitals and Emergency Rooms, suicide risk does not end at the moment of discharge. Rather, their elevated risk continues or is easily rekindled in the days and weeks that follow, leading to heightened rates of suicide during this post-acute care period” (p. 7).

Differentiating risk levels and related treatments, discharge planning, and establishing continuity of care among populations with lower levels of risk—particularly in ED settings—is still a relatively unexplored area within suicide prevention. Some existing risk assessment tools have not been studied in ED settings, and some evidence-based treatments have been shown to be effective only if delivered in specialty settings (e.g., inpatient and outpatient mental health provider settings, EDs with follow-up support available such as care managers or home visits). The current project seeks to build on the current base of knowledge by obtaining consensus-based recommendations on (1) assessing patient risk in EDs with an emphasis on identifying low-risk patients who may be safely discharged, and (2) protocols for treatment while in the ED and discharge planning. The remainder of this document describes the study design, methods, and findings of the project.

## **BRIEF PROJECT OVERVIEW**

Through its cooperative agreement with SAMHSA, SPRC sought to coordinate the development of consensus-based protocols for suicidal patients in EDs, to address objective 9.6 of the U.S. Department of Health and Human Services’ (HHS) revised National Strategy for Suicide Prevention (HHS, 2012, p. 61). Specifically, the project was designed to obtain consensus-based recommendations in two areas: (1) assessing patient risk in EDs with an emphasis on low-risk patients who may be safely discharged, and (2) protocols for treatment while in the ED and discharge planning.

To generate formal consensus on these topics, SPRC conducted two data collection efforts with multidisciplinary subject matter experts from the emergency medicine, behavioral emergencies, and suicide prevention fields. These experts formed a consensus panel and all panel activity was conducted remotely. In addition to the priority topics stated above, both efforts were intended to elicit recommendations on related items such as applying protocols to special populations (e.g., intoxicated, actively psychotic, chronically suicidal), providing patient- and family-centered care, and addressing provider liability concerns.

As documented in [Table 2](#), the DST portion of the ED Guide was addressed during the first consensus study, verified in the second consensus study, and was also informed by the use of expert interviews and a review of the research literature. The ED-based interventions and discharge planning portions of the ED Guide and the sections on patient-centered care, documentation, and supporting tools and resources were addressed during the second consensus study and were also informed by the use of expert interviews and the research literature.

**Table 2: Data Sources/Methods Used for Each Component of the ED Guide**

Key Components of the ED Guide	Consensus Study One	Consensus Study Two	Expert Interviews	Research Literature
DST	X	X	X	X
ED-Based Interventions and Discharge Planning		X	X	X
Patient-Centered Care, Documentation, Tools		X	X	X

The first consensus study was carried out by RAND Corporation using its ExpertLens system (described below). The second consensus study was carried out by Social Science Research and Evaluation, Inc. (SSRE) using a similar process. Data analysis and reporting for both studies were conducted by SSRE.

## SELECTION OF A CONSENSUS FRAMEWORK AND APPROACH

In preparation for the project, SPRC explored several consensus-based approaches and methods. Following the review of available methodologies, SPRC elected to utilize the RAND Corporation’s ExpertLens system (Dalal, Khodyakov, Srinivasan, Straus, & Adams, 2011; Khodyakov et al., 2011). The ExpertLens system was developed as a way to capitalize on the benefits of the Delphi method and Nominal Group Technique (NGT). The traditional Delphi approach generally involves asking large groups of experts to anonymously answer a survey. The survey results for the group are processed and fed back to each expert. The expert then takes part in a second survey, and the process is repeated for a set number of rounds or until consensus is reached. The NGT approach uses smaller groups of experts and includes a face-to-face component where experts have the opportunity to deliberate between survey rounds. ExpertLens seeks to make use of the large panels’ characteristics of the Delphi method while also incorporating the discussion aspect of the NGT method.

The ExpertLens system is hosted online by RAND and consists of three distinct rounds:

- **Round One – Assessment** – Expert panel members log in to a secure website and take part in an online survey. Open-ended text boxes are provided for each rating question to allow panelists to provide clarifying comments to accompany their ratings.

- **Round Two – Feedback and Discussion** – Panel members log in to the website and are presented with tables and graphs of the results from the Round One survey. The data are presented in a manner such that panelists can see the group responses and their own responses. Descriptive statistics (means, medians, quartiles) are provided to help panelists assess their own answers in comparison to the rest of the group. After examining the data from Round One, panel members are invited to take part in an anonymous, threaded (i.e., running commentary between two or more people) discussion forum over a period of one to two weeks. The forum is asynchronous, which enables panelists to review and post discussion threads with peers at times convenient to them.
- **Round Three – Reassessment** – In the final round, panelists log in to the website and have the opportunity to update or revise their ratings on the Round One survey based on their experience of having had the opportunity to see their responses in comparison to their peers and having engaged in the Round Two discussion.

A detailed description of the ExpertLens system is available online on the RAND Corporation's website at <http://www.rand.org/pubs/tools/expertlens.html>

## EXPERT PANEL COMPOSITION

The expert panel convened by SPRC comprised 61 multidisciplinary and diverse stakeholders. Panelists were selected based on their ability to contribute to the clinical and non-clinical aspects of the project. Panel members included emergency physicians and emergency psychiatry providers; emergency nurses and psychiatric nurses; emergency medicine/clinical researchers and suicidology experts; ED social work professionals and social workers; first responders; individuals with lived experience, family members, suicide attempt survivors, and suicide loss survivors; legal/attorney; crisis center counselors, follow-up providers, and patient advocates; and federal agency representatives, state agency representatives, and policy experts. Many of these panel members were current or former presidents, board members, and/or held other key positions at associations, agencies, and organizations such as:

- American Academy of Emergency Medicine (AAEM)
- American Academy of Emergency Psychiatry (AAEP)
- American Association of Suicidology (AAS)
- American College of Emergency Physicians (ACEP)
- American Psychiatric Nurses Association (APNA)
- Centers for Medicare and Medicaid Services (CMS)
- Emergency Nurses Association (ENA)
- National Alliance on Mental Illness (NAMI)
- NIMH
- National Suicide Prevention Lifeline
- SAMHSA

Additional information and background on the panel members who participated in each phase of the project is presented later in the Study One and Study Two sections of this report under the Participant Characteristics headings. A complete list of panel members and their affiliations is available in Appendix A.

## **EXPERT PANEL COMMITMENT**

Panel members were each sent a personalized letter on June 6, 2013, from the director of SPRC and SAMHSA's Suicide Prevention Branch chief. This letter described the purpose and scope of the project and asked prospective panel members to please consider taking part in the project based on their demonstrated commitment and expertise in suicide prevention, emergency medicine, behavioral emergencies, and/or suicidal patient and family issues.

Prospective panel members were informed that their participation in the project was voluntary and that they would not be offered stipends for participation. The time commitment for participation was estimated to be 8–10 hours and consisted of:

- Participation in a 90-minute orientation webinar on June 20, 2013
- Reading background materials and responding to e-mails
- Taking part in all three rounds of Study One over a period of six weeks during summer 2013, focused on assessing patient risk in EDs with an emphasis on low-risk patients who may be safely discharged
- Participating in a post-study webinar to discuss the results of Study One
- Taking part in all three rounds of Study Two over a period of six weeks during winter 2014, focused on protocols for treatment while in the ED and discharge planning
- Participating in a post-study webinar to discuss the results of Study Two

A subset of panel members was also called upon outside of his or her role in the project to take part in task-oriented workgroups or to lend specific expertise during product development.

## STUDY ONE: DECISION SUPPORT TOOL

### STUDY ONE PURPOSE

The purpose of Study One was to use expert consensus to develop a Decision Support Tool (DST) that can be used in ED settings to assess patient risk (i.e., inform decision to obtain further assessment) with an emphasis on identifying low-risk patients who may be safely discharged. The DST is a secondary screening instrument developed by expert consensus to help ED providers make decisions about the care and discharge of adult patients with suicide risk. It is not a comprehensive suicide risk assessment tool. **It will help providers determine whether a patient’s health and safety needs can be met in the outpatient environment following a brief ED-based intervention or whether further consultation from a mental health specialist is recommended.** The DST is designed for use with adult patients who have been identified as having suicide risk (i.e., SI or suspected suicide risk) and have the capacity to make health care decisions. Identification of individuals at risk may occur as a result of (1) patient disclosure; (2) reports by family, friends, or other collaterals; (3) individual indicators such as depression, substance use, or debilitating illness; or (4) primary screening. The DST does not replace a provider’s best judgment.

### STUDY ONE DESIGN

#### Study Design Group

At the beginning of the project SPRC convened a study design group (SDG) that included:

- Lisa Capoccia, MPH, SPRC Assistant Manager of Clinical Initiatives
- Julie Goldstein Grumet, PhD, SPRC Director of Prevention and Practice
- Scott Formica, MA, SPRC External Evaluator – SSRE
- Morton Silverman, MD, SPRC Senior Science Advisor and Clinical Associate Professor in the Department of Psychiatry at the University of Chicago
- Dmitry Khodyakov, PhD RAND Corporation ExpertLens Research Scientist Liaison
- Michael H. Allen, MD, Professor of Psychiatry and Emergency Medicine at the University of Colorado School of Medicine and director of research for the Colorado Depression Center
- Leslie S. Zun, MD, MBA, FAEEM, Chairman of the Department of Emergency Medicine at Mount Sinai Hospital and Board Member of the American Academy of Emergency Medicine
- Michael Wilson, MD, PhD, FAAEM, Attending Physician at the University of California San Diego Department of Emergency Medicine and Director of Emergency Psychiatry Research for the American Association for Emergency Psychiatry

- Lisa Horowitz, PhD, MPH, Staff Scientist/Clinical Psychologist in the NIMH Intramural Research Program at the National Institutes of Health
- Scott Zeller, MD, Chief of Psychiatric Emergency Services for the Alameda Health System

The SDG was tasked with:

1. Reviewing common items from 14 existing risk assessment tools to identify which items (e.g., previous suicide attempt, agitation) panelists should be asked to rate during Study One
2. Identifying the criteria against which each item should be rated (e.g., usefulness, importance)
3. Articulating the threshold for and definition of consensus
4. Identifying background materials for panelists to review prior to Study One

### **Review of Suicide Risk Assessment Tools to Identify Common Items for DST or “Secondary Screening”**

Staff members from SPRC identified and reviewed 14 suicide risk assessment tools and guides. These resources were selected using three criteria: (1) the tool is currently being used in some EDs; (2) the tool has the potential for use in EDs; or (3) the tool is used and has been validated in non-ED settings (e.g., outpatient mental health) but may be appropriate for use in EDs.

The complete list of tools and guides considered was:

- Adult Suicidal Ideation Questionnaire (ASIQ) (Reynolds, 1991)
- AsQ'em – Ask Suicide-Screening Questions to Everyone in Medical Settings (Horowitz et al., 2013)
- Columbia Suicide Severity Rating Scale (CSSRS) (Posner et al., 2011)
- Crisis Triage Rating Scale – Revised (Berlin and Berman, in development)
- ED-SAFE (Boudreaux et al., 2013)
- Five-Item SAD PERSONS (Bolton, Spiwak, & Sareen, 2012)
- Modified Scale for Suicidal Ideation (MSSI) (Miller, Norman, Bishop, & Dow, 1986)
- National Suicide Prevention Lifeline Suicide Risk Assessment Standards (Joiner et al., 2007)
- *New South Wales Suicide Risk Assessment Guide* (NSW Department of Health, 2004)
- P4 Suicidality Screener (Dube, Kroenke, Bair, Theobald, & Williams, 2010)
- Self-Assessment Tool (Cheryl King, in development)

- Suicide Behaviors Questionnaire-Revised (SBQ-R) (Osman et al., 2001)
- *Suicide Risk: A Guide for Evaluation and Triage* (SPRC, 2007)
- U.S. Army Medical Research and Materiel Command Military Operational Medicine Research Program (MOMRP) (Castro, 2013)

### Suicide Risk Assessment Item Matrix and Selection

After their review of the 14 suicide risk assessment tools and guides, SPRC staff members created a matrix of items present in each instrument. The matrix contained 46 discrete items (e.g., SI, frequency of thoughts, access to means, medication stockpiling, wish to live, availability of social supports, excessive substance abuse). A truncated version of the item matrix appears in Figure 3. A full, final version of this table is provided in Appendix B.

**Figure 3: Sample Suicide Risk Assessment Tool Matrix**

ITEMS	TOOLS						
	P4 Suicidality Screener	Crisis Triage Rating Scale [Revised]	Columbia Suicide Severity Rating Scale	ED-SAFE	Modified Scale for Suicide Ideation (MSSI)	New South Wales Suicide Risk Assessment Guide (NSW)	5-Item SAD PERSONS
Suicidal ideation, thoughts of self harm, non-specific active suicidal thoughts	x	x	x	x			
Frequency of thoughts			x		x		
Duration of thoughts			x		x		
Intensity of thoughts					x		
Controllability of thoughts			x				
Reasons for ideation			x				
Intent (with/without a plan)			x	x			x

For each of the 46 items in the matrix, an additional spreadsheet page provided details, examples, and sample questions, as shown in Figure 4.

**Figure 4: Sample Item Matrix Detailed View**

SUB-VARIABLES, QUESTIONS, and/or DEFINITIONS	
ITEMS	SUB-ITEMS, QUESTIONS, and/or DEFINITIONS
Thoughts of self harm; SI; Non-specific active suicidal thoughts	Have you had thoughts of actually hurting yourself? (P4)
	Have you actually had any thoughts of killing yourself? (CSSRS)
	General non-specific SI w/o thoughts of ways to kill oneself/associated methods, intent, or plan during the assessment period. (CSSRS)
	Are you thinkig of suicide? Have you thought of suicide in the last 2 months? (Lifeline)



The full matrix was sent to the 11 members of the SDG prior to the first SDG meeting. Members were asked to review the entire list of items and identify their top 10 selections for inclusion in the study, based on their expert assessment of which items are most relevant for informing an ED provider's decision making on whether to discharge a patient with SI or consult the ED's mental health specialist for further evaluation. In other words, which items would help a provider rule out near-term suicide risk in a patient with SI (i.e., "negative prediction")? Members were reminded that the task was not about selecting items for universal screening or for comprehensive suicide risk assessment. The variables of interest were those that would be most relevant for patients identified as having SI based on (1) patient disclosure; (2) reports by family, friends, or other collaterals; (3) individual patient presentations such as depression, substance use, or debilitating illness; or (4) universal screening.

The SDG met via conference call for the first time on June 18, 2013, to discuss which items should be included in the study, identify the rating criteria to be used, and define the threshold for/definition of consensus. As a result of this discussion, the SDG successfully reduced the number of items from 46 to 15. The items that were retained, and the number of instruments out of the 14 that were examined in which they appeared, were as follows:

- Active SI (present in 11 of the 14 instruments examined)
- Frequency of thoughts (3 instruments)
- Reasons for ideation (1 instrument)
- Wish to die – Acuity (4 instruments)
- Wish to die – Now (2 instruments)
- Intent (4 instruments)
- Thoughts of carrying out a plan (5 instruments)
- Preparatory acts or behavior (3 instruments)
- Gun ownership (1 instrument)
- History of psychiatric hospitalization (2 instruments)
- Past suicide attempt – including interrupted, aborted, and current (10 instruments)
- Excessive substance abuse (5 instruments)
- Self-assessment of probability of attempt (4 instruments)
- Irritability/agitation/aggression (5 instruments)
- Sleep – including disturbing dreams/nightmares (2 items)

### **Suicide Risk Assessment Final Item List**

The SDG reconvened on June 21, 2013, to develop the final list of variables for Study One. Basing its decision on input from the RAND ExpertLens consultant, the group decided to further narrow the list of variables from 15 to 13 and to develop an item reference sheet handout for study participants. The item reference sheet began with the following instructions:

*Imagine a patient in an ED has been identified for whatever reason as having some non-zero suicide risk. Further imagine that this patient is being examined by an emergency physician or other non-mental health professional. What items, if negatively endorsed, would allow the Emergency Physician to release the patient from the ED without further assessment by a mental health professional (MHP), or alternatively, if answered affirmatively would require a detailed suicide risk assessment (presumably by an MHP).*

*In the ExpertLens study, Consensus Panel members will evaluate thirteen common items found in existing assessment tools for their ability to help ED providers decide which suicidal patients can be safely discharged.*

*Listed below are the items with definitions and/or sample questions.*

**1. Suicidal Ideation**

- Thoughts of engaging in suicide-related behavior
- Have you actually had any thoughts of killing yourself?
- Are you thinking of suicide?

**2. Frequency of Thoughts**

- How many times have you had these thoughts?

**3. Reasons for Ideation/Acute Precipitant**

- External circumstances believed to have played a role in precipitating the suicidal behavior
- Proximal risk factors

**4. Wish to Die**

- Right now, how strong is your wish to die?

**5. Intent**

- There is past or present evidence (implicit or explicit) that an individual wishes to die, means to kill him/herself, and understands the probable consequences of his/her actions or potential actions
- Have you had some intention of acting on your thoughts?

**6. Thoughts of Carrying Out a Plan**

- Have you been thinking how you might kill yourself?
- Have you thought about taking an overdose of medication, driving your car off the road, using a gun, or doing something else serious like this?

## **7. Self-Assessment of Probability of Attempt**

- There's a big difference between having a thought and acting on a thought. How likely do you think it is that you will act on these thoughts about hurting yourself or ending your life sometime over the next month?
- How likely is it that you will attempt suicide someday?
- If you have thoughts of killing yourself in the future, how confident are you that you will be able to keep yourself from attempting suicide?

## **8. Preparatory Behaviors**

- Acts of preparation towards engaging in self-directed violence, but before potential injury has begun. This can include anything beyond a verbalization or thought, such as assembling a method (e.g., buying a gun, collecting pills) or preparing for one's death by suicide (e.g., writing a suicide note, giving things away).
- Have you taken any steps towards making a suicide attempt or preparing to kill yourself (such as collecting pills, getting a gun, giving valuables away or writing a suicide note)?

## **9. Gun Ownership**

- Do you own a gun?

## **10. History of Psychiatric Hospitalization**

- Have you ever been hospitalized for a mental health problem or substance use problem?

## **11. Past Suicide Attempt, Including Aborted and Interrupted Attempt**

- A non-fatal self-inflicted potentially injurious behavior with an intent to die as a result of the behavior.
- Interrupted attempt: When the person is interrupted (by an outside circumstance) from starting the potentially self-injurious act (if not for that, actual attempt would have occurred).
- Aborted attempt: When the person begins to take steps toward making a suicide attempt, but stops themselves before they actually have engaged in any self-destructive behavior.
- Have you ever attempted to kill yourself?

## **12. Substance Use Problem**

- Does the patient have a pattern of excessive substance use?
- Has drinking or drug abuse ever been a problem for you?

## **13. Irritability/Agitation/Aggression**

- Is there evidence from the history or presentation of extreme anxiety, motor restlessness, anger, or verbal or physical fights?

## Development of Rating Criteria and Scaling

Following the identification of the final set of suicide risk assessment variables, the SDG turned its attention to specifying the criteria against which each variable should be rated with regard to its ability to help ED providers decide which suicidal patients can be safely discharged. In consultation with the RAND ExpertLens liaison, the SDG began by considering nine potential criteria with the goal of narrowing this list to five criteria. The initial list of criteria included:

- Clinical Usefulness
- Feasibility
- Objective or Observable
- Applicability
- Ease of Assessment
- Focuses Clinical Assessment
- Acuity
- Acceptable to Staff
- Acceptable to Patients

The SDG deliberated and arrived at five criteria that all members agreed were the most relevant and valuable. The final set of rating criteria for Study One were:

1. **Clinical Usefulness:** How useful is this item in guiding ED provider decision-making? By useful we mean that the item suggests ways to understand and modify risk rather than merely quantifying it and it helps guide ED provider decision-making.
2. **Acuity:** What is the degree of acuity of this item? By acuity we mean that the item is associated with imminent or chronic risk.
3. **Feasibility:** What is the feasibility of this item? By feasibility we mean that the item is simple enough that most ED practitioners can ask and interpret it based on their current training and practice. We also mean the item is low-burden and does not disrupt the workflow.
4. **Objectivity:** What is the objectivity of this item? By objectivity we mean the item has elements that can be observed or gathered from interaction or examination and thereby provide a different type of data than the patient's report. It can also be uniformly and consistently interpreted.
5. **Applicability:** How applicable is this item? By applicable we mean the item has relevance to the majority of ED patients who are suicidal rather than only a small subset.

The SDG discussed whether the criteria should be judged against a 5-, 7-, or 9-point rating scale and agreed on using a 9-point scale anchored at a value of 1 (Absence of the Criteria) and 9 (High on the Criteria). Conceptually, the rating scale was intended to have the following underlying structure:

- 1 = Low – Low
- 2 = Low – Medium
- 3 = Low – High
- 4 = Medium – Low
- 5 = Medium – Medium
- 6 = Medium – High
- 7 = High – Low
- 8 = High – Medium
- 9 = High – High

### **Defining Consensus**

The SDG decided to use a variation of the RAND/UCLA Appropriateness Method to define consensus among panel members (Fitch et al., 2001). The determination of whether there was agreement, disagreement, or the findings were inconclusive was based on the following rule:

- (a) Disagreement: cases in which at least 33.3% of participants chose an answer that was in the extreme category of response options 1–3 on the 9-point scale (indicating absence of the criteria) AND at least 33.3% of participants chose an answer that was in the extreme category of response options 7–9 on the 9-point scale (indicating that the variable was high on the criteria). In this instance, large proportions of individuals are at opposite ends of the 9-point scale.
- (b) Agreement: cases in which less than 33.3% of participants chose a response option outside of the three cut-points in the scale (values of 1–3, 4–6, or 7–9) that contains the median value. In this instance, the majority of responses (66.7% or greater) are in the same grouping as the value of the median—indicating *agreement* that the variable is low (1–3), medium (4–6), or high (7–9) on the criteria.
- (c) Inconclusive: all other variations, combinations, or permutations that do not meet the criteria for disagreement or agreement. In this instance, the experts are not far enough apart from one another to say that they disagree and not similar enough in their responses to say that they are in agreement.

### **STUDY ONE IMPLEMENTATION**

On June 20, 2013, the 61 members of the expert panel took part in a 90-minute orientation webinar to affirm their commitment to participate in the project, to receive additional information on the scope of the project, and to learn how to use the RAND ExpertLens system. Richard McKeon, Suicide Prevention Branch chief, SAMHSA, spoke about SAMHSA’s perspective

and the revised National Strategy for Suicide Prevention. Lisa Capoccia, assistant manager, Provider Initiatives, SPRC, provided an overview of the project and its goals. Dmitry Khodyakov, behavioral/social scientist, RAND Corporation, introduced panelists to the ExpertLens system and consensus methodology. Edwin Boudreaux, professor, University of Massachusetts Medical School, presented on lessons learned from the ED-SAFE project. Sandra Schneider, past president, American College of Emergency Physicians, spoke extensively about ED settings and the perspective of ED providers. Representatives from SPRC and RAND were available to answer any questions about the project, Study One, or use of the ExpertLens system.

Between June 22 and July 9, 2013, representatives from SPRC, RAND, and the SDG worked to finalize the study protocol and to program the questions into the ExpertLens system. A pilot test was conducted between July 10, 2013, and July 12, 2013 to ensure that the ExpertLens system was working properly and to identify any last-minute changes that needed to be made to any of the three rounds of the study. The pilot test revealed few issues and did not result in any significant changes to the protocol, questions, or study design.

### **Study One – Round One**

All members of the expert panel received an e-mail on July 17, 2013, that thanked them for agreeing to participate in the online expert panel process and reminding them that the goal of Study One was to establish consensus among emergency medicine and suicide prevention experts regarding the identification of suicidal patients in EDs who can safely receive a discharge disposition. Panelists received individualized log-in instructions for the ExpertLens website and were informed that Round One was now open.

Upon logging in to the ExpertLens site, participants were given the following set of instructions:

*The purpose of this online expert panel process is to establish consensus among emergency medicine and suicide prevention experts regarding the identification of suicidal patients in EDs who can safely receive a discharge disposition.*

*This panel process will occur in three rounds over a period of approximately six weeks. Each round is expected to last for two weeks.*

- *In Round One, you will be asked to answer a set of questions about items that may help ED providers decide which suicidal patients can be safely discharged. As you go through Round One, you may want to jot down a few notes on issues you would like to discuss in Round Two.*
- *In Round Two, we will provide you with your own answers and a summary of the group ratings from Round One. You will be asked to engage in an anonymous online discussion with other participants.*
- *Finally, in Round Three, you will be able to change your Round One answers if you wish to do so. However, for your answers to count, you will*

*need to enter them again, even if they have not changed since Round One. At the end of Round Three, we will ask you to complete a brief questionnaire about your experience with our online program.*

Participants were also instructed to download and print three handouts: (1) Items Reference Sheet, (2) Criteria Reference Sheet, and (3) VA [Department of Veterans Affairs] Self-Directed Violence Classification System. These three handouts are provided in Appendix C.

The first question in the survey was an open-ended item designed to elicit panelists' opinions concerning the goal(s) of risk assessment in an ED. This was followed by a description of the 13 suicide risk assessment items to be rated and the five rating criteria. The panelists were then led through 13 survey pages (one page per item) where they were provided with the item definition and were asked to rate the item on the five criteria using a 9-point scale. Panelists were also given the opportunity to provide an open-ended rationale for their rating on each criterion (see Figure 5).

**Figure 5: ExpertLens Round One Study Question Sample**

**SUICIDAL IDEATION**

Please use the following definition and/or sample question for this item:

- Thoughts of engaging in suicide-related behavior
- Have you actually had any thoughts of killing yourself?
- Are you thinking of suicide?

**Clinical usefulness**  
How useful is this item in guiding ED provider decision-making? By useful we mean that the item suggests ways to understand and modify risk rather than merely quantifying it and it helps guide ED provider decision-making.

not clinically useful    1   2   3   4   5   6   7   8   9    very clinically useful

Optional: Please provide the rationale behind your answer

After they provided a rating for all five criteria for each of the 13 study items, panelists were asked to identify what they felt was the maximum number of items feasible for use by ED providers to inform disposition decision making with suicidal patients. Participants were also asked to identify up to two variables missing from the list that they feel should be part of an ED provider's brief assessment to determine which suicidal patients are safe to discharge. The final question in this section of the survey asked respondents to rank order the five rating criteria, by order of importance for deciding which suicidal patients are safe to discharge from an ED, and to provide a rationale for their answer. The last page of the survey asked respondents to provide information on their background, such as years providing ED services, years as an ED leader/manager, psychiatric emergency services experience, whether they spend at least half of their work time seeing patients, whether or not they are board-certified, publication and research history, and affiliation.

Round One of the study was open for 15 days and closed the morning of July 31, 2013. In total, 45 of the 61 expert panel members (74%) logged in to the website and answered at least one question, 41 panelists completed at least half of the questions (67%), and 36 panelists completed at least 90% of the questions (59%). This participation rate is consistent with Dalal and colleagues' (2011) finding that the average participation rate in ExpertLens panels is slightly above 60% (range 55% to 75%) across five studies.

### **Study One – Round Two**

The second round of Study One opened at 9 a.m. EST on July 31, 2013. All panel members, regardless of their participation in the first round, were invited to participate. Upon logging in to the ExpertLens site, participants were given the following set of instructions:

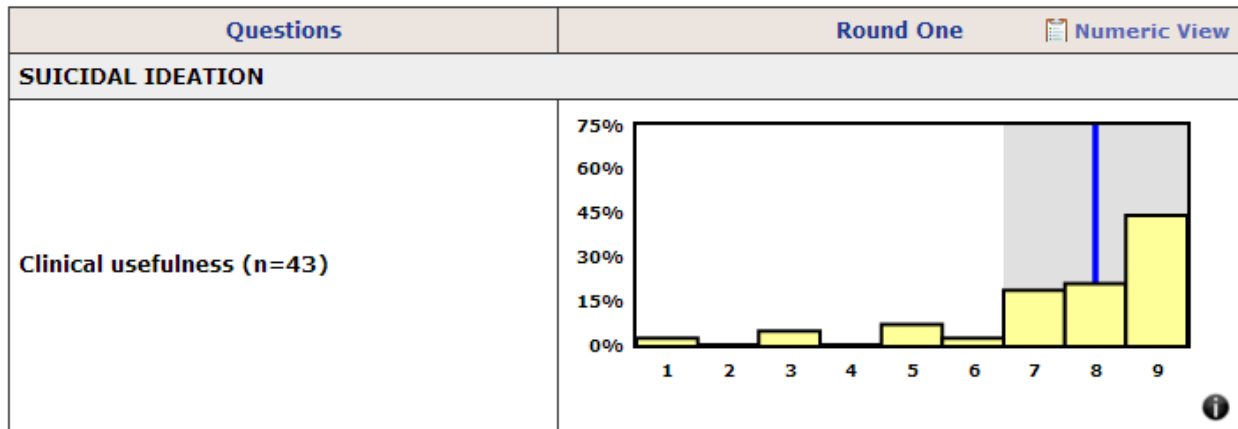
*In Round One, you offered your expert opinion on items that may help ED providers decide which suicidal patients can be safely discharged. In Round Two, we show you your own and the group's responses to Round One questions and ask you to participate in an anonymous online discussion with the panel. The group statistics are shown to stimulate discussion, and we encourage you to share your ideas and debate each others' positions. Round Two is designed to help you consider your own responses in relation to those of your colleagues and facilitate the development of consensus around these important topics. Because participants will be contributing comments at different times, we encourage you to check back throughout the week. Your identity will remain concealed from all other participants throughout this discussion. Submitting comments is encouraged but also voluntary.*

*The following page provides the group's aggregated responses to most study questions. At the bottom of the next page is a discussion board available to investigate any aspect of the responses you think might be important. For example, if your answer is an outlier, you may want to discuss any assumptions you made that might sway others' answers. Conversely, if you are not an expert in the field, you may want to ask other panel members why they chose a different answer. Round Two is an opportunity to influence and/or affirm each others' positions and potentially produce a different outcome in Round Three.*

For each of the 13 items in the Round One survey, participants were shown the frequency of each answer for each of the five criteria (i.e., the number of individuals who provided each rating), their own answer to each question, the range of the middle 50% of group answers, the group median value, and the number of participants who answered each question (see [Figure 6](#)).



**Figure 6: ExpertLens Round Two Feedback Sample**



At the bottom of each item page, panelists were given the opportunity to discuss the item and criteria with their peers in a moderated, threaded discussion area. To ensure confidentiality, all comments were identified by a username (e.g., Expert 9, Expert 12). Participants could join in an existing discussion thread or create their own thread (see Figure 7).

**Figure 7: ExpertLens Round Two Discussion Area Sample**

**Discussion on FREQUENCY OF THOUGHTS**

[Start New Discussion Topic](#)

Title	Posted By	Replies	Latest Post
FREQUENCY OF THOUGHTS			
Number of thoughts as a vague question	EXPERT 12	4 replies	Aug 13, 2013 09:30 AM
Frequency is misleading	EXPERT 15	10 replies	Aug 09, 2013 01:59 PM
Limitation	EXPERT 52	1 reply	Aug 08, 2013 11:17 AM

Round Two of the study was open for 15 days and closed the morning of August 14, 2013. In total, 42 of the 61 expert panel members (69%) logged in to the website during Round Two, and half (51%) posted at least one comment in the discussion area. There was a high degree of overlap in participation between Round One and Round Two: 42 of the 45 experts who took part in Round One also took part in Round Two (93%), and 31 of the 45 posted at least one comment in Round Two (69%).

There were 42 different discussion threads during Round Two, 16 of which (38%) were initiated by site moderators and 26 of which (62%) were initiated by expert panel members. Across the different discussion threads there were 205 discrete comments posted: 148 comments by panelists (72%) and 57 comments by moderators (28%).

### Study One – Round Three

The third round of Study One opened at 9 a.m. EST on August 14, 2013. All panel members, regardless of their participation in the first two rounds, received an e-mail from the ExpertLens

administrator indicating that Round Three was now open and that participants should log in to the system. Upon logging in to the ExpertLens site, participants were given the following set of instructions:

*We thank you for your insightful discussions during Round Two. We now ask you to revisit the questions from Round One and reassess your responses. There is no limit to the number of answers you can revise or the number of times you can make revisions to the same answer. For your answers to count in Round Three, you will need to enter them again, even if your answers have not changed since Round One. If you did not have a chance to answer the Round One questions, please provide your input now.*

*The next page shows the same tabular results displayed in Round Two and you are asked to re-answer the same questions from Round One. The discussion that occurred in Round Two is shown at the bottom of the next page. Although you can no longer respond to discussion topics, you may view the discussion that occurred in Round Two.*

Participants in Round Three were given the same summary information that they received during Round Two in graphical form, but were now asked to re-answer the questions from Round One (see [Figure 8](#)).

**Figure 8: ExpertLens Round Three Feedback and Update Sample**

Questions	Round One	Numeric View	Round Three																				
<b>SUICIDAL IDEATION</b>																							
Clinical usefulness (n=43)	<table border="1"> <caption>Clinical usefulness (n=43) Data</caption> <thead> <tr> <th>Rating</th> <th>Percentage</th> </tr> </thead> <tbody> <tr><td>1</td><td>~2%</td></tr> <tr><td>2</td><td>~2%</td></tr> <tr><td>3</td><td>~5%</td></tr> <tr><td>4</td><td>~2%</td></tr> <tr><td>5</td><td>~5%</td></tr> <tr><td>6</td><td>~2%</td></tr> <tr><td>7</td><td>~15%</td></tr> <tr><td>8</td><td>~18%</td></tr> <tr><td>9</td><td>~45%</td></tr> </tbody> </table>		Rating	Percentage	1	~2%	2	~2%	3	~5%	4	~2%	5	~5%	6	~2%	7	~15%	8	~18%	9	~45%	<input type="text"/>
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7	~15%																						
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9	~45%																						
Acuity (n=43)	<table border="1"> <caption>Acuity (n=43) Data</caption> <thead> <tr> <th>Rating</th> <th>Percentage</th> </tr> </thead> <tbody> <tr><td>1</td><td>~2%</td></tr> <tr><td>2</td><td>~2%</td></tr> <tr><td>3</td><td>~10%</td></tr> <tr><td>4</td><td>~5%</td></tr> <tr><td>5</td><td>~5%</td></tr> <tr><td>6</td><td>~8%</td></tr> <tr><td>7</td><td>~25%</td></tr> <tr><td>8</td><td>~15%</td></tr> <tr><td>9</td><td>~25%</td></tr> </tbody> </table>		Rating	Percentage	1	~2%	2	~2%	3	~10%	4	~5%	5	~5%	6	~8%	7	~25%	8	~15%	9	~25%	<input type="text"/>
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6	~8%																						
7	~25%																						
8	~15%																						
9	~25%																						

These individuals could also view the Round Two discussion threads at the bottom of each page but could no longer add to the discussion (see [Figure 9](#)).

**Figure 9: ExpertLens Round Three Discussion Area Read-Only Sample**

Read-only Discussion from Round Two on REASONS FOR IDEATION/ACUTE PRECIPITANT			
Title	Posted By	Replies	Latest Post
REASONS FOR IDEATION/ACUTE PRECIPITANT			
How asked and explored?	EXPERT 15	6 replies	Aug 13, 2013 12:51 PM
Your thoughts on Reasons for Ideation	Moderator 1	4 replies	Aug 09, 2013 10:47 AM

Round Three of the study was open for 17 days and closed the evening of August 30, 2013. In total, 45 of the 61 expert panel members (74%) logged in to the website during Round Three and answered at least one question, 42 panelists completed at least half the questions (69%), and 30 panelists completed at least 90% of the Round Three questions (49%). There was a high degree of overlap in participation between Round One and Round Three: all 45 of the experts who took part in Round One also took part in at least some portion of Round Three (100%), 42 of the 45 answered at least half of the questions (93%), and 67% of Round One participants answered at least 90% of the Round Three questions.

### STUDY ONE FINDINGS

The analysis phase of Study One began on September 3, 2013. Data from the Round Three survey were extracted from the ExpertLens system and analyzed using SPSS version 22.0. The focus of the analysis was on the Round Three data, since these data constitute the refined data point (i.e., the respondents' *final* answers after having had an opportunity to reflect on their Round One responses and having taken part in the Round Two discussion). Summary descriptive statistics were calculated for all quantitative questions in the Round Three survey (counts, frequencies, measures of central tendency). Medians, standard deviations, and the percentage of respondents in the low (1–3), medium (4–6), or high (7–9) range of the scale for each of the five criteria were calculated for all 13 suicide risk assessment variables. Data were organized into a *5 criteria by 13 variable* matrix to facilitate examination and categorization. Responses to open-ended questions were extracted, tallied, and examined for the presence of themes that could help inform the findings and product development.

### Participant Characteristics

Data in this section are based on the 45 individuals who participated in Round Three.

Participants were asked about years of providing ED services, years as an ED leader/manager, years of experience providing psychiatric emergency services (PES), years as a PES leader/manager, time spent with patients, and board certification.

Three quarters of respondents (74%) reported having experience providing health or behavioral health care services in a non-PES hospital ED. A little over half (55%) reported that they have provided behavioral health care services in a PES hospital ED. Eight-one percent (81%) of all panelists reported that they had worked in *either* a PES or non-PES ED, and 48% reported that

they have worked in both settings. Forty-three percent (43%) of respondents indicated that they spend at least half of their work time seeing patients, and 73% were board-certified.

Participants were asked about their publications, participation in research studies, and organizational memberships.

Sixty percent of respondents (60%) indicated that they have been the first author for at least one article on suicide prevention and/or emergency medicine published in peer-reviewed journals. A larger proportion of respondents (78%) indicated that they have authored or co-authored articles on suicide prevention and/or emergency medicine in peer-reviewed journals. Among those in this group, 33% authored or co-authored 1–5 articles, 8% authored or co-authored 6–10 articles, 10% authored or co-authored 11–20 articles, and 28% authored or co-authored over 20 articles. Half of the respondents (52%) reported that they have participated in a clinical research study in the past five years, and 61% have held one or more offices with national professional and membership organizations related to suicide prevention and/or emergency medicine.

### **Primary/Secondary Affiliation**

Respondents were asked to identify the primary professional discipline or stakeholder category that most closely matched their current role based on a list of 16 options. Respondents also had the option of identifying a secondary role using the same list. Many of the panelists had multiple affiliations/roles. The most well-represented groups were psychiatrists, clinical researchers, suicide prevention professionals, non-mental health physicians, and psychologists. The only role that was not represented among respondents in Study One, based on the list provided, was crisis center counselor. The percentages below exceed 100% because some respondents provided both a primary and secondary affiliation.

- Psychiatrist: **13** (29%)
- Clinical researcher: **11** (24%)
- Suicide prevention professional: **11** (24%)
- Physician (non-mental health): **10** (22%)
- Psychologist: **9** (20%)
- Policy expert: **7** (16%)
- Nurse (non-mental health): **5** (11%)
- Social worker: **5** (11%)
- Patient advocate: **4** (9%)
- Federal agency representative: **3** (7%)
- Family member: **2** (4%)
- Suicide attempt survivor: **2** (4%)
- Attorney: **1** (2%)
- Psychiatric nurse: **1** (2%)
- Suicide loss survivor: **1** (2%)

## Expert Panel DST Item Ratings

The Round Three survey ratings were examined to identify the median value for each criterion across the set of 13 items derived from established suicide risk assessment tools. The median value is the middle point: the point above which and below which half the ratings lie. The median value was used to assign each criterion a label of *low* (1–3), *medium* (4–6), or *high* (7–9). The next step in the process was to calculate the percentage of panel members whose score fell within the same category as the median value. For example, if the median value for clinical usefulness of SI was 8 (*high*), the percentage of experts who provided a score within the same category as the median (7–9) was calculated.

The results from this initial set of analyses are presented in Table 3. The median value ( $\bar{x}$ ) fell within the *high* rating category for 45 of the 65 variable/criterion combinations (69%), the *medium* category in 17 of the pairs (26%), and the *low* category for 3 of the pairs (5%). In other words, the expert panel members tended to rate each of the 13 suicide risk assessment items as being *high* on the five rating criteria in over two thirds of all instances. Overall, 11 of the 13 suicide risk assessment items were rated in the *high* category for their perceived feasibility and their perceived applicability. Ten (10) of the 13 items were rated in the *high* category for their perceived clinical usefulness, 9 of the 13 for their perceived acuity, and 4 of the 13 for their perceived objectivity. The objectivity criterion was the only one for which there was a median rating within the *low* category, which occurred on 3 of the 13 items (SI, frequency of thoughts, self-assessment of probability of intent).

**Table 3: DST Item Raw Ratings (Label, Median, % Within Median Category)**

	Clinical Usefulness	Acuity	Feasibility	Objectivity	Applicability
SI	High ( $\bar{x}$ =8; 90%)	High ( $\bar{x}$ =7; 63%)	High ( $\bar{x}$ =8; 83%)	Low ( $\bar{x}$ =3; 73%)	High ( $\bar{x}$ =9; 90%)
Frequency of Thoughts	Medium ( $\bar{x}$ =5; 57%)	Medium ( $\bar{x}$ =6; 48%)	High ( $\bar{x}$ =7; 67%)	Low ( $\bar{x}$ =2; 73%)	High ( $\bar{x}$ =7; 50%)
Reasons for Ideation/Acute Precipitant	High ( $\bar{x}$ =7; 61%)	High ( $\bar{x}$ =7; 61%)	Medium ( $\bar{x}$ =6; 46%)	Medium ( $\bar{x}$ =5; 46%)	High ( $\bar{x}$ =7; 76%)
Wish to Die	High ( $\bar{x}$ =8; 88%)	High ( $\bar{x}$ =8; 93%)	High ( $\bar{x}$ =8; 88%)	Medium ( $\bar{x}$ =4; 45%)	High ( $\bar{x}$ =8; 91%)
Intent	High ( $\bar{x}$ =9; 98%)	High ( $\bar{x}$ =9; 98%)	High ( $\bar{x}$ =8; 85%)	Medium ( $\bar{x}$ =5; 59%)	High ( $\bar{x}$ =9; 95%)
Thoughts of Carrying Out a Plan	High ( $\bar{x}$ =8; 97%)	High ( $\bar{x}$ =8; 92%)	High ( $\bar{x}$ =8; 87%)	Medium ( $\bar{x}$ =5; 77%)	High ( $\bar{x}$ =8; 97%)
Self-Assessment of Probability of Intent	Medium ( $\bar{x}$ =5; 63%)	Medium ( $\bar{x}$ =6; 55%)	Medium ( $\bar{x}$ =5; 55%)	Low ( $\bar{x}$ =2; 78%)	Medium ( $\bar{x}$ =6; 65%)
Preparatory Behaviors	High ( $\bar{x}$ =8; 90%)	High ( $\bar{x}$ =8; 95%)	High ( $\bar{x}$ =8; 76%)	High ( $\bar{x}$ =7; 61%)	High ( $\bar{x}$ =8; 85%)

Gun Ownership	High ( $\bar{x}$ =8; 76%)	High ( $\bar{x}$ =7; 58%)	High ( $\bar{x}$ =8; 85%)	High ( $\bar{x}$ =7; 58%)	High ( $\bar{x}$ =7; 70%)
History of Psychiatric Hospitalization	Medium ( $\bar{x}$ =6; 44%)	Medium ( $\bar{x}$ =5; 49%)	High ( $\bar{x}$ =8; 73%)	High ( $\bar{x}$ =7; 56%)	Medium ( $\bar{x}$ =6; 45%)
Past Suicide Attempt (aborted/interrupted)	High ( $\bar{x}$ =8; 90%)	High ( $\bar{x}$ =7; 78%)	High ( $\bar{x}$ =8; 80%)	Medium ( $\bar{x}$ =6; 46%)	High ( $\bar{x}$ =8; 87%)
Substance Use Problem	High ( $\bar{x}$ =7; 56%)	Medium ( $\bar{x}$ =6; 54%)	High ( $\bar{x}$ =7; 62%)	Medium ( $\bar{x}$ =5; 72%)	High ( $\bar{x}$ =7; 50%)
Irritability/Agitation/Aggression	High ( $\bar{x}$ =7; 71%)	High ( $\bar{x}$ =7; 76%)	High ( $\bar{x}$ =7; 71%)	High ( $\bar{x}$ =7; 68%)	High ( $\bar{x}$ =7; 68%)

### Study One Consensus Ratings

As discussed earlier in the Study One *Defining Consensus* section, consensus was very specifically defined. The classifications, presented in Table 3, based on the median value alone do not communicate information about whether or not the individual ratings from expert panel members were clustered together closely enough to conclude that they were in agreement, or that they arrived at a point of consensus. For a determination of consensus, the majority of responses (66.7% or greater) needed to be in the same category as the value of the median—indicating *agreement* that the variable is low (1–3), medium (4–6), or high (7–9) on the criteria. In cases where the panelists failed to meet this threshold, the results were deemed to be *inconclusive*—that is, the members of the expert panel were too far apart from one another to say that they arrived at a point of consensus. Experts were only found to be in strict *disagreement* when over one third were in both the *low* and *high* categories; this did not occur in the current study.

As shown in Table 4, members of the expert panel reached consensus on 39 of the 65 variable/criterion combinations (60%). Feasibility was the criterion upon which experts agreed the most (10 of 13), followed by applicability (9), clinical usefulness (8), and acuity (6). There was consensus around the objectivity criterion for 6 of the 13 variables, but the consensus was that the variables were *low* (3) or *medium* (2) on this criterion; there was only one case where there was consensus that objectivity was *high* (irritability/agitation/aggression).

**Table 4: DST Items – Areas of Consensus (Label, % Within Median Category)**

	Clinical Usefulness	Acuity	Feasibility	Objectivity	Applicability
SI	High (90%)		High (83%)	Low (73%)	High (90%)
Frequency of Thoughts			High (67%)	Low (73%)	
Reasons for Ideation/Acute Precipitant					High (76%)
Wish to Die	High	High	High		High

	(88%)	(93%)	(88%)		(91%)
Intent	High (98%)	High (98%)	High (85%)		High (95%)
Thoughts of Carrying Out a Plan	High (97%)	High (92%)	High (87%)	Medium (77%)	High (97%)
Self-Assessment of Probability of Intent				Low (78%)	
Preparatory Behaviors	High (90%)	High (95%)	High (76%)		High (85%)
Gun Ownership	High (76%)		High (85%)		High (70%)
History of Psychiatric Hospitalization			High (73%)		
Past Suicide Attempt (aborted/interrupted)	High (90%)	High (78%)	High (80%)		High (87%)
Substance Use Problem				Medium (72%)	
Irritability/Agitation/ Aggression	High (71%)	High (76%)	High (71%)	High (68%)	High (68%)

The irritability/aggression/agitation variable was the only one for which the expert panel reached consensus that it was *high* on all five criteria. This was followed by thoughts of carrying out a plan (4), past suicide attempt (aborted/interrupted) (4), wish to die (4), intent (4), preparatory behaviors (4), SI (3), gun ownership (3), frequency of thoughts (1), reasons for ideation/acute precipitant (1), and history of psychiatric hospitalization (1). Self-assessment of probability of intent and substance use problem did not receive a rating of *high* for any of the five criteria.

### Ranking Prioritization Criteria

Expert panel members were asked to rank order the five rating criteria from most important (1) to least important (5) for their importance in deciding which suicidal patients are safe to discharge from an ED.

The most popular order, from most to least important, was:

1. Clinically Useful (most important)
2. Acuity
3. Feasibility
4. Objectivity
5. Applicability (least important)

## Findings by Rank Order

There are a variety of ways to assess the acceptability of each item for inclusion in the DST. One approach is to weight each criterion by the order of importance provided by panelists. Using this approach, variables for which there was consensus on the extent to which the criterion was clinically useful would receive a value of 5, those rated as having high acuity would receive a score of 4, those rated as having high feasibility would receive a score of 3, those rated as being highly objective would receive a score of 2, and those rating high on applicability would receive a score of 1. Summing these scores across the five criteria would result in a scale score ranging from a low of 0 (absence of all criteria) to a high of 15 (high on all desirable criteria). For example, members of the expert panel arrived at consensus that the irritability/agitation/aggression item was high on all five criteria, resulting in a cumulative score of 15 out of a possible 15. In contrast, expert panel members failed to arrive at consensus on any of the criteria for the substance use problem item, resulting in a cumulative score of 0 out of a possible 15.

The final set of scores for each of the 13 items that were rated appears below in [Table 5](#). This approach is not intended to be used in isolation; it is merely an aid that decision makers could use to help inform their discussions about which items should and should not be included in the DST product.

**Table 5: Suicide Risk Assessment Variable Rank Scores**

	Clinical Usefulness	Acuity	Feasibility	Objectivity	Applicability	RANK SCORE (0-15)
Irritability/Agitation/ Aggression	5	4	3	2	1	15
Intent	5	4	3		1	13
Past Suicide Attempt (Aborted/Interrupted)	5	4	3		1	13
Preparatory Behaviors	5	4	3		1	13
Thoughts of Carrying Out a Plan	5	4	3		1	13
Wish to Die	5	4	3		1	13
Gun Ownership	5		3		1	9
SI	5		3		1	9
Frequency of Thoughts			3			3
History of Psychiatric Hospitalization			3			3
Reasons for Ideation/Acute Precipitant					1	1



Self-Assessment of Probability of Intent	0
Substance Use Problem	0

### **Optimal Assessment Tool Length for ED Setting**

Expert panel members were asked to indicate the maximum number of items, up to 20, feasible for use by ED providers to inform disposition decision making with suicidal patients.

Respondents were asked to keep in mind the complexity and fast-paced nature of the ED environment, ED provider decision-making processes, and the provider’s information needs regarding a suicidal patient’s risk status. The range of responses from expert panel members was from 1 item to 19 items. The average (mean) response was 7 items, the median value was 6 items, and the modal (most frequent) response was 5 items. The three response options with the highest proportion of respondents were 5 items (27%), 10 items (24%), and 3 items (20%).

### **Goals of Risk Assessment in ED Settings**

Participants were asked to assess the goals of risk assessment in ED settings. This was a Round One question in which experts were asked to imagine a patient in an ED has been identified for whatever reasons as having some non-zero suicide risk. Panelists were further instructed to imagine that this patient is being examined by an emergency physician or other non-mental health professional. Given that most available risk assessment tools were first designed for use by trained mental health clinicians in outpatient settings, the purpose of this question was to learn experts’ opinions about the goals of conducting risk assessment in the ED setting and how they may differ from conducting risk assessment in other settings. Given this context, panelists were asked to describe the primary goal of risk assessment for suicidal patients in an ED setting. This information was deemed as being important for helping to frame the DST, which is a secondary screening designed for helping providers determine which patients with SI may be appropriate to discharge with brief ED-based intervention, and which patients should receive further assessment including a comprehensive suicide risk assessment.

In general, comments from expert panelists emphasized maintaining patient safety as the primary goal of risk assessment for suicidal patients in an ED setting. Some comments illustrative of this theme were:

- “To determine if risk is sufficiently high to be evaluated by a mental health professional.”
- “The primary goal is to assess for imminent risk—i.e., if the ED personnel do not take some action is there a high likelihood that this individual will take action to harm themselves in the next 24–48 hours?”
- “To identify the environment in which the patient’s non-zero risk can be addressed.”

## Examination of Round One Comments

As described in the study design section, panel members were given the opportunity to provide clarifying comments to accompany any of their criteria ratings when answering the Round One survey. While these were not as potentially informative as comments provided in Round Two, the SDG examined these comments to obtain a better sense of respondents' attitudes and opinions prior to having the benefit of discussing these issues with their peers. Some of the major themes that arose from the Round One comments were:

- Giving consideration to the fact that each additional item added to a DST adds a level of burden to the provider and patient
- The idea of this being a secondary screening for patients with some known suicide risk, and not a primary (universal) screening or a comprehensive suicide risk assessment, will be new to some providers and practitioners—which highlights the need for provider training and support
- The need for appreciation that liability concerns may affect discharge decisions
- The extent to which self-report items provide a sufficient degree of objectivity is a concern for most of the variables being considered
- Consideration for whether variables in the DST should include protective factors as well as risk factors
- The need to add time frames to some of the items in the final tool and suggestions for additional working changes to the examples that were provided
- Tension between predicting imminent risk versus negative prediction
- The feeling that some of the sample items being rated are more useful for later-stage steps such as comprehensive risk assessment, treatment, or discharge planning
- The need to consider intoxicated patients and addressing voluntary versus involuntary patients

Some comments assumed that a full risk assessment would take place, and some assumed negative SI—two issues that should be clarified in the final consensus-based guide for ED providers. In general, Round One comments illustrated a great degree of thought and consideration on the part of the expert panel and helped to identify important issues for follow-up and discussion during the two results webinars.

## Examination of Round Two Discussion

After receiving the group ratings on each criterion for each of the 13 variables and seeing their own answers in comparison to their peers, panelists were asked to take part in a semi-moderated, asynchronous discussion. As described earlier, panelists provided highly detailed

commentary on each variable. Many of the comments reiterated and expanded upon those that were provided during the Round One survey, such as:

- Considering how to address difficult cases, such as intoxicated patients who deny suicidal intent when sober
- Considering how protocols might be applied differently to voluntary and involuntary patients
- Liability concerns and discharging patients with SI
- The willingness of all patients to fully disclose their suicidal thoughts and behaviors
- The suicide prevention training needs of ED health care professionals and existing skill level with using secondary screening for suicide risk

Some of the issues and comments that were new to the Round Two discussion were:

- Consideration of the threshold for tolerating false negatives
- The differences among ED settings in levels of access to mental health consultations
- Removing stigmatizing language from materials
- Appreciation of the gaps in data that are present both in the research literature and gaps in information often available to ED providers
- The need to examine current documentation practices in ED settings
- Addressing patients with contingent suicidality—patients with additional needs the ED may be in a position to meet

As with the first round, questions were raised about the scope of the screening (e.g., universal, secondary, full risk assessment), an issue that should be clarified in the consensus-based guide for ED providers.

### **Missing Items**

Panelists were also asked to identify up to two items missing from the list of 13 that they reviewed that they feel should be part of an ED provider's brief assessment to determine which suicidal patients are safe to discharge. Panelists were instructed to only identify an item if they believed it to be absolutely essential, and to comment on the value of adding the item. All recommendations were to be accompanied by a list of citations, assessment tools, and risk assessment questions associated with the item that the panelist would like SPRC and the SDG to review.

Few additional items not already covered by the list of 13 that panelists were asked to review as part of the study were identified. Those that were identified tended to focus on protective factors and patient supports:

- Available support resources or support network (e.g., is there someone who will be with the patient after discharge; what supports keep you safe or are in place for you if you are discharged at this time?)
- Access to outpatient care
- Currently receiving mental health treatment (e.g., do you have a solid relationship with an outpatient mental health professional; do you intend to see this person within the next three days?)
- Reasons for living
- Acute or chronic medical conditions associated with unmanageable pain

## **DST DEVELOPMENT PROCESS**

### **SDG and Panel Webinars**

The analysis phase of Study One lasted approximately six weeks from early September 2013 to early November 2013. During this time, representatives from SPRC and the SDG were tasked with examining all available information, reviewing the quantitative findings, reading through all of the qualitative comments, and using all means available to them to begin crafting the draft DST. The overarching purpose of the analysis was to inform the design of the materials and questions for the second study. That is, using the results from the first study to develop a draft of the DST for the approval (or disapproval) of panelists in the second study. This process was aided by convening two webinars to present the findings to all expert panel members. Approximately half of the panel members were invited to the first webinar on November 12, 2013, and the other half were invited to a second webinar on November 13, 2013. The purpose of the webinars was to review the results of Study One, answer any questions that panel members had about the preliminary findings, and engage in a discussion. Specifically, panelists were asked to note what, if anything, surprised them about the results which results affirmed their view; and whether or not they reconsidered any views during the study.

### **Areas Requiring Further Analysis**

Following an analysis of all of the data available and participating in the two results webinars, the SDG spent time discussing the major themes of the results. They also identified topics needing further examination during Study Two. These discussions focused on topics in two categories: (1) item-specific results that ran counter to views previously expressed by panel members, other experts, and the literature; and (2) general/broader topics relating to overall use of the tool.

Item-specific results warranting further discussion:

- **History of Psychiatric Hospitalization:** This item was included in the study because it was thought to be an objective and simple way to obtain proxy for the presence of mood

disorder, a major suicide risk factor. Panelists reached consensus that this item was highly feasible to implement but failed to arrive at consensus on its clinical usefulness, acuity, objectivity, and applicability. During the results webinar discussions, panelists identified several potential drawbacks of using this item (e.g., the introduction of stigma associated with psychiatric hospitalization; the possibility of missing patients with undiagnosed mood disorders and those patients who never received inpatient treatment). Panelists felt that this was an important item but recommended using alternative terminology if the item was retained in the final DST.

- **Substance Use Problem:** Panelists failed to reach consensus on the clinical usefulness, acuity, feasibility, objectivity, and applicability of this item despite its being a major risk factor for suicide. Further discussion revealed that many panelists interpreted this to mean patients with current intoxication during the ED encounter versus patients with a chronic substance use problem. Panelists recommended retaining this item for use in the DST (with clarifying language) and separately highlighting patients with current intoxication as a special population in the final version of the consensus-based guide for ED providers.

General topics warranting further discussion and interpretation:

- **The Role of Protective Factors:** Several panel members cited the lack of inclusion of protective factors in the DST as a gap. While the group acknowledged the importance of protective factors in provider decision making, it was decided that their inclusion in a DST or secondary screening would not be beneficial in this case. Specifically, panelists argued that there is a lack of research demonstrating the ability of protective factor items to predict imminent risk (in contrast to the risk-oriented items selected for the tool) and the lack of feasibility of obtaining objective protective factor information during a brief ED encounter.
- **Objectivity of Patient Self-Report Measures:** A concern was raised about the objectivity of patient self-report items and patient willingness to fully disclose suicidal thoughts and behaviors. Panel members felt that the objectivity criteria used to select DST items in the first study did not contribute useful information to the study, given that the items are all self-report in nature and objectivity ratings were universally low across all items considered (the irritability/agitation/aggression item was the only one of the 13 on which panelists arrived at consensus for the objectivity criterion). In order to address this shortcoming, while acknowledging that some providers will simply assume that the patient's report is reliable, the panel recommended adding a section to the final consensus-based guide for ED providers that emphasizes the importance of obtaining corroborating information from collaterals.
- **Risk Estimation Versus Negative Prediction:** Panel members emphasized the importance of constantly reiterating that this project emphasizes considerations for patients who either may be discharged from an ED followed by a brief ED-based intervention or need further assessment, and that this should be contrasted with risk assessment tools, which

aim to identify suicidal patients' risk levels (including possible imminent risk and the appropriate treatment to reduce that risk). It was the opinion of panelists that the DST or secondary screening can help providers rule out the possibility of imminent risk, which is sometimes referred to as negative prediction.

- **Liability Concerns:** The consensus-based guide for ED providers should include information about legal concerns associated with the care discharge of patients with suicide risk.
- **Patient-Centered Care:** The consensus-based guide for ED providers should include information about providing patient-centered care to patients with suicide risk.
- **The Limits of Prediction:** The DST is not sensitive to patients who minimize their own risk level in responding to provider questions, but it can be enhanced through increasing the skill of providers to interview patients in a manner that increases patient comfort and trust. Therefore, the consensus-based guide for ED providers should emphasize obtaining corroborating information from collaterals and include a section on provider training.
- **The Usefulness of Secondary Screening in EDs:** In EDs with universal screening, the DST can help providers determine which patients, from among those with a positive screen, may be appropriate to discharge and which patients may need further evaluation. In EDs without universal screening, the DST may need further evaluation. For example, in the absence of universal screening, the decision to use the tool may be driven by suicide risk identified through patient disclosure; reports by family, friends, or other collaterals; or individual patient presentations such as depression, substance use, or debilitating illness.

## STUDY TWO: BEST PRACTICES

### STUDY TWO DESIGN

The purpose of Study Two was to establish consensus among panel members in three areas: (1) decision support to help providers determine which patients with SI may be appropriate to discharge without further assessment; (2) brief ED-based interventions and discharge planning best practices to improve continuity of care and patient safety in the community; and (3) related topics including patient-centered care, documentation, legal issues, and the treatment of complex patients. This was the second of a two-part Consensus Panel Study, coordinated by SPRC and funded by SAMHSA. Study Two was focused on ED settings. Psychiatric emergency services settings were not the focus of this study.

As noted at the beginning of this report, the first consensus study was carried out by RAND Corporation using its ExpertLens system. The second consensus study was carried out by SSRE using a similar process. Data analysis and reporting for both studies were conducted by SSRE.

## Study Design Group

The 11-member study design group (SDG) from Study One was reconvened beginning on November 1, 2013, and met multiple times through the end of the year. The SDG was tasked with:

1. Developing a draft Decision Support Tool (DST) based on Study One findings to present to the consensus panel
2. Reviewing and identifying treatment and brief intervention programs or practices, and discharge planning protocols for use with suicidal patients in ED settings that should be examined during Study Two
3. Identifying the criteria against which each intervention should be rated (e.g., clinical usefulness, feasibility)
4. Defining the threshold for/definition of consensus
5. Identifying background materials for panelists to review prior to Study Two

### DRAFT DST

Between November 1, 2013, and December 19, 2013, the SDG met six times to synthesize all of the information gained from Study One and from the post-study results webinars and to work on the development of the draft DST. The resulting tool consisted of a set of instructions and seven items:

## INSTRUCTIONS

- Ask questions for all numbered items.
- Consult with collateral informants where possible.
- For patients with a “YES” on any one of items 2–7, assess the patient’s immediate supervision needs.
- This guide is not a substitute for a provider’s clinical judgment.
- This guide does not address involuntary hold decisions. Consult your hospital’s involuntary hold policy.

ITEM <i>With sample question</i>	Required for discharge without further assessment
<b>1. SUICIDAL IDEATION</b> <i>Have you had recent thoughts of killing yourself?                      (or is there other evidence of suicidal ideation, e.g., collateral report)                      [This is a forced item but providers will still assess.]</i>	YES (or other evidence of suicide risk, e.g., collateral report)
<b>2. THOUGHTS OF CARRYING OUT A PLAN</b> <i>Have you recently been thinking about how you might kill yourself?                      [If YES, assess the immediate supervision needs of the patient.]</i>	NO
<b>3. INTENT</b> <i>Do you have any intention of killing yourself?</i>	NO
<b>4. PAST SUICIDE ATTEMPT</b> <i>Have you ever attempted to kill yourself?</i>	NO
<b>5. SIGNIFICANT EMOTIONAL PROBLEM OR PSYCHIATRIC ILLNESS</b> <i>Have you had any treatment for emotional problems, or do you have a mental health condition like depression or anxiety that affects your ability to do things in your life?</i>	NO
<b>6. SUBSTANCE USE PROBLEM (NOT CURRENT INTOXICATION)</b> <i>In the past year have you had 5 (men) or 4 (women) drinks in a day?<sup>(1)</sup>                      In the past year have you used drugs or prescription medication for non-medical reasons?<sup>(2)</sup></i> <p><small>(1) Smith PC, Schmidt SM, Allesworth-Davies D, et al. Primary care validation of a single-question alcohol screening test. J Gen Intern Med 2009;24:783e8. (2) Smith PC, Schmidt SM, Allesworth-Davies D, et al. A single-question screening test for drug use in primary care. Arch Intern Med 2010;170:1155e60.</small></p>	NO
<b>7. IRRITABILITY/AGITATION/AGGRESSION</b> <i>Recently have you felt so anxious, agitated, or keyed up that you felt like you could just jump out of your skin or are you having conflicts or getting into fights with people?</i>	NO
<b>SCORE</b>	<b>ALL NO on lines 2 through 7 = Discharge may be considered</b> <b>ANY YES on lines 2 through 7 = Further assessment recommended</b>

*For patients being discharged without further assessment, providers should ask about access to lethal means and protective factors during brief intervention and/or discharge planning discussions. For all other patients, questions about lethal means and protective factors should be included in the full assessment/mental health consultation.*



## **Review of Brief Interventions and Discharge Planning Best or Promising Practices**

SPRC staff members reviewed the research literature and identified a preliminary list of 14 different brief interventions and discharge planning best or promising practices. The initial list of interventions considered was:

1. Safety Plan – self-administered paper version (Boudreaux et al., 2013)
2. Safety Plan – Quick Guide for Clinicians and Veteran’s Version (Larkin & Beautrais, 2010; Stanley & Brown, 2008)
3. Follow-up contacts (e.g., Alonzo & Stanley, 2013; Fleischmann et al., 2008; Hvid et al., 2011)
4. Brief motivational interviewing (Britton, Williams, & Conner, 2008; Rollnick & Miller, 1995)
5. Referral to outpatient treatment within 24–72 hours (Knesper, 2010)
6. Contact the patient’s outpatient mental health provider
7. Contact the patient’s primary care provider
8. Contact collateral informants
9. Patient education (Knesper, 2010)
10. Home visit (Hvid et al., 2011)
11. Lethal means counseling (Brent, Baugher, Birmaher, Kolko, & Bridge, 2000; Kruesi et al., 1999; Larkin, 2003; Larkin & Beautrais, 2010)
12. Give crisis center phone numbers
13. Telepsychiatry (Fortney et al., 2013)
14. Brief intervention (e.g., Alonzo & Stanley, 2013; Cedereke & Ojehagen, 2007; Fleischmann et al., 2008; Larkin & Beautrais, 2010; Randell, Eggert, & Pike, 2001)

## **Selection of Brief Interventions and Discharge Planning Best or Promising Practices**

After a review of the 14 interventions, SPRC staff members created a matrix that included (a) a description of each intervention and its components, (b) whether or not mental health expertise was need to use the intervention, (c) whether the intervention was designed to be used during or after the ED visit, (d) the intended target population(s), and (e) the source(s) of evidence for the intervention. The full matrix was sent to the 11 members of the SDG for review and comment. Members were asked to review the entire list and supporting documentation and to recommend modifications.

The SDG met via conference call on 12/3/13, 12/18/13, 1/2/14, 1/14/14, and 1/20/14 to discuss which interventions should be included in Study Two, identify the rating criteria to be used, and define the threshold for/definition of consensus. As a result of these discussions, the SDG successfully reduced the number of interventions from 14 to 9. The interventions that were retained are listed below. A handout was developed to provide consensus panel members with a description of each intervention, examples of resources containing the intervention, and related research documenting the effectiveness of using them with suicidal patients. This handout is provided in Appendix D.

1. Brief patient education
2. Patient-administered safety planning
3. Clinician-administered safety planning
4. Lethal means counseling
5. Crisis center helpline information
6. Brief motivational interviewing
7. Telepsychiatry
8. Rapid follow-up/referral
9. Subsequent contact or caring contacts

### **Development of Rating Criteria and Scaling**

Following identification of the final set of interventions to be rated, the SDG turned its attention to specifying the criteria against which each variable should be rated. The SDG examined the Institute of Medicine's (IOM) 2001 Quality Chasm report (IOM, 2001). This report describes six aims of providing quality care:

1. *Safe*: care should be as safe for patients in health care facilities as it is in their homes.
2. *Effective*: the science and evidence behind health care should be applied and serve as the standard in delivery of care.
3. *Efficient*: care and service should be cost-effective, and waste should be removed from the system.
4. *Timely*: patients should experience no waits or delays in receiving care and service.
5. *Patient-centered*: the system of care should revolve around the patient, respect patient preferences, and put the patient in control.
6. *Equitable*: unequal treatment should be a fact of the past; disparities in care should be eradicated.

Using the IOM categories as the foundation, the SDG attempted to consolidate the list into a shorter and more meaningful set of rating criteria (see [Table 6](#)).

**Table 6: Crosswalk of IOM Categories and Proposed Rating Criteria**

Proposed Intervention Rating Criteria				
IOM: Crossing the Quality Chasm Outcomes	Clinically Useful	Facilitates Continuity of Care	Feasible	Patient-Centered
<b>Safe</b> – Care should be as safe for patients in health care facilities as it is in their homes	X			X
<b>Effective</b> – The science and evidence behind health care should be applied and serve as the standard in the delivery of care	X	X		
<b>Efficient</b> – Care and service should be cost-effective, and waste should be removed from the system		X	X	
<b>Timely</b> – Patients should experience no waits or delays in receiving care and service			X	
<b>Patient-Centered</b> – The system of care should revolve around the patient, respect patient preferences, and put the patient in control				X
<b>Equitable</b> – Unequal treatment should be a fact of the past; disparities in care should be eradicated				X

The final set of rating criteria for Study Two and their definitions were:

1. **Clinical Usefulness:** Helps the patient manage suicidal thoughts, helps the patient resist suicidal urges, decreases repeat visits, is evidence-based or evidence-informed.
2. **Facilitates Continuity of Care:** Helps the patient engaged in outpatient treatment, teaches patient when to seek help, provides patient with tools/supports to access outpatient services.
3. **Feasible:** Can be implemented with minimal training, requires a realistic amount of time to perform (from the provider’s perspective), can be administered by providers with different training (e.g., mental health and non-mental health).
4. **Patient-Centered:** Involves patient in decision-making where possible, respects patient preferences, is delivered in a timely fashion (e.g., from patient’s perspective), is non-discriminatory/equitable.

The SDG decided to keep the methods used in Study Two as close as possible to those that were used in Study One. This decision was made to help maximize comparability and to stay with a model with which the members of the expert panel were already familiar. The same 9-point rating scale that was used during Study One was used during Study Two. This scale was anchored at a value of 1 (Absence of the Criteria) and 9 (High on the Criteria). As with the first study, the rating scale was intended to have the following underlying structure:

- 1 = Low – Low
- 2 = Low – Medium
- 3 = Low – High
- 4 = Medium – Low
- 5 = Medium – Medium
- 6 = Medium – High
- 7 = High – Low
- 8 = High – Medium
- 9 = High – High

## Defining Consensus

The SDG decided to adopt the same definition of consensus that was used in Study One. The determination of whether there was agreement, disagreement, or the findings were inconclusive was based on the following rule:

- (a) Disagreement: Cases in which at least 33.3% of participants chose an answer that was in the extreme category of response options 1–3 on the 9-point scale (indicating absence of the criteria) AND at least 33.3% of participants chose an answer that was in the extreme category of response options 7–9 on the 9-point scale (indicating that the variable was high on the criteria). In this instance, large proportions of individuals are at opposite ends of the 9-point scale.
- (b) Agreement: Cases in which less than 33.3% of participants chose a response option outside of the three cut-points in the scale (values of 1–3, 4–6, or 7–9) that contains the median value. In this instance, the majority of responses (66.7% or greater) are in the same grouping as the value of the median, indicating *agreement* that the variable is low (1–3), medium (4–6), or high (7–9) on the criteria.
- (c) Inconclusive: All other variations, combinations, or permutations that do not meet the criteria for disagreement or agreement. In this instance, the experts are not far enough apart from one another to say that they disagree and not similar enough in their responses to say that they are in agreement.

## STUDY TWO IMPLEMENTATION

On December 10, 2013, the 61 members of the expert panel were invited to take part in a 90-minute webinar that was designed to reaffirm their commitment to participate in the project, keep them engaged, and describe the scope and expectations for the second study. In addition to the administrative component of the webinar, three members of the expert panel were invited to deliver brief presentations on their work. The first presentation, “The Patients: Some Voices,” provided the perspective of a person with lived experience and explored issues related to patient-centered care. The second presentation, “Legal Issues in ED Discharge of Psychiatric Patients,” sought to examine current myths about liability for ED discharge decisions involving psychiatric patients. The third presentation, “Safety Planning with Suicidal Individuals in

Emergency Settings,” focused on the goals of brief suicide interventions, the rationale for brief interventions, and the safety planning evidence base.

Between January 4 and February 9, 2014, representatives from SPRC, SSRE, and the SDG worked to finalize the study protocol and to program the questions into the online platform. The second study was conducted using a combination of an online survey system and a customized discussion area on SPRC’s website rather than within the ExpertLens system. A pilot test was conducted between February 10, 2014, and February 12, 2014, to ensure that the online system was working properly and to identify any last-minute changes that needed to be made to any of the three rounds of the study. The pilot test revealed few issues and did not result in any significant changes to the protocol, questions, or study design.

### **Study Two – Round One**

All members of the expert panel received an e-mail on February 18, 2014, that welcomed them to the second study and reminded them that the goal of Study Two was to establish consensus among emergency medicine and suicide prevention experts in three areas: (1) decision support to help providers determine which suicidal patients may be appropriate to discharge without further assessment—provided recommended intervention and discharge planning practices are followed; (2) brief interventions and discharge planning best or promising practices to improve continuity of care and patient safety in the community; and (3) related topics including patient-centered care, documentation, legal issues, and treating complex patients.

The first two questions in the survey were designed to assess the draft DST that was generated at the end of Study One (see Appendix D). After examining the draft DST, participants were asked to rate the ED Guide based on its ability to help ED providers determine which suicidal patients may be appropriate to discharge without further assessment using a four category scale (Poor, Fair, Good, Excellent). A companion open-ended question asked panelists to identify what critical changes, if any, would increase the acceptability or usability of the DST (see [Figure 10](#)).

Figure 10: Study Two DST Questions

**SPRC ED Project Study 2: Round One**

**Draft Decision-Support Guide**

In Study 1, conducted July-August 2013 by RAND Corporation ("ExpertLens"), Consensus Panel members rated thirteen items for their usefulness in helping emergency department\* (ED) providers determine which suicidal patients may be appropriate to discharge from an ED without further assessment. Using results from Study 1, the SPRC Study Design Group developed a draft Decision Support Guide for your consideration.

\*Does not apply to psychiatric emergency services (PES) settings.

Please review and print the draft Decision Support Guide for use in considering the following question:

[Download the Guide](#)

*A patient in a general ED has been identified as having some suicide risk. She is being examined by an emergency care provider. Is the Decision Support Guide an acceptable way to identify, from among all suicidal patients in the ED, those who are also appropriate for discharge without further assessment?*

**Based on your examination of the Decision Support Guide, how would you rate this for the purpose of helping ED providers determine which suicidal patients may be appropriate to discharge without further assessment? (choose one)**

Poor       Fair       Good       Excellent

**Which critical changes, if any, would increase the acceptability or usability of the Decision Support Guide? Please provide the rationale for making each change suggested. (type-in)**



After they provided an evaluation of the draft DST, participants were provided with a description of the nine interventions to be rated and the four rating criteria. Panelists were asked to download and print the intervention descriptions and criteria rating descriptions so that they could reference these throughout the rest of the survey (see Appendix D). The panelists were then led through nine survey pages (one page per intervention), where they were provided with the intervention description and were asked to rate the intervention on the four criteria using a 9-point scale. Panelists were also given the opportunity to provide an open-ended rationale for their rating on each criterion (see Figure 11).

Figure 11: Study Two Sample Question for Interventions

**SPRC ED Project Study 2: Round One**

**Interventions Review - Brief Patient Education**

The next series of pages will ask you to rate each of the nine interventions using the four criteria.

You can hover your mouse over any **bold** text (including the intervention name at the top of the page) to retrieve a definition. [Or refer to the printed handouts \(PDFs\).](#)

**Brief Patient Education**

	Not (1)	2	3	4	5	6	7	8	Very (9)
How <b>clinically useful</b> is providing brief patient education?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

▶ Explain your rating (optional):

Once ratings were provided for all four criteria for each of the nine interventions, panelists were asked to identify up to two interventions missing from the list that they feel should be part of an ED provider’s intervention and discharge planning toolbox for suicidal patients being

discharged. Respondents were also asked to rank order the four rating criteria by order of importance for evaluating interventions for use in EDs. The last page of the survey asked respondents to provide information on their background, such as years providing ED services, years as an ED leader/manager, psychiatric emergency services experience, whether they spend at least half of their work time seeing patients, whether or not they are board-certified, publication and research history, and affiliation.

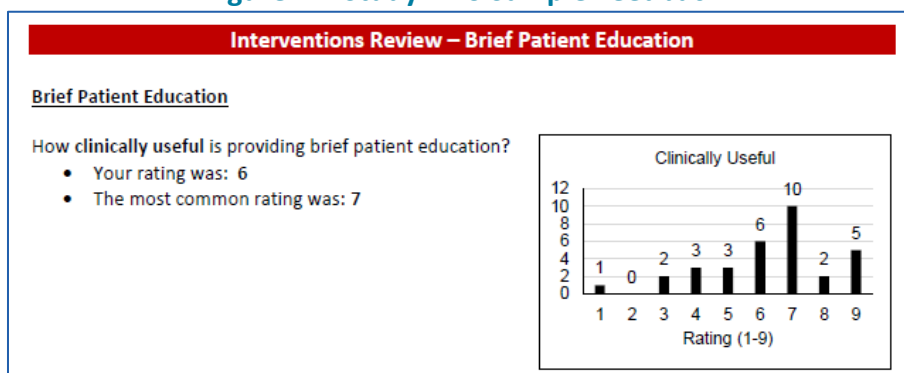
Round One of the study was open for 10 days and closed the morning of February 27, 2014. In total, 37 of the 61 expert panel members (61%) logged in to the website during Round One: 33 completed the entire Round One survey and an additional four (4) partially completed the survey. As with the first study, this participation rate is consistent with Dalal and colleagues' (2011) finding that the average participation rate in ExpertLens panels is slightly above 60% (range 55% to 75%) across five studies.

### Study Two – Round Two

The second round of Study Two opened at 8:30 a.m. EST on February 27, 2014. All panel members, regardless of their participation in the first round, received an e-mail from the SSRE study administrator indicating that Round Two was now open and that participants should log in to the SPRC discussion board area.

Each panel member received a customized PDF report that displayed the frequency of each answer for each of the four criteria across the nine interventions (i.e., the number of individuals who provided each rating), their own answer to each question, and the most common rating for each question (see Figure 12). Panel members who did not participate in Round One received a summary of the responses of all individuals who did participate in the first round.

**Figure 12: Study Two Sample Feedback**



The discussion area for Study Two was hosted in a private section of the SPRC website. All comments posted in the discussion area were anonymous. The discussion threads were organized according to the four criteria, with two separate threads for discussing surprises in scores or responses and rating variations. Two moderators from SPRC helped direct the discussion and manage the discussion board (see Figure 13).

Figure 13: Study Two Discussion Area Sample

The screenshot shows a forum interface with a 'Topic Menu' header. On the left, there is a sidebar with instructions: 'Login is for administration only', 'Select any topic from the Topic list on the right. To open a topic forum click the title', and 'The following handouts contain important information about the interventions and rating criteria.' Below this are two bullet points: 'Download the Intervention Descriptions (required)' and 'Download the Intervention Rating Criteria (required)'. The main content area shows a breadcrumb trail 'Home » Forums » Emergency Department Forums' and a prompt 'Login to post new content in the forum.' Below this is a table of forum topics with columns for 'Topic', 'Replies', 'Created', and 'Last reply'. The table lists six topics: 'Rating variations', 'Continuity of Care criteria', 'Clinically Useful criteria', 'Feasibility criteria', 'Surprises in scores or responses', and 'Patient-Centered criteria'. Each row includes a lock icon, the topic name, the number of replies, the creation date, and the date of the last reply by a user named 'Anonymous'. A social media icon is visible at the bottom left of the main content area.

Topic	Replies	Created	Last reply
Rating variations	8	24 weeks 4 days ago by Icapoccia	21 weeks 5 days ago by Anonymous
Continuity of Care criteria	5	24 weeks 4 days ago by Icapoccia	21 weeks 5 days ago by Anonymous
Clinically Useful criteria	5	24 weeks 4 days ago by Icapoccia	21 weeks 5 days ago by Anonymous
Feasibility criteria	9	22 weeks 6 days ago by Icapoccia	21 weeks 5 days ago by Anonymous
Surprises in scores or responses	14	22 weeks 6 days ago by Icapoccia	21 weeks 5 days ago by Anonymous
Patient-Centered criteria	5	22 weeks 6 days ago by Icapoccia	21 weeks 5 days ago by Anonymous

Round Two of the study was open for nine days and closed the morning of March 7, 2014. A total of 46 comments were provided across the six different discussion threads. Given the desire to keep the discussion anonymous, the site was not able to track the number of unique individuals who participated in this round.

### Study Two – Round Three

The third round of Study Two opened at 8:30 a.m. EST on March 7, 2014. All panel members, regardless of their participation in the first two rounds, received an e-mail from the SSRE survey administrator indicating that Round Three was now open and that participants should log in to the system. Upon logging in to the site, participants were given the following set of instructions:

*In Round Three, you will be asked to revisit the questions from Round One and reassess your responses. You may wish to refer back to the summary of your answers and the answers from the rest of the group that was provided to you at the end of Round One. This Round also includes some questions about providing patient-centered care, documentation, emergency department technology use, special patient populations, and product development.*

The questions in the Round Three survey were identical to those that were asked in the Round One survey, with the addition of the open-ended questions at the end that were designed to elicit additional qualitative comments on factors that were expected to help inform the consensus-based guide for ED providers.

Round Three of the study was open for 13 days and closed the evening of March 19, 2014. In total, 43 of the 61 expert panel members (70%) logged in to the website during Round Three



and answered at least one question. There was a high degree of overlap in participation between Round One and Round Three. Fifty (50) individuals participated in at least one round of the study (82%). Among this group, 7 members participated only in Round One, 12 members participated only in Round Three, and 31 members participated in both survey rounds.

## STUDY TWO FINDINGS

The analysis phase of Study Two began on March 20, 2014. Data from the Round Three survey were extracted from the online system and analyzed using SPSS version 22.0. The focus of the analysis was on the Round Three data, since these data constitute the refined data point (i.e., the respondents' *final* answers after having had an opportunity to reflect on their Round One responses and having taken part in the Round Two discussion). Summary descriptive statistics were calculated for all quantitative questions in the Round Three survey (counts, frequencies, measures of central tendency). Medians, standard deviations, and the percentage of respondents in the low (1–3), medium (4–6), or high (7–9) range of the scale for each of the four criteria were calculated for all nine interventions. Data were organized into a *4 criteria by 9* intervention matrix to facilitate examination and categorization. Responses to open-ended questions were extracted, tallied, and examined for the presence of themes that could help inform the findings and product development.

### Participant Characteristics

Data in this section are based on the 43 individuals who participated in Round Three.

Participants were asked about years of providing ED services, years as an ED leader/manager, years of experience providing psychiatric emergency services (PES), years as a PES leader/manager, time spent with patients, and board certification.

Almost three quarters of respondents (72%) reported having experience providing health or behavioral health care services in a non-PES hospital ED. Roughly one-third of panelists (34%) reported that they have provided behavioral health care services in a PES hospital ED.

Seventy-eight percent (78%) of all panelists reported that they had worked in *either* a PES or non-PES ED, and 28% reported that they have worked in both settings. Half of the respondents (50%) indicated that they spend at least half of their work time seeing patients, and 70% were board-certified.

Participants were asked about their publications, participation in research studies, and organizational memberships.

Three quarters of respondents (74%) indicated that they have been the first author for at least one article on suicide prevention and/or emergency medicine published in peer-reviewed journals. A larger proportion of respondents (88%) indicated that they have authored *or* co-

authored articles on suicide prevention and/or emergency medicine in peer-reviewed journals. Among those in this group, 38% authored or co-authored 1–5 articles, 14% authored or co-authored 6–10 articles, 10% authored or co-authored 11–20 articles, and 38% authored or co-authored over 20 articles. Three quarters of respondents (74%) reported that they have participated in a clinical research study in the past five years, and 71% have held one or more offices with national professional and membership organizations related to suicide prevention and/or emergency medicine.

### **Primary/Secondary Affiliation**

Respondents were asked to identify the primary professional discipline or stakeholder category that most closely matched their current role based on a list of 16 options. Respondents also had the option of identifying a secondary role using the same list. Many of the panelists had multiple affiliations/roles. The most well-represented groups were non-mental health physicians, psychologists, clinical researchers, suicide prevention professionals, and psychiatrists. The only roles that were not represented among respondents in Study Two, based on the list provided, were crisis center counselor, patient advocate, family member, and attorney. The percentages below exceed 100% because some respondents provided both a primary and secondary affiliation.

- Physician (non-mental health): **10** (29%)
- Psychologist: **9** (26%)
- Clinical researcher: **7** (21%)
- Suicide prevention professional: **7** (21%)
- Psychiatrist: **6** (18%)
- Social worker: **4** (12%)
- Nurse (non-mental health): **3** (9%)
- Psychiatric nurse: **3** (9%)
- Federal agency representative: **2** (6%)
- Policy expert: **1** (3%)
- Suicide attempt survivor: **1** (3%)
- Suicide loss survivor: **1** (3%)

The top five primary and secondary affiliations represented in both Study One and Study Two were nearly identical.

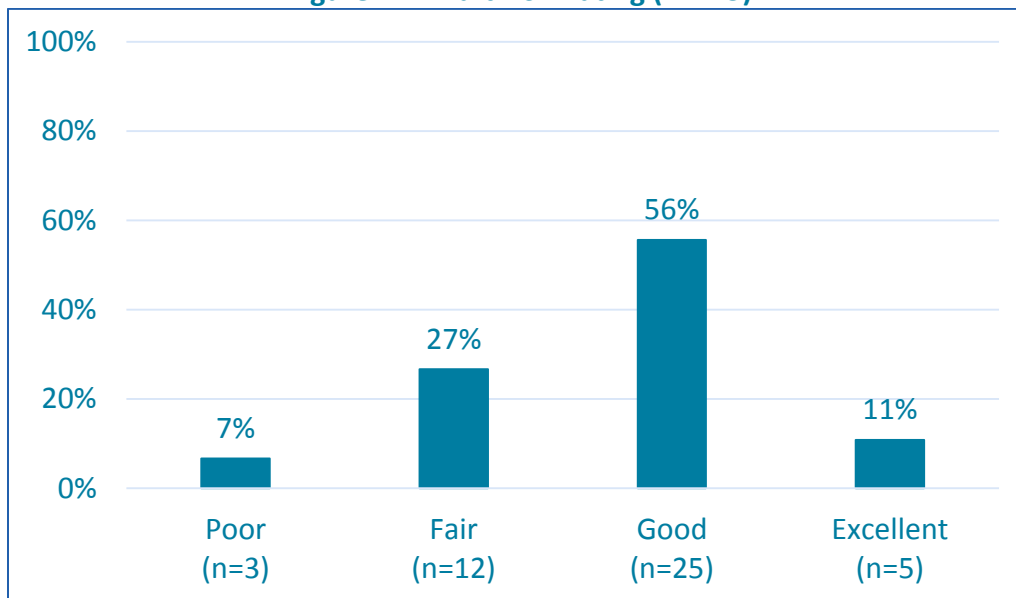
### **Draft DST Ratings**

In Study One, expert panel members rated 13 items for their usefulness in helping ED providers determine which suicidal patients may be appropriate to discharge from an ED without further assessment. As described earlier, using results from Study One, the SDG narrowed the list of 13 down to 6 and developed a draft DST.

Study members were asked the following question: “A patient in a general ED has been identified as having some suicide risk. S/he is being examined by an emergency care provider. Is the Decision Support Tool an acceptable way to identify, from among all suicidal patients in the ED, those who are also appropriate for discharge without further assessment? Based on your examination of the Decision Support Tool, how would you rate this for the purpose of helping ED providers determine which suicidal patients may be appropriate to discharge without further assessment?” The possible response options were Poor, Fair, Good, and Excellent.

As shown in Figure 14, 56% of respondents rated the draft DST as being *Good* for the purpose of helping ED providers determine which suicidal patients may be appropriate to discharge without further assessment. The remaining respondents rated the draft DST as being *Fair* (27%), *Excellent* (11%), or *Poor* (7%).

Figure 14: Draft DST Rating (n = 45)



### Expert Panel Ratings for Brief Interventions

The Round Three survey ratings were examined to identify the median value for each criterion across the set of nine brief interventions and discharge planning practices for suicidal patients in EDs. The median value is the middle point, the point above which and below which half the ratings lie. The median value was used to assign each criterion a label of *low* (1–3), *medium* (4–6), or *high* (7–9). The next step in the process was to calculate the percentage of panel members whose score fell within the same category as the median value. For example, if the median value for clinical usefulness of brief patient education was 8 (*high*), the percentage of experts who provided a score within the same category as the median (7–9) was calculated.

The results from this initial set of analyses are presented in Table 7. The median value ( $\bar{x}$ ) fell within the *high* rating category for 28 of the 36 variable/criterion combinations (78%), the

*medium* category in 8 of the pairs (22%), and the *low* category for 0 of the pairs (0%). In other words, the expert panel members tended to rate each of the nine brief interventions and discharge planning practices as being *high* on the four rating criteria in over three quarters of all instances. Overall, all nine interventions were rated in the *high* category for their perceived clinical usefulness and for the extent to which they were viewed as being patient-centered, and seven of the nine interventions were rated in the *high* category for facilitates continuity of care. Only three of the nine interventions were rated in the *high* category for the extent to which they were viewed as being feasible (brief patient education, lethal means counseling, crisis center helpline information).

**Table 7: Brief Intervention Raw Ratings (Label, Median, % Within Median Category)**

	Clinically Useful	Facilitates Continuity of Care	Feasible	Patient-Centered
Brief patient education	High ( $\bar{x}$ =7; 68%)	High ( $\bar{x}$ =7; 61%)	High ( $\bar{x}$ =7; 74%)	High ( $\bar{x}$ =8; 68%)
Patient-administered safety planning	High ( $\bar{x}$ =7; 55%)	Medium ( $\bar{x}$ =6; 42%)	Medium ( $\bar{x}$ =6; 37%)	High ( $\bar{x}$ =8; 71%)
Clinician-administered safety planning	High ( $\bar{x}$ =7; 74%)	High ( $\bar{x}$ =7; 68%)	Medium ( $\bar{x}$ =6; 53%)	High ( $\bar{x}$ =8; 63%)
Lethal means counseling	High ( $\bar{x}$ =8; 87%)	Medium ( $\bar{x}$ =5; 37%)	High ( $\bar{x}$ =7; 55%)	High ( $\bar{x}$ =7; 63%)
Crisis center helpline information	High ( $\bar{x}$ =7; 58%)	High ( $\bar{x}$ =7; 58%)	High ( $\bar{x}$ =9; 95%)	High ( $\bar{x}$ =7; 55%)
Brief motivational interviewing	High ( $\bar{x}$ =8; 76%)	High ( $\bar{x}$ =7; 61%)	Medium ( $\bar{x}$ =5; 34%)	High ( $\bar{x}$ =8; 74%)
Telepsychiatry	High ( $\bar{x}$ =7; 63%)	High ( $\bar{x}$ =7; 55%)	Medium ( $\bar{x}$ =6; 61%)	High ( $\bar{x}$ =7; 55%)
Rapid follow-up/referral	High ( $\bar{x}$ =8; 89%)	High ( $\bar{x}$ =9; 100%)	Medium ( $\bar{x}$ =6; 49%)	High ( $\bar{x}$ =8; 84%)
Subsequent contact or caring contacts	High ( $\bar{x}$ =7; 68%)	High ( $\bar{x}$ =7; 79%)	Medium ( $\bar{x}$ =6; 45%)	High ( $\bar{x}$ =7; 68%)

### Study Two Consensus Ratings

As discussed in the Study Two Design section, consensus was very specifically defined. The classifications, presented in Table 7, based on the median value alone do not communicate information about whether or not the individual ratings from expert panel members were clustered together closely enough to conclude that they were in agreement, or that they arrived at a point of consensus. For a determination of consensus, the majority of responses (66.7% or greater) needed to be in the same category as the value of the median—indicating *agreement* that the variable is low (1–3), medium (4–6), or high (7–9) on the criteria. In cases where the panelists failed to meet this threshold, the results were deemed to be *inconclusive*—that is, the members of the expert panel were too far apart from one another to say that they arrived at a point of consensus. Experts were only found to be in strict

*disagreement* when over one third were in both the *low* and *high* categories; this did not occur in the current study.

As shown in Table 8, members of the expert panel reached consensus on 16 of the 36 variable/criterion combinations (44%). Clinical usefulness was the criterion upon which experts agreed the most (six of nine interventions), followed by patient-centered (five), facilitates continuity of care (three), and feasible (two).

**Table 8: Brief Intervention Areas of Consensus (Label, % Within Median Category)**

	Clinically Useful	Facilitates Continuity of Care	Feasible	Patient-Centered
Brief patient education	High (68%)		High (74%)	High (68%)
Patient-administered safety planning				High (71%)
Clinician-administered safety planning	High (74%)	High (68%)		
Lethal means counseling	High (87%)			
Crisis center helpline information			High (95%)	
Brief motivational interviewing	High (76%)			High (74%)
Telepsychiatry				
Rapid follow-up/referral	High (89%)	High (100%)		High (84%)
Subsequent contact or caring contacts	High (68%)	High (79%)		High (68%)

Brief patient education, rapid follow-up/referral, and subsequent contact or caring contacts were each rated in the *high* category on three of the four rating criteria. This was followed by clinician-administered safety planning (two), brief motivational interviewing (two), patient-administered safety planning (one), lethal means counseling (one), crisis center helpline information (one), and telepsychiatry (zero).

The interventions that panelists agreed were **Clinically Useful** were:

- Brief patient education
- Clinician-administered safety planning
- Lethal means counseling
- Brief motivational interviewing
- Rapid follow-up/referral
- Subsequent contact or caring contacts

The interventions that panelists agreed **Facilitate Continuity of Care** were:

- Clinician-administered safety planning
- Rapid follow-up/referral
- Subsequent contact or caring contacts

The interventions that panelists agreed were **Feasible** were:

- Brief patient education
- Crisis center helpline information

The interventions that panelists agreed were **Patient-Centered** were:

- Brief patient education
- Patient-administered safety planning
- Brief motivational interviewing
- Rapid follow-up/referral
- Subsequent contact or caring contacts

### **Ranking Prioritization Criteria**

Study participants were asked to rank order the rating criteria from most important (1) to least important (4) for their ability to help evaluate intervention recommendations for use in EDs, particularly for patients who are appropriate to be discharged without further assessment.

The most popular order, from most to least important, was:

1. Clinically Useful
2. Feasible
3. Facilitates Continuity of Care
4. Patient-Centered

### **Findings by Rank Order**

There are a variety of ways to assess the acceptability of the interventions based on the opinions of the expert panel. One approach is to weight each criterion by the order of importance provided by panelists. Using this approach, interventions for which there was consensus on the extent to which it was clinically useful would receive a value of 4, those rated as being feasible would receive a score of 3, those that facilitate continuity of care would receive a score of 2, and those that are patient-centered would receive a score of 1. Summing these scores across the four criteria would result in a scale score ranging from a low of 0 (absence of all criteria) to a high of 10 (high on all desirable criteria). For example, members of the expert panel arrived at consensus that brief patient education was high on three of the four criteria, resulting in a cumulative score of 8 out of a possible 10. In contrast, expert panel

members failed to arrive at consensus on any of the criteria for telepsychiatry, resulting in a cumulative score of 0 out of a possible 10.

The final set of scores for each of the nine brief interventions that were rated appears below in [Table 9](#). This approach is not intended to be used in isolation; it is merely an aid that decision makers could use to help inform their discussions about which items should and should not be included in the ED Guide product.

**Table 9: Brief Intervention Rank Scores**

	Clinically Useful	Facilitates Continuity of Care	Feasible	Patient-Centered	RANK SCORE (0-10)
Brief patient education	4	0	3	1	<b>8</b>
Patient-administered safety planning	0	0	0	1	<b>1</b>
Clinician-administered safety planning	4	2	0	0	<b>6</b>
Lethal means counseling	4	0	0	0	<b>4</b>
Crisis center helpline information	0	0	3	0	<b>3</b>
Brief motivational interviewing	4	0	0	1	<b>5</b>
Telepsychiatry	0	0	0	0	<b>0</b>
Rapid follow-up/referral	4	2	0	1	<b>7</b>
Subsequent contact or caring contacts	4	2	0	1	<b>7</b>

### **SDG and Panel Webinars**

Results from Study Two were shared with SDG members on April 3, 2014, and senior staff from SAMHSA were briefed on April 17, 2014. Results were shared with members of the expert panel during a 90-minute webinar that was held on May 21, 2014. Following input from each of these three groups, SPRC began the process of creating *Caring for Patients with Suicide Risk: A Consensus Guide for Emergency Departments* in late May 2014. PowerPoint slides from these webinars are included in Appendix E.

## REFERENCES

- 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.
- Alonzo, D., & Stanley, B. (2013). A novel intervention for treatment of suicidal individuals. *Psychiatric Services, 64*(5), 494.
- Bolton, J. M., Spiwak, R., & Sareen, J. (2012). Predicting suicide attempts with the SAD PERSONS scale: A longitudinal analysis. *Journal of Clinical Psychiatry, 73*(6), e735–741.
- Borges, G., Angst, J., Nock, M. K., Ruscio, A. M., Walters, E. E., & Kessler, R. C. (2006). A risk index for 12-month suicide attempts in the National Comorbidity Survey Replication (NCS-R). *Psychological Medicine, 36*, 1747–1757.
- Borges, G., Nock, M. K., Haro Abad, J. M., Hwang, I., Sampson, N. A., Alonso, J., . . . Kessler, R. C. (2010). Twelve-month prevalence of and risk factors for suicide attempts in the World Health Organization World Mental Health Surveys. *Journal of Clinical Psychiatry, 71*(12), 1617–1628.
- Boudreaux, E. D., Miller, I., Goldstein, A. B., Sullivan, A. F., Allen, M. H., Manton, A. P., . . . Camargo, Jr., C. A. (2013). The Emergency Department Safety Assessment and Follow-up Evaluation (ED-SAFE): Method and design considerations. *Contemporary Clinical Trials, 36*(1), 14–24.
- Brent, D. A., Baugher, M., Birmaher, B., Kolko, D. J., & Bridge, J. (2000). Compliance with recommendations to remove firearms in families participating in a clinical trial for adolescent depression. *Journal of the American Academy of Child and Adolescent Psychiatry, 39*, 1220–1226.
- Britton, P. C., Williams, G. C., & Conner, K. R. (2008). Self-determination theory, motivational interviewing, and the treatment of clients with acute suicidal ideation. *Journal of Clinical Psychology, 64*, 52–66.
- Castro, C.A. (2013). *Research efforts toward reducing suicide behavior among military service members and veterans*. U.S. Army Medical Research and Materiel Command Military Operational Medicine Research Program. Presentation delivered Fort Detrick, Maryland: March 18, 2013.
- Cedereke, M., & Ojehagen, A. (2007). Formal and informal help during the year after a suicide attempt: A one-year follow-up. *International Journal of Social Psychiatry, 53*, 419–429.



Centers for Disease Control and Prevention. (2009). *Fatal injury data. Web-based Injury Statistics Query and Reporting System*. Available at [www.cdc.gov/injury/wisqars/fatal.html](http://www.cdc.gov/injury/wisqars/fatal.html)

Centers for Disease Control and Prevention. (2011). *FastStats homepage: Suicide and self-inflicted Injury*. Retrieved from <http://www.cdc.gov/nchs/fastats/suicide.htm>

Centers for Disease Control and Prevention (2013, May 3). Suicide among adults aged 35–64 years – United States, 1999–2010. *MMWR: Morbidity and Mortality Weekly Report*, 62(17), 321–325.

Claassen, C. A., & Larkin, G. L. (2005). Occult suicidality in an emergency department population. *The British Journal of Psychiatry*, 186(4), 352–353.

Crosby, A. E. (2014). *The epidemiology of self-directed violence*. Presentation by the Division of Violence Prevention, Centers for Disease Control and Prevention. July 2014. Accessed online at <http://payspi.org/wp-content/uploads/2014/07/EofSDV.pdf>

Dalal, S., Khodyakov, D., Srinivasan, R., Straus, S., & Adams, J. (2011). ExpertLens: A system for eliciting opinions from a large pool of non-collocated experts with diverse knowledge. *Technological Forecasting & Social Change*, 78, 1426–1444.

Dube, P., Kroenke, K., Bair, M. J., Theobald, D., & Williams L. S. (2010). The P4 screener: Evaluation of a brief measure for assessing potential suicide risk in 2 randomized effectiveness trials of primary care and oncology patients. [Primary Care Companion] *Journal of Clinical Psychiatry*, 12(6), pii: PCC.10m00978.

Fitch K., Bernstein S. J., Aguilar, M.D., Burnand, B., LaCalle, J. R., Lazaro, P., . . . Kahan, J.P. (2001). The RAND/UCLA Appropriateness Method user's manual. Santa Monica, CA: RAND Corporation.

Fleischmann, A., Bertolote, J. M., Wasserman, D., De Leo, D., Bolhari, J., Botega, N. J., . . . Tran Thi Thanhk, H. (2008). Effectiveness of brief intervention and contact for suicide attempters: A randomized controlled trial in five countries. *Bulletin of the World Health Organization*, 86(9), 703–709.

Fortney J. C., Pyne, J. M., Mouden, S. B., Mittal D, Hudson TJ, Schroeder GW. . . Rost, K.M. (2013). Practice-based versus telemedicine-based collaborative care for depression in rural federally qualified health centers: A pragmatic randomized comparative effectiveness trial. *American Journal of Psychiatry*, 170(4), 414–425.

Han, B., Compton, W. M., Gfroerer, J., & McKeon, R. (2014). Mental health treatment patterns among adults with recent suicide attempts in the United States. *American Journal of Public Health*, 104(12), 2359–2368.

Horowitz, L. M., Snyder, D., Ludi, E., Rosenstein, D. L., Kohn-Godbout, J., Lee, L., . . . Pao, M. (2013). Ask suicide-screening questions to everyone in medical settings: The asQ'em Quality Improvement Project. *Psychosomatics, 54*(3), 239–247.

Hvid, M., Vangborg, K., Sørensen, H. J., Nielsen, I. K., Stenborg, J. M., & Wang, A. G. (2011). Preventing repetition of attempted suicide—II. The Amager Project, a randomized controlled trial. *Nordic Journal of Psychiatry, 65*(5), 292–298.

Ilgen, M., Walton, M., Cunningham, R., Barry, K., Chermack, S., De Chavez, P., & Blow, F. (2009). Recent suicidal ideation among patients in an inner city emergency department. *Suicide & Life-Threatening Behavior, 39*(5), 508–517.

IOM (Institute of Medicine). (2001). *Crossing the quality chasm: A new health system for the 21st century*. Washington, DC: National Academy Press.

Joiner, T. J., Kalafat, J., Draper, J., Stokes, H., Knudson, M., Berman, A. L., & McKeon, R. (2007). Establishing standards for the assessment of suicide risk among callers to the National Suicide Prevention Lifeline. *Suicide and Life-Threatening Behavior, 37*(3), 353–365.

Khodyakov, D., Hempel, S., Rubenstein, L., Shekelle, P., Foy, R., Salem-Schatz, S., . . . Dalal, S. (2011). Conducting online expert panels: A feasibility and experimental replication study. *BMC Medical Research Methodology, 11*, 174.

Knesper, D. J., American Association of Suicidology, & Suicide Prevention Resource Center. (2010). *Continuity of care for suicide prevention and research: Suicide attempts and suicide deaths subsequent to discharge from the emergency department or psychiatry inpatient unit*. Newton, MA: Education Development Center, Inc.

Kruesi, M. J., Grossman, J., Pennington, J. M., Woodward, P. J., Duda, D., & Hirsch, J. G. (1999). Suicide and violence prevention: Parent education in the emergency department. *Journal of the American Academy of Child and Adolescent Psychiatry, 38*, 250–255.

Larkin, G. L. (2003). Screening for adolescent firearms-carrying: One more way to save a life. *Annals of Emergency Medicine, 42*, 808–810.

Larkin, G. L., & Beautrais, A. L. (2010). Emergency departments are underutilized sites for suicide prevention. *Crisis, 31*(1), 1–6.

Luoma J. B., Martin, C. E., & Pearson, J. L. (2002). Contact with mental health and primary care providers before suicide: A review of the evidence. *American Journal of Psychiatry, 159*(6), 909–916.

Miller, I. W., Norman, W. H., Bishop, S. B., & Dow, M. G. (1986). The Modified Scale for Suicide Ideation: Reliability and validity. *Journal of Consulting and Clinical Psychology, 54*(5), 724–725.

National Action Alliance for Suicide Prevention: Research Prioritization Task Force. (2014). A prioritized research agenda for suicide prevention: An action plan to save lives. Rockville, MD: National Institute of Mental Health and the Research Prioritization Task Force.

NSW Department of Health. (2004). *Framework for suicide risk assessment and management*. North Sydney, NSW.

Osman, A., Bagge, C. L., Gutierrez, P. M., Konick, L. C., Kopper, B. A., & Barrios, F. X. (2001). The Suicidal Behaviors Questionnaire-Revised (SBQ-R): Validation with clinical and nonclinical samples. *Assessment, 8*, 443–454.

Posner, K., Brown, G. K., Stanley, B., Brent, D. A., Yershova, K. V., Oquendo, M. A., . . . Mann, J. J. (2011). The Columbia–Suicide Severity Rating Scale: Initial validity and internal consistency findings from three multisite studies with adolescents and adults. *The American Journal of Psychiatry, 168*(12), 1266–1277.

Randell, B. P., Eggert, L. L., & Pike, K. C. (2001). Immediate post intervention effects of two brief youth suicide prevention interventions. *Suicide and Life-Threatening Behavior, 31*, 41–61.

Reynolds, W. M. (1991). *Adult Suicide Ideation Questionnaire: Professional manual*. Odessa, FL: Psychological Assessment Resources.

Rockett, I. R. H., Regier, M. D., Kapusta, N. D., Coben, J. H., Miller, T. R., Hanzlick, R. L., . . . Smith, G. S. (2012). Leading causes of unintentional and intentional injury mortality: United States, 2000–2009. *American Journal of Public Health, 102*(11), e84–e92.

Rollnick S., & Miller, W. R. (1995). What is motivational interviewing? *Behavioural and Cognitive Psychotherapy, 23*, 325–334.

Ronquillo, L., Minassian, A., Vilke, G. M., & Wilson, M. P. (2012). Literature-based recommendations for suicide assessment in the emergency department: A review. *The Journal of Emergency Medicine, 43*(5), 836–842.

Stanley, B., & Brown, G. K. (2008). *The safety plan treatment manual to reduce suicide risk: Veteran version*. Washington, DC: United States Department of Veterans Affairs.

Suicide Prevention Resource Center. (2007). *Suicide risk: A guide for evaluation and triage*. Waltham, MA: Education Development Center, Inc.

Suicide Prevention Resource Center. (2013). *Continuity of care for suicide prevention: The role of emergency departments*. Waltham, MA: Education Development Center, Inc.

U.S. Department of Health and Human Services. (2001). *National strategy for suicide prevention: Goals and objectives for action*. Rockville, MD: Author.

U.S. Department of Health and Human Services (HHS) Office of the Surgeon General, & National Action Alliance for Suicide Prevention. (2012). *National Strategy for Suicide Prevention: Goals and objectives for action*. Washington, DC: HHS.

U.S. Public Health Service. (1999). *The Surgeon General's call to action to prevent suicide*. Washington, DC: Author.

## APPENDICES

Appendix A – SPRC ED Final Panel Roster

Appendix B – Suicide Risk Assessment Tool Matrix

Appendix C – Study One Handouts

- Items Reference Sheet
- Criteria Reference Sheet
- VA Self-Directed Violence Classification System

Appendix D – Study Two Handouts

- Decision Support Tool
- Intervention Descriptions Final
- Rating Criteria

## APPENDIX A: EMERGENCY DEPARTMENT CONSENSUS PANEL MEMBERS

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## APPENDIX B: SUICIDE RISK ASSESSMENT TOOL MATRIX

COMMON ITEMS IN RISK ASSESSMENT TOOLS															
TOOLS															
ITEMS	P4 Suicidality Screener	P4 Clarifying Questions	Proposed rev. of Crisis Triage Rating Scale	Columbia Suicide Severity Rating Scale (CSSRS)	ED-SAFE Secondary Screener	Modified Scale for Suicide Ideation (MSSI)	New South Wales Suicide Risk Assessment Guide (NSW)	5-Item SAD PERSONS	SBQ-R	Life-line	US Army MOMRP	Self-Report (King)	ASQ'em	ASIQ	SPRC Guide
Active Suicidal Ideation - SI, thoughts of self harm, non-specific active suicidal thoughts	x		x	x	x				x	x	x	x	x	x	x
Frequency of thoughts				x		x			x						
Reasons for ideation				x											
Wish to die - Acuity		x		x		x				x					
Wish to die - Now													x	x	
Intent (with/without a plan)				x	x			x		x					
Thoughts of carrying out a plan		x		x	x	x				x					
Preparatory acts or behavior				x		x				x					
Gun ownership		x													
History of psychiatric hospitalization					x			x							
Past suicide attempt (incl. interrupted, aborted, and current)	x			x	x		x	x	x	x			x	x	x
Excessive substance abuse				x	x		x	x		x					
Self assessment of probability of attempt, expectancy of actual attempt, Likelihood of acting on thoughts	x					x			x			x			
Irritability/agitation/aggression					x		x	x		x	x				
Sleep (incl. disturbing dreams/nightmares)											x	x			

<b>SDVCS = Self Directed Violence Classification System</b>	
<b>ITEMS</b>	<b>DEFINITIONS AND/OR EXAMPLE QUESTIONS</b>
Active suicidal ideation	Thoughts of engaging in suicide-related behavior. For example, intrusive thoughts of suicide without the wish to die would be classified as Suicidal Ideation, Without Intent. [SDVCS] Have you actually had any thoughts of killing yourself? [CSSRS] Are you thinking of suicide? [Lifeline]
Frequency of thoughts	How many times have you had these thoughts? (1) Less than once a week (2) Once a week (3) 2- 5 times in week (4) Daily or almost daily (5) Many times each day [CSSRS]
Reasons for ideation / acute precipitant	Proximal risk factors: external circumstances believed to have played a role in precipitating the suicidal behavior [SDVCS]
Wish to die - acuity	Right now, how strong is your wish to die? [P4-c]
Intent	There is past or present evidence (implicit or explicit) that an individual wishes to die, means to kill him/herself, and understands the probable consequences of his/her actions or potential actions. Suicidal intent can be determined retrospectively and in the absence of suicidal behavior. Suicidal Ideation, with Suicidal Intent. [SDVCS] Have you had some intention of acting on your thoughts? [ED-SAFE]
Thoughts of carrying out a plan	Have you been thinking about how you might kill yourself? [ED-SAFE] Have you thought about taking an overdose of medication, driving your car off the road, using a gun, or doing something else serious like this? [P4-c]
Self assessment of probability of attempt	There's a big difference between having a thought and acting on a thought. How likely do you think it is that you will act on these thoughts about hurting yourself or ending your life some time over the next month? (not at all, somewhat, very likely) [P4] How confident are you that you WILL NOT attempt suicide in the future? If you have thoughts of killing yourself in the future, how confident are you that you WILL BE ABLE to keep yourself from attempting suicide? If you have thoughts of killing yourself in the future, how confident are you that you WILL tell someone? [King] How likely is it that you will attempt suicide someday? (0) Never (1) No chance at all (2) Rather unlikely (3) Unlikely (4) Likely (5) Rather likely (6) Very likely [MSSI]
Preparatory behaviors	Acts or preparation towards engaging in Self-Directed Violence, but before potential for injury has begun. This can include anything beyond a verbalization or thought, such as assembling a method (e.g., buying a gun, collecting pills) or preparing for one's death by suicide (e.g., writing a suicide note, giving things away). For example, hoarding medication for the purpose of overdosing would be classified as Suicidal Self-Directed Violence, Preparatory. [SDVCS] Have you taken any steps towards making a suicide attempt or preparing to kill yourself (such as collecting pills, getting a gun, giving valuables away or writing a suicide note)? [CSSRS]
Gun ownership	Do you own a gun? (P4-c)
History of psychiatric hospitalization	Have you ever been hospitalized for a mental health problem or substance use problem? (ED-SAFE)

**SDVCS = Self Directed Violence Classification System**

ITEMS	DEFINITIONS AND/OR EXAMPLE QUESTIONS
Past suicide attempt, including aborted and interrupted attempt	A non-fatal self-inflicted potentially injurious behavior with any intent to die as a result of the behavior. [SDVCS]
	Have you ever attempted to kill yourself? (Lifeline)
	Interrupted attempt: When the person is interrupted (by an outside circumstance) from starting the potentially self-injurious act (if not for that, actual attempt would have occurred). (CSSRS)
	Aborted attempt: When person begins to take steps toward making a suicide attempt, but stops themselves before they actually have engaged in any self-destructive behavior. (CSSRS)
Substance use problem	Does the patient have a pattern of excessive substance use? (ED-SAFE)
	Has drinking or drug abuse ever been a problem for you? (ED-SAFE)
Irritability / agitation / aggression	Is there evidence from the history or presentation of extreme anxiety, motor restlessness, anger or verbal or physical fights?
Sleep	Recently, have you had problems sleeping? (MOMRP)
	Recently, have you been significantly bothered by disturbing dreams or nightmares? (MOMRP)

## **APPENDIX C: STUDY ONE HANDOUTS**

Items Reference Sheet

Criteria Reference Sheet

VA Self-Directed Violence Classification System



## ITEMS REFERENCE SHEET

Imagine a patient in an ED has been identified for whatever reasons as having some non-zero suicide risk. Further imagine that this patient is being examined by an emergency physician or other non-mental health professional. What items, if negatively endorsed, would allow the Emergency Physician to release the patient from the ED without further assessment by a MHP, or alternatively, if answered affirmatively would require a detailed suicide risk assessment (presumably by an MHP).

In the ExpertLens study, Consensus Panel members will evaluate thirteen common items found in existing assessment tools for their ability to help ED providers decide which suicidal patients can be safely discharged.

Listed below are the items with definitions and/or sample questions. In the rating exercise, please focus on the items *only* (e.g., Suicidal Ideation). These will display in blue in ExpertLens. The definitions and sample questions are provided *only for reference* and should *not be* the focus of your rating.

### 1. SUICIDAL IDEATION

- Thoughts of engaging in suicide-related behavior
- Have you actually had any thoughts of killing yourself?
- Are you thinking of suicide?

### 2. FREQUENCY OF THOUGHTS

- How many times have you had these thoughts?

### 3. REASONS FOR IDEATION/ACUTE PRECIPITANT

- External circumstance believed to have played a role in precipitating the suicidal behavior
- Proximal risk factors

### 4. WISH TO DIE

- Right now, how strong is your wish to die?

### 5. INTENT

- There is past or present evidence (implicit or explicit) that an individual wishes to die, means to kill him/herself, and understands the probable consequences of his/her actions or potential actions
- Have you had some intention of acting on your thoughts?

### 6. THOUGHTS OF CARRYING OUT A PLAN

- Have you been thinking about how you might kill yourself?
- Have you thought about taking an overdose of medication, driving your car off the road, using a gun, or doing something else serious like this?

### 7. SELF-ASSESSMENT OF PROBABILITY OF ATTEMPT

- There's a big difference between having a thought and acting on a thought. How likely do you think it is that you will act on these thoughts about hurting yourself or ending your life sometime over the next month?
- How likely is it that you will attempt suicide someday?
- If you have thoughts of killing yourself in the future, how confident are you that you will be able to keep yourself from attempting suicide?

Continued next page

## 8. PREPARATORY BEHAVIORS

- Acts of preparation towards engaging in self-directed violence, but before potential for injury has begun. This can include anything beyond a verbalization or thought, such as assembling a method (e.g., buying a gun, collecting pills) or preparing for one's death by suicide (e.g., writing a suicide note, giving things away).
- Have you taken any steps towards making a suicide attempt or preparing to kill yourself (such as collecting pills, getting a gun, giving valuables away or writing a suicide note)?

## 9. GUN OWNERSHIP

- Do you own a gun?

## 10. HISTORY OF PSYCHIATRIC HOSPITALIZATION

- Have you ever been hospitalized for a mental health problem or substance use problem?

## 11. PAST SUICIDE ATTEMPT, INCLUDING ABORTED AND INTERRUPTED ATTEMPT

- A non-fatal self-inflicted potentially injurious behavior with the intent to die as a result of the behavior.
- Interrupted attempt: When the person is interrupted (by an outside circumstance) from starting the potentially self-injurious act (if not for that, actual attempt would have occurred).
- Aborted attempt: When the person begins to take steps toward making a suicide attempt, but stops themselves before they actually have engaged in any self-destructive behavior.
- Have you ever attempted to kill yourself?

## 12. SUBSTANCE USE PROBLEM

- Does the patient have a pattern of excessive substance use?
- Has drinking or drug abuse ever been a problem for you?

## 13. Irritability/agitation/aggression

- Is there evidence from the history or presentation of extreme anxiety, motor restlessness, anger or verbal or physical fights?

### Tools and resources referenced for developing the item list and item descriptions:

Adult Suicidal Ideation Questionnaire (ASIQ)VA Self Directed Violence Classification System  
ASQ'em - Ask suicide-screening questions to everyone in medical settings: the asQ'em Quality Improvement Project  
Columbia Suicide Severity Rating Scale  
Emergency Department Safety Assessment and Follow-up Evaluation (ED-SAFE study decision logic)  
Five-Item SAD PERSONS  
Modified Scale for Suicidal Ideation  
National Suicide Prevention Lifeline Suicide Risk Assessment Standards  
New South Wales Suicide Risk Assessment Guide  
Proposed revision of Crisis Triage Rating Scale (Berlin, Berman)  
P4 Suicidality Screener from the ACP Depression Care Guide  
Self-Assessment Tool Used by the University of Michigan (King, in development)  
SPRC Emergency Department Poster – Companion Resource  
Suicide Behaviors Questionnaire-Revised  
U.S. Army Medical Research and Materiel Command Military Operational Medicine Research Program

*A grid of the 13 items and the assessment tools in which they appear is available upon request.*

Contact [lcapoccia@edc.org](mailto:lcapoccia@edc.org) to request a copy.

## CRITERIA REFERENCE SHEET

In the ExpertLens study, Consensus Panel members evaluate thirteen common items from existing assessment tools for their ability to help ED providers decide which suicidal patients can be safely discharged. The evaluation criteria and their definitions are listed below.

**1. Clinical Usefulness:** How useful is this item in guiding ED provider decision-making? By useful we mean that the item suggests ways to understand and modify risk rather than merely quantifying it and it helps guide ED provider decision-making. Rating scale: 1 – not clinically useful, 9 – very clinically useful.

**2. Acuity:** What is the degree of acuity of this item? By acuity we mean that the item is associated with imminent or chronic risk. Rating scale: 1 – no acuity, 9 – high acuity.

**3. Feasibility:** What is the feasibility of this item? By feasibility we mean that the item is simple enough that most ED practitioners can ask and interpret it based on their current training and practice. We also mean the item is low-burden and does not disrupt the workflow. Rating scale: 1 – not feasible, 9 – very feasible.

**4. Objectivity:** What is the objectivity of this item? By objectivity we mean the item has elements that can be observed or gathered from interaction or examination and thereby provide a different type of data than the patient's report. It can also be uniformly and consistently interpreted. Rating scale: 1 – not objective, 9 – very objective.

**5. Applicability:** How applicable is this item? By applicable we mean the item has relevance to the majority of ED patients who are suicidal rather than only a small subset. Rating scale: 1 – not applicable, 9 – very applicable.

## Self-Directed Violence Classification System\*

Type	Sub-Type	Definition	Modifiers	Terms
<b>Thoughts</b>	Non-Suicidal Self-Directed Violence Ideation	Self-reported thoughts regarding a person's desire to engage in self-inflicted potentially injurious behavior. There is no evidence of suicidal intent.  For example, persons engage in Non-Suicidal Self-Directed Violence Ideation in order to attain some other end (e.g., to seek help, regulate negative mood, punish others, to receive attention).	N/A	<ul style="list-style-type: none"> <li>•Non-Suicidal Self-Directed Violence Ideation</li> </ul>
	Suicidal Ideation	Thoughts of engaging in suicide-related behavior.  For example, intrusive thoughts of suicide without the wish to die would be classified as Suicidal Ideation, Without Intent.	<ul style="list-style-type: none"> <li>•Suicidal Intent:                             <ul style="list-style-type: none"> <li>-Without</li> <li>-Undetermined</li> <li>-With</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>•Suicidal Ideation, Without Suicidal Intent</li> <li>•Suicidal Ideation, With Undetermined Suicidal Intent</li> <li>•Suicidal Ideation, With Suicidal Intent</li> </ul>
<b>Behaviors</b>	Preparatory	Acts or preparation towards engaging in Self-Directed Violence, but before potential for injury has begun. This can include anything beyond a verbalization or thought, such as assembling a method (e.g., buying a gun, collecting pills) or preparing for one's death by suicide (e.g., writing a suicide note, giving things away).  For example, hoarding medication for the purpose of overdosing would be classified as Suicidal Self-Directed Violence, Preparatory.	<ul style="list-style-type: none"> <li>•Suicidal Intent:                             <ul style="list-style-type: none"> <li>-Without</li> <li>-Undetermined</li> <li>-With</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>•Non-Suicidal Self-Directed Violence, Preparatory</li> <li>•Undetermined Self-Directed Violence, Preparatory</li> <li>•Suicidal Self-Directed Violence, Preparatory</li> </ul>
	Non-Suicidal Self-Directed Violence	Behavior that is self-directed and deliberately results in injury or the potential for injury to oneself. There is no evidence, whether implicit or explicit, of suicidal intent.  For example, persons engage in Non-Suicidal Self-Directed Violence in order to attain some other end (e.g., to seek help, regulate negative mood, punish others, to receive attention).	<ul style="list-style-type: none"> <li>•Injury:                             <ul style="list-style-type: none"> <li>-Without</li> <li>-With</li> <li>-Fatal</li> </ul> </li> <li>•Interrupted by Self or Other</li> </ul>	<ul style="list-style-type: none"> <li>•Non-Suicidal Self-Directed Violence, Without Injury</li> <li>•Non-Suicidal Self-Directed Violence, Without Injury, Interrupted by Self or Other</li> <li>•Non-Suicidal Self-Directed Violence, With Injury</li> <li>•Non-Suicidal Self-Directed Violence, With Injury, Interrupted by Self or Other</li> <li>•Non-Suicidal Self-Directed Violence, Fatal</li> </ul>
	Undetermined Self-Directed Violence	Behavior that is self-directed and deliberately results in injury or the potential for injury to oneself. Suicidal intent is unclear based upon the available evidence.  For example, the person is unable to admit positively to the intent to die (e.g., unconsciousness, incapacitation, intoxication, acute psychosis, disorientation, or death); <b>OR</b> the person is reluctant to admit positively to the intent to die for other or unknown reasons.	<ul style="list-style-type: none"> <li>•Injury:                             <ul style="list-style-type: none"> <li>-Without</li> <li>-With</li> <li>-Fatal</li> </ul> </li> <li>•Interrupted by Self or Other</li> </ul>	<ul style="list-style-type: none"> <li>•Undetermined Self-Directed Violence, Without Injury</li> <li>•Undetermined Self-Directed Violence, Without Injury, Interrupted by Self or Other</li> <li>•Undetermined Self-Directed Violence, With Injury</li> <li>•Undetermined Self-Directed Violence, With Injury, Interrupted by Self or Other</li> <li>•Undetermined Self-Directed Violence, Fatal</li> </ul>
	Suicidal Self-Directed Violence	Behavior that is self-directed and deliberately results in injury or the potential for injury to oneself. There is evidence, whether implicit or explicit, of suicidal intent.  For example, a person with the wish to die cutting her wrists with a knife would be classified as Suicide Attempt, With Injury.	<ul style="list-style-type: none"> <li>•Injury:                             <ul style="list-style-type: none"> <li>-Without</li> <li>-With</li> <li>-Fatal</li> </ul> </li> <li>•Interrupted by Self or Other</li> </ul>	<ul style="list-style-type: none"> <li>•Suicide Attempt, Without Injury</li> <li>•Suicide Attempt, Without Injury, Interrupted by Self or Other</li> <li>•Suicide Attempt, With Injury</li> <li>•Suicide Attempt, With Injury, Interrupted by Self or Other</li> <li>•Suicide</li> </ul>

\* Developed in collaboration with the Centers for Disease Control and Prevention

## Self-Directed Violence Classification System\*

<b>Key Terms</b>	<p><b><i>Self-Directed Violence:</i></b> Behavior that is self-directed and deliberately results in injury or the potential for injury to oneself.</p> <p><b><i>Suicidal Intent:</i></b> There is past or present evidence (implicit or explicit) that an individual wishes to die, means to kill him/herself, and understands the probable consequences of his/her actions or potential actions. Suicidal intent can be determined retrospectively and in the absence of suicidal behavior.</p> <p><b><i>Physical Injury:</i></b> A (suspected) bodily lesion resulting from acute overexposure to energy (this can be mechanical, thermal, electrical, chemical, or radiant) interacting with the body in amounts or rates that exceed the threshold of physiological tolerance. In some cases an injury results from an insufficiency of vital elements, such as oxygen. Acute poisonings and toxic effects, including overdoses of substances and wrong substances given or taken in error are included, as are adverse effects and complications of therapeutic, surgical and medical care. Psychological injury is excluded in this context.</p> <p><b><i>Interrupted By Self or Other:</i></b> A person takes steps to injure self but is stopped by self/another person prior to fatal injury. The interruption may occur at any point.</p> <p><b><i>Suicide Attempt:</i></b> A non-fatal self-inflicted potentially injurious behavior with any intent to die as a result of the behavior.</p> <p><b><i>Suicide:</i></b> Death caused by self-inflicted injurious behavior with any intent to die as a result of the behavior.</p>
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\* Developed in collaboration with the Centers for Disease Control and Prevention



## **APPENDIX D: STUDY TWO HANDOUTS**

Decision Support Tool

Intervention Descriptions Final

Rating Criteria

## DECISION SUPPORT GUIDE – SAMPLE FOR SPRC ED STUDY USE ONLY

**PANEL QUESTION:** A patient in a general ED has been identified as having some suicide risk. S/he is being examined by an emergency care provider. Assuming the patient has suicidal ideation (i.e., Item 1 is positive), if all other items are negative, is this set of items acceptable for allowing the Emergency Physician to discharge the patient from the ED without further assessment? Alternatively, and still assuming the patient has suicidal ideation (i.e., Item 1 is positive), is a positive response on any other item acceptable for recommending further assessment?

INSTRUCTIONS
<ul style="list-style-type: none"> <li>➤ Ask questions for all numbered items.</li> <li>➤ Consult with collateral informants where possible.</li> <li>➤ For patients with a “YES” on any one of items 2 – 7, assess the patient’s immediate supervision needs.</li> <li>➤ This guide is not a substitute for a provider’s clinical judgment.</li> <li>➤ This guide does not address involuntary hold decisions. Consult your hospital’s involuntary hold policy.</li> </ul>

ITEM <i>With sample question</i>	Required for discharge without further assessment
<b>1. SUICIDAL IDEATION</b> <i>Have you had recent thoughts of killing yourself?</i> <i>(or is there other evidence of suicidal ideation, e.g., collateral report)</i> [This is a forced item but providers will still assess.]	YES (or other evidence of suicide risk, e.g., collateral report)
<b>2. THOUGHTS OF CARRYING OUT A PLAN</b> <i>Have you recently been thinking about how you might kill yourself?</i> [If YES, assess the immediate supervision needs of the patient.]	NO
<b>3. INTENT</b> <i>Do you have any intention of killing yourself?</i>	NO
<b>4. PAST SUICIDE ATTEMPT</b> <i>Have you ever attempted to kill yourself?</i>	NO
<b>5. SIGNIFICANT EMOTIONAL PROBLEM OR PSYCHIATRIC ILLNESS</b> <i>Have you had any treatment for emotional problems, or do you have a mental health condition like depression or anxiety that affects your ability to do things in your life?</i>	NO
<b>6. SUBSTANCE USE PROBLEM (NOT CURRENT INTOXICATION)</b> <i>In the past year have you had 5 (men) or 4 (women) drinks in a day?<sup>(1)</sup></i> <i>In the past year have you used drugs or prescription medication for non-medical reasons?<sup>(2)</sup></i> <a href="http://www.ncbi.nlm.nih.gov/pubmed/22511015">http://www.ncbi.nlm.nih.gov/pubmed/22511015</a> (1) Smith PC, Schmidt SM, Allesworth-Davies D, et al. Primary care validation of a single-question alcohol screening test. <i>J Gen Intern Med</i> 2009;24:783e8. (2) Smith PC, Schmidt SM, Allesworth-Davies D, et al. A single-question screening test for drug use in primary care. <i>Arch Intern Med</i> 2010;170:1155e60.	NO
<b>7. IRRITABILITY/AGITATION/AGGRESSION</b> <i>Recently have you felt so anxious, agitated, or keyed up that you felt like you could just jump out of your skin or are you having conflicts or getting into fights with people?</i>	NO
SCORE	<b>ALL NO on lines 2 through 7 = Discharge may be considered</b>
	<b>ANY YES on lines 2 through 7 = Further assessment recommended</b>

For patients being discharged without further assessment, providers should ask about access to lethal means and protective factors during brief intervention and/or discharge planning discussions. For all other patients, questions about lethal means and protective factors should be included in the full assessment/mental health consultation.

**Note:** This document is a handout for the SPRC ED Consensus Panel study, and is not intended for dissemination outside of this study or as a provider resource. Results from the study will inform the development of a provider resource which will contain restructured information on some or all of the interventions below. The listings under “Examples,” “Related publications,” and “Selected outcomes” are not exhaustive. If you would like more information about any of these interventions email [lcapoccia@edc.org](mailto:lcapoccia@edc.org).

## 1. BRIEF PATIENT EDUCATION

Patient education for suicidal patients involves communication with the patient and informal caregivers (i.e., friends, family), if present and with the patient’s consent, to discuss the patient’s condition, risk and protective factors (e.g., engagement in outpatient mental health care), signs of worsening condition and how to respond, home care, medication adherence, and expectations for follow-up care. Patient education often happens as part of discharge planning instructions. Written discharge instructions should be seen as a complement to, and not a replacement for, verbal instructions.

### Examples

- [Continuity of Care for Suicide Prevention: The Role of Emergency Departments](#) (bottom of page 2)
- *After an Attempt* brochure series for patients who attempted suicide, versions for [patients](#) and [friends/family](#)

### Related publications

- Emergency Nurses Association, 2013. [Safe Discharge from the Emergency Setting Position Statement](#)
- Knesper, 2011. [Continuity of Care for Suicide Prevention and Research](#)
- Szpiro, et al., 2008. [Patient Education in the Emergency Department: A Systematic Review of Interventions and Outcomes](#)
- Fleischmann et al., 2008. [Effectiveness of Brief Intervention and Contact for Suicide Attempters: A Randomized Controlled Trial in Five Countries](#)
- Taylor & Cameron, 2000. [Discharge Instructions for Emergency Department Patients: What Should We Provide?](#)

### Selected outcomes

- Patient education combined with follow-up contacts resulted in fewer deaths from suicide up to 18 months later (Fleischmann et al., 2008)
- Multiple experimental and quasi-experimental studies have demonstrated statistically significant improvements in learning in intervention groups compared with controls (Szpiro et al., 2008)

## 2. PATIENT-ADMINISTERED SAFETY PLANNING

Patient-administered safety planning is a process in which patients develop a prioritized list of coping strategies and sources of support to use during a suicidal crisis or to prevent a crisis from developing. The plan is brief, in the patient’s own words, and easy to read. Topics addressed in most safety plans include warning signs, internal coping strategies, distracting oneself from the crisis, family members or friends who can provide support, professionals and agencies to contact for help, and making the environment safe. Safety plans have traditionally been done using pen and paper, but there are at least two mobile apps for safety planning currently available.

### Examples

- Mobile apps: [MY3](#) and [Safety Plan](#)
- Self-administered paper version adapted by the [ED-SAFE Study](#) from the Veteran Version developed by Barbara Stanley, Greg Brown, and the Department of Veterans Affairs. E-mail [lcapoccia@edc.org](mailto:lcapoccia@edc.org) to request a copy.



### Related publications

- Stanley (2013, Dec 10). Safety Planning with Suicidal Individuals in Emergency Settings [Webinar]. E-mail [icapoccia@edc.org](mailto:icapoccia@edc.org) to request a copy.
- Stanley & Brown, 2012. [Safety Planning Intervention: A Brief Intervention to Mitigate Suicide Risk](#)
- Stanley & Brown, 2009. [Brief Interventions with Suicidal Individuals: Safety Planning and Beyond](#)

### Selected outcomes

- VA patients reported safety planning was “very helpful in making them feel connected to and cared for” (Stanley, 2013)
- Safety planning helps to immediately enhance patients’ sense of control over suicidal urges and thoughts and conveys a feeling that they can “survive” suicidal feelings (Stanley & Brown, 2009)

## **3. CLINICIAN-ADMINISTERED SAFETY PLANNING**

Clinician-administered safety planning is a process in which healthcare providers collaborate with a patient to develop a prioritized list of coping strategies and sources of support to use during a suicidal crisis or to prevent a crisis from developing. The plan is brief, in the patient’s own words, and easy to read. Topics addressed in most safety plans include warning signs, internal coping strategies, distracting oneself from the crisis, family members or friends who can provide support, professionals and agencies to contact for help, and making the environment safe.

### Examples

- Safety Planning [Quick Guide for Clinicians](#)
- [Safety Plan Treatment Manual to Reduce Suicide Risk: Veteran Version](#)

### Related publications

- Stanley (2013, Dec 10). Safety Planning with Suicidal Individuals in Emergency Settings [Webinar]. E-mail [icapoccia@edc.org](mailto:icapoccia@edc.org) to request a copy.
- Stanley & Brown, 2012. [Safety Planning Intervention: A Brief Intervention to Mitigate Suicide Risk](#)
- Stanley & Brown, 2009. [Brief Interventions with Suicidal Individuals: Safety Planning and Beyond](#)

### Selected outcomes

- VA patients reported safety planning was “very helpful in making them feel connected to and cared for” (Stanley, 2013)
- Safety planning helps to immediately enhance patients’ sense of control over suicidal urges and thoughts and conveys a feeling that they can “survive” suicidal feelings (Stanley & Brown, 2009)

## **4. LETHAL MEANS COUNSELING**

Lethal means counseling is a process by which providers assess whether patients at risk for suicide have access to firearms or other lethal means (e.g., prescription medications), and works with both patients and their families and support systems to discuss ways to limit their access until they are no longer feeling suicidal. It also involves teaching patients that suicide risk can sometimes escalate rapidly. Examples of reducing access to lethal means include storing firearms at a friend’s house until the suicidal crisis has passed or allowing a family member to keep medication under lock and key and dispense it as necessary in order to prevent self-poisoning.

### Examples

- [Lethal Means Counseling Recommendations for Clinicians](#)
- [Counseling on Access to Lethal Means](#) online training

### Related publications

- Multiple sources cited in the “[Bibliography](#)” section of the Harvard School of Public Health’s [Means Matter web site](#)
- [NREPP Intervention Summary: Emergency Department Means Restriction Education](#)
- Betz et al., 2013. [Lethal Means Restriction for Suicide Prevention: Beliefs and Behaviors of Emergency Department Providers](#)

- Brent et al., 2000. [Compliance with Recommendations to Remove Firearms in Families Participating in a Clinical Trial for Adolescent Depression](#)
- Kruesi, et al., 1999. [Suicide and Violence Prevention: Parent Education in the Emergency Department](#)
- McManus et al., 1997. [Child and Adolescent Suicide Attempts: An Opportunity for Emergency Departments to Provide Injury Prevention Education](#)

#### Selected outcomes

- Parents/caregivers who received lethal means counseling were significantly more likely to take action to limit access to firearms compared with a control group of parents/caregivers who did not (Kruesi, et al., 1999)
- Parents/caregivers who received lethal means counseling were significantly more likely to report limiting access to medications that can be used in an overdose suicide attempt compared with a control group of parents/caregivers who did not (McManus et al., 1997)

### **5. CRISIS CENTER HELPLINE INFORMATION**

Providing patients with the phone number of the National Suicide Prevention Lifeline (NSPL) or a local crisis center helps them access supportive services and stay connected to their networks after being discharged from an ED. Crisis centers provide free, confidential, 24/7 services, assessment, referral, and nonjudgmental listening. Providing a patient with information about crisis lines often happens as part of discharge planning. These services can be helpful for patients who are unable or unwilling to use outpatient mental health services. Some crisis centers offer text and online support. A Veterans Crisis Line is also available.

#### Examples

- Lifeline [wallet card](#) with crisis line phone number and warning signs
- [National Suicide Prevention Lifeline website](#) (includes Veterans Crisis Line, online chat, Spanish language line)

#### Related publications

- Mishara, et al., 2007. [Which Helper Behaviors and Intervention Styles Are Related to Better Short-Term Outcomes in Telephone Crisis Intervention?](#)
- Gould et al., 2007. [An Evaluation of Crisis Hotline Outcomes Part 2: Suicidal Callers](#)
- Suicide Prevention Resource Center (2011, Nov 8). [Suicidal Patients in the Emergency Department: Improving Care through Partnerships with Crisis Centers](#) [Webinar]

#### Selected outcomes

- Many suicidal clients of the NSPL utilize outpatient health care as a result of their interactions with the NSPL centers and also experience decreased hopelessness and psychological pain at the end of their sessions; hotlines lower caller distress and suicidality both immediately following the call and up to three weeks later (Gould et al., 2007)

### **6. BRIEF MOTIVATIONAL INTERVIEWING**

Motivational interviewing (MI) is a brief one- to two-session clinical approach that helps people with mental health problems, substance use disorders, and other chronic conditions such as diabetes, cardiovascular conditions, and asthma, make positive behavioral changes to support better health. MI has been used by non-specialists (e.g., primary care providers) to support patient changes on a range of behavioral health issues. The MI approach rests on four principles: 1) expressing empathy and avoiding arguing; 2) helping the patient see discrepancies between his/her present situation and what s/he would like in the future; 3) rolling with resistance, (e.g., offering but not imposing new perspectives, relying on the patient as the source for finding answers and solutions); and 4) supporting self-efficacy. MI has been proposed as a potentially effective intervention for use with suicidal patients to increase engagement with outpatient treatment, increase motivation to live and engage in life-enhancing and sustaining behaviors, and enhance the effectiveness of more intensive treatments such as Dialectical Behavioral Therapy, Cognitive Therapy for Suicide Prevention, and Problem Solving Therapy.

### Examples

- [SAMHSA-HRSA Center for Integrated Health Solutions “Motivational Interviewing” webpage](#)
- [Case Western Reserve University Center for Evidence Based Practices “Motivational Interviewing” webpage](#)
- [“Am I Doing This Right?” card](#)

### Related publications

- Britton et al., 2012. [An Open Trial of Motivational Interviewing to Address Suicidal Ideation with Hospitalized Veterans](#)
- Britton et al., 2011. [Integrating Motivational Interviewing and Self-Determination Theory with Cognitive Behavioral Therapy to Prevent Suicide](#)
- Britton et al., 2008. [Self-Determination Theory, Motivational Interviewing, and the Treatment of Clients with Acute Suicidal Ideation](#)
- Zerler, 2009. [Motivational Interviewing in the Assessment and Management of Suicidality](#)

### Selected outcomes

- Psychiatrically hospitalized veterans with suicidal ideation experienced reductions in severity of suicidal ideation immediately following treatment as well as up to 60 days later (Britton, 2012)
- In preliminary pilot research, clinicians reported that MI facilitated discussion of both reasons for dying and reasons for living (Britton, 2011)

## **7. TELEPSYCHIATRY**

Telepsychiatry, sometimes referred to as telebehavioral health, is the application of telemedicine (i.e., using electronic communications such as two-way video to provide clinical services at a distance) to provide mental health services. Services provided using telepsychiatry may include mental health assessment, consultation, and treatment services. Telepsychiatry is used in some hospitals to provide mental health specialist services when an on-site mental health specialist is unavailable.

### Examples

- AHRQ Innovations Exchange. [Statewide Partnership Provides Mental Health Assessments via Telemedicine to Patients in Rural Emergency Departments, Reducing Wait Times, Hospitalizations, and Costs](#)
- SAMHSA-HRSA Center for Integrated Health Solutions. [Telebehavioral Health Training and Technical Assistance](#) webpage
- South Carolina Department of Mental Health (SCDMH) [Telepsychiatry Program](#)

### Related publications

- [APA Silver and Bronze Achievement Awards, 2011](#)
- Williams et al., 2009. [Telepsychiatry in the Emergency Department: Overview and Case Studies](#)
- Yellowlees et al., 2008. [Emergency Telepsychiatry](#)
- Shore et.al., 2007. [Emergency Management Guidelines for Telepsychiatry](#)
- O’Reilly et al., 2007. [Is Telepsychiatry Equivalent to Face-to-Face Psychiatry? Results from a Randomized Controlled Equivalence Trial](#)

### Selected outcomes

- Patients and providers reported high satisfaction using telepsychiatry in emergency settings as well as high success measures, including access to medical care, reduced admissions, and reduced length of stay (Williams, 2009)
- In the SCDMH project, using telepsychiatry in EDs has been shown to increase access to emergency psychiatric consultation, facilitate appropriate treatment, improve quality of care, and reduce length of stay (Silver and Bronze Achievement Awards, 2011)
- Psychiatric consultation can be as effective when delivered by telepsychiatry as when provided face to face (O’Reilly, 2007)

## 8. RAPID FOLLOW-UP/REFERRAL

Rapid Follow-up/Referral involves taking steps during the ED visit to facilitate rapid access to a follow-up appointment for the patient, preferably within 24 hours and no more than seven days after discharge. Steps taken by ED providers may include: scheduling the first follow-up appointment before the patient is discharged, if the outpatient provider is reachable; if not, leaving a message with the referral provider to request priority scheduling for the patient upon discharge. To facilitate this practice it may be helpful to establish referral agreements with outpatient providers to accept rapid follow-up referrals for patients discharged from the ED.

### Examples

- The Joint Commission [Sentinel Event Policy](#) (Hospitals)
- [VA/DoD Clinical Practice Guideline for Assessment and Management of Patients at Risk for Suicide](#) (pages 71 & 125)

### Related publications

- Knesper, 2011. [Continuity of Care for Suicide Prevention and Research](#) (bottom of page 70)
- SPRC, 2013. [Continuity of Care for Suicide Prevention: The Role of Emergency Departments](#)
- Lizardi & Stanley, 2010. [Treatment Engagement: A Neglected Aspect in the Psychiatric Care of Suicidal Patients](#)
- Boyer et al., 2000. [Identifying Risk Factors and Key Strategies in Linkage to Outpatient Psychiatric Care](#)

### Selected outcomes

- Effective clinical bridging strategies, such as communication about patients' discharge plans between inpatient staff and outpatient clinicians, patients' starting outpatient programs before discharge, and family involvement during the hospital stay can triple the odds of linkage to outpatient psychiatric care (Boyer et al., 2000)

## 9. SUBSEQUENT CONTACT OR CARING CONTACTS

“Caring contacts” are brief, one- or two-way communications between the provider and the patient post-discharge. There may be a single contact, or a series of them. The goals of these contacts are to facilitate adherence to the discharge plan, promote a feeling of connectedness by demonstrating continued human interest in the patient, and troubleshoot barriers to accessing outpatient care. These contacts may be delivered by the ED provider or other ED personnel using postcards or letters, e-mail or text messages, and/or telephone calls. Some, such as postcards, can be automated. In some communities EDs and local crisis centers establish agreements enabling crisis centers to make caring contacts with patients recently discharged from the ED.

### Examples

- [Continuity of Care for Suicide Prevention: The Role of Emergency Departments](#)

### Related publications

- Knesper, 2011. [Continuity of Care for Suicide Prevention and Research](#) (bottom of page 56)
- Hassanian-Moghaddam et al., 2011. [Postcards in Persia: Randomized Controlled Trial to Reduce Suicidal Behaviors 12 Months after Hospital-treated Self-poisoning](#)
- Alonzo & Stanley, 2011. [A Novel Intervention for Treatment of Suicidal Individuals](#)
- Fleischmann et al., 2008. [Effectiveness of Brief Intervention and Contact for Suicide Attempters: A Randomized Controlled Trial in Five Countries.](#)
- Carter et al., 2005. [Postcards from the EDge Project: Randomized Controlled Trial of an Intervention Using Postcards to Reduce Repetition of Hospital Treated Deliberate Self Poisoning](#)
- Motto & Bostrom, 2001. [A Randomized Controlled Trial of Postcrisis Suicide Prevention](#)

### Selected outcomes

- Systematic long-term follow-up contacts after discharge can have a positive influence on preventing subsequent deaths from suicide up to 18 months after discharge from EDs (Fleischmann et al., 2008)

## INTERVENTION RATING CRITERIA

Use the following criteria to rate the interventions provided on the *Interventions Reference Sheet* for the SPRC ED Project Consensus Panel study.

### 1. CLINICALLY USEFUL

Helps the patient manage suicidal thoughts, helps the patient resist suicidal urges, decreases repeat visits, is evidence-based or evidence-informed

### 2. FACILITATES CONTINUITY OF CARE

Helps the patient engage in outpatient treatment, teaches patient when to seek help, provides patient with tools/supports to access outpatient services

### 3. FEASIBLE

Can be implemented with minimal training, requires a realistic amount of time to perform (from the provider's perspective), can be administered by providers with different training (e.g., mental health and non-mental health)

### 4. PATIENT-CENTERED

Involves patient in decision-making where possible, respects patient preferences, is delivered in a timely fashion (e.g., from patient's perspective), is non-discriminatory/equitable

**Information about the criteria:** *The four criteria (above) were developed by collapsing and renaming six Institute of Medicine Crossing the Quality Chasm Outcomes as shown below.*

Institute of Medicine: Crossing the Quality Chasm Outcomes	SPRC ED Project Criteria			
	Clinically Useful	Facilitates Continuity of Care	Feasible	Patient Centered
1. Safe – Care should be as safe for patients in health care facilities as in their homes	X			X
2. Effective – The science and evidence behind health care should be applied and serve as the standard in the delivery of care	X	X		
3. Efficient – Care and service should be cost effective, and waste should be removed from the system		X	X	
4. Timely – Patients should experience no waits or delays in receiving care and service			X	
5. Patient Centered – The system of care should revolve around the patient, respect patient preferences, and put the patient in control				X
6. Equitable – Unequal treatment should be a fact of the past; disparities in care should be eradicated				X

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**Suicide Prevention Resource Center**

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