Evidence In-Sight:

EMERGENCY DEPARTMENT MANAGEMENT AND INPATIENT TREATMENT FOR SUICIDAL YOUTH

Date: September 2014
The following Evidence In-Sight report involved a non-systematic search and summary of the research and grey literature. These findings are intended to inform the requesting organization, in a timely fashion, rather than providing an exhaustive search or systematic review. This report reflects the literature and evidence available at the time of writing. As new evidence emerges, knowledge on evidence-informed practices can evolve. It may be useful to re-examine and update the evidence over time and/or as new findings emerge.

Evidence In-Sight primarily presents research findings, along with consultations with experts where feasible and constructive. Since scientific research represents only one type of evidence, we encourage you to combine these findings with the expertise of practitioners and the experiences of children, youth and families to develop the best evidence-informed practices for your setting.

While this report may describe best practices or models of evidence-informed programs, Evidence In-Sight does not include direct recommendations or endorsement of a particular practice or program.

This report was researched and written to address the following question(s):

- What are the best evidence-informed practices for managing suicidal youth in inpatient programs and emergency departments?

We prepared the report given the contextual information provided in our first communications (see Overview of inquiry). We are available at any time to discuss potential next steps.

We appreciate your responding to a brief satisfaction survey that the Centre will e-mail to you within two weeks. We would also like to schedule a brief phone call to assess your satisfaction with the information provided in the report. Please let us know when you would be available to schedule a 15-minute phone conversation.

Thank you for contacting Evidence In-Sight. Please do not hesitate to follow up or contact us at evidenceinsight@cheo.on.ca or by phone at 613-737-2297.
1. **Overview of inquiry**

The requesting contact was interested in exploring empirical evidence on inpatient suicidal youth in the hospital setting. Specifically, the Evidence In-Sight request was made with the aim of uncovering pragmatic, user-focused research and evidence-informed practices for the treatment and care of suicidal youth admitted for psychiatric hospitalization. Other areas of interest were guidelines for emergency department management, suicide prevention in the hospital setting and postvention practices such as follow-up care. This report may help to shed light on current protocols for care in the hospital setting for suicidal youth.

2. **Answer search strategy**

   - Databases searched: EBSCO Host (Medline, PsycInfo, CINAHL), Google Scholar, The Cochrane Library, and the Campbell Library.
   - Search terms used: suicidal adolescents, suicidal youth, youth suicide, suicidal ideation, suicide attempt, hospitalization, hospital, inpatient treatment, emergency department, crisis intervention, hospital discharge, acute treatment.

3. **Findings**

This search uncovered very few promising practices specific to suicidal children and youth in inpatient care units. No evidence-informed practices on treating suicidal youth in psychiatric or hospital inpatient units were found in the literature. Given these limitations, the report expanded its focus to emergency department (ED) management practices, which comprise components of care that may be relevant and applicable to inpatient treatment units. The evidence on standard care the ED is, however, also limited and largely based on general consensus. However, despite several gaps in the literature, this search uncovered some empirically supported practices and interventions developed specifically for the ED. With the aim of providing a scan of all current procedures of the ED and inpatient care units, this report outlines both consensus protocols for care as provided by the available literature, along with the few specific practices that benefited from closer attention from researchers.

3.1 **A therapeutic approach as framework for care in the hospital setting**

Staff attitudes are extremely important in enhancing youth and family experiences in the hospital setting, whether it be in the emergency room or in the inpatient care unit. In particular, staff’s ability to build a therapeutic alliance with young patients can be a pivotal factor in providing them with hope (Michel, Jobes, Leenaars, Maltsberger, Dey, Valach & Young, 2009) and encouraging them to further participate in treatment (Shaffer & Pfeffer, 2001; Stewart, Manion & Davidson, 2002). However, building a strong working alliance in the hospital setting can be challenging because a short hospitalization duration leaves little time for a bond to develop (Simon, 1999).

*Patient and family experiences*

A study by Cerel, Currier & Conwell (2006) explored the satisfaction with care in the ED following a suicide attempt. Results revealed that fewer than 40% of individuals felt as though staff listened to them, explained the nature of treatment to them or took their injury seriously; family members were more likely than individuals receiving treatment to feel heard or to be informed by staff about treatment; and more than half of patients and almost a third of family
members felt punished or directly stigmatized by staff. Patients and family members also reported perceptions of unprofessional staff behavior, long wait times and feeling as though the suicide attempt was not taken seriously (Cerel et al., 2006).

Other studies support these findings, depicting the frequently antipathetic, non-cooperative nature of care provided to youth in hospitals (Stewart et al., 2002). In addition to this, The Aeschi Working Group, an international group of clinicians committed to improving the treatment of suicidal patients, came to the unanimous conclusion that “...current emergency room and clinic approaches to suicidal patients are too unempathic and unhelpful to succeed in drawing out patients' accounts of extreme pain and suffering in such a way so that the nature of their experience becomes clear, and a therapeutic alliance established” (Michel et al., 2009, p. 1).

**Recommendations for building a therapeutic alliance in the hospital setting**

With the goal of improving the experiences of suicidal patients in the ED and in treatment, The Aeschi Working Group advocates a patient-oriented approach, where the clinician works in partnership with the individual and is not considered the only knowledgeable person in the room. In their attempt to guide future caregiving, the group proposes the following guidelines to help enhance clinicians’ approaches and practices when it comes to establishing an alliance with people, including youth, who are suicidal (Michel et al., 2009):

1. **The clinician’s task is to reach, together with the individual, a shared understanding of the individual’s suicidality.** Specifically, the goal of performing an active exploration of the patient’s mental state should not be placed early in the interview. The clinician conducting the assessment should instead begin the assessment with the aim of coming to a shared understanding of the patient's suicidality.

2. **The clinician should be aware that most people with suicidal ideation/behaviour suffer from a state of mental pain or anguish and a total loss of self-respect.** Experience suggests, however, that a "window" of opportunity exists following a suicide attempt when people can be reached. During this time, patients are more open to share their emotional and cognitive experiences related to the suicidal crisis. Clinicians may be able to use this opportunity in order to help youth at a critical time.

3. **The interviewer’s attitude should be non-judgmental and supportive.** The clinician must be ready to listen, which also means that the individual can be the expert of his or her own personal experiences.

4. **The interview should start with the patient’s self-narrative** (e.g.: “Would you be able to tell me, in your own words, what is behind the suicide attempt...”). Explaining the reasons behind the suicidal act to another person can help to put the suicidal crisis into perspective, which is important in re-establishing the individual's sense of mastery.

5. **The ultimate goal must be to engage the individual in a therapeutic relationship.** A meaningful rapport with patients has the potential to re-establish life-oriented goals and ultimately be their turning point. In order for this to happen, clinicians must be able to empathize with the individual's inner experience and to understand the reasoning behind the suicidal urge. Together, the patient and the interviewing clinician should explore the root meaning of the suicidal desire.

6. **New models are needed to conceptualize suicidal behaviour that provide a frame for the patient and clinician to reach a shared understanding of suicidality.** Escaping from an unbearable state of mind or self is commonly what pushes one to act on suicidal ideation. New models should support an approach that does not perceive people as objects that display pathology, but rather as individuals who have personal reasons to perform a suicidal act.
3.2 Emergency department management

Quality evidence on how to care for suicidal youth in emergency departments is limited. Most guidelines endorsed in hospitals have not been formally based on evidence regarding outcomes such as death by suicide, repeat suicide attempts and self-reported symptoms, behaviours and emotions (Rhodes et al., 2012). Several EDs may also lack clear guidelines for care and treatment of individuals with suicidal ideation and/or attempts (Bennett, Daly, Kirkwood, McKain & Swope, 2006). However, more recent evaluations of ED-based programs are showing increasing promise (Newton et al., 2010). This section of the report includes a synthesis of consensus guidelines, as well as specific interventions and practices with greater empirical support.

3.2.1 Safety and stabilization

Safety precautions

The ED staff’s first concern should be to ensure the patient’s safety (Carrigan & Lynch, 2003; Kennedy, Baraff, Suddath & Asarnow, 2004; Kleepsies, Deleppo, Gallagher & Niles, 1999). In a calm and non-judgmental manner, youth should be searched when they arrive at the ED and their clothes should be removed to be replaced with a hospital gown (Bennett et al., 2006; Kennedy, 2004). Staff need to ensure that all rooms that individuals access are completely safe and have no available means for self-harm (Bennett et al., 2006; Carrigan & Lynch, 2003; Kennedy et al., 2004; Kleepsies et al., 1999). This requires the removal or isolation of any sharp objects, belts, drugs and medical equipment. Rooms should also be easily observable by nurses and staff (Bennett et al., 2006). Kleepsies et al. (1999) denotes that hospital staff frequently fail to attend to safety precautions when individuals are admitted to intensive care units for observation, especially if they are in a coma at the moment of admission.

Emotional stabilization

Emotional turmoil or agitation needs to be stabilized before further evaluation (Kleepsies et al., 1999). This is not necessary in all cases, but staff ought to be prepared for crisis management and containment (Bennett et al., 2006; Kleepsies et al., 1999). As a first attempt to instill calmness and confidence in an agitated or particularly disconcerted individual, the clinician should try to form a working alliance. This is a critical step in ED care as it sets the tone for the rest of the youth’s experience in hospital. In response to continued agitation, the caregiver should use empathic limit setting by prompting youth with direction, while still acknowledging their distress (Kleepsies et al., 1999).

In cases where establishing this kind of rapport with the young person is not possible and severe agitation persists, the next level of response is to involve another professional in the interaction. If acute agitation continues to increase and the individual’s behaviour becomes threatening, physical and/or medical restraints may be initiated by security and appropriate staff. Communicating with the individual with genuine concern for their safety and in an understanding, sensitive manner often encourages a decrease in agitation (Kleepsies et al., 1999).

To ensure that staff are adequately prepared to respond to escalating agitation in a timely and effective manner (e.g. if a youth in distress attempts to leave the emergency room), it may be helpful to develop an algorithm that outlines how to manage different levels and cases of turmoil (Kleepsies et al., 1999). Stewart et al., 2002 also suggest using a flowchart to outline a problem-solving pathway for different situations. Having these pre-determined intervention strategies can
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increase the clinician’s control of the situation and the effectiveness of their response (Kingsbury, 1987; Turner & Hersen, 1994).

3.2.2 Physical examination

All suicidal youth need to go through a careful physical and medical examination when they enter the ED before any further psychological assessment may take place (Kennedy et al., 2004). The following procedures and considerations should constitute primary concerns in the physical assessment:

- Verifying that the young person is medically stable. Vital signs and symptoms of substance impairment or intoxication (Bennett et al., 2006; Carrigan & Lynch, 2003; Kennedy et al., 2004) need to be identified and addressed to ensure the young person is in a proper physical state to be evaluated. Later psychiatric referrals that are made while youth are intoxicated or not medically stable should be deemed inappropriate (Stewart et al., 2002).
- Levels of alertness and orientation should be assessed (Carrigan & Lynch, 2003; Kennedy et al., 2004) with simple, focused questions regarding things such as what day of the week it is, who brought the youth in the hospital, or whether the young patient knows where they are (Carrigan & Lynch, 2003).
- Special attention should be paid to signs of previous suicide attempts or self-harm such as scars or bruising from past hanging attempts (Kennedy et al., 2004).
- Signs of physical or sexual abuse should be carefully noted (Kennedy et al., 2004) and be considered within the broader context of the psychological assessment.
- Specific laboratory testing should be performed on a patient-specific basis, depending on the method of suicide attempt (e.g. ingestion) or clinical toxidrome (Kennedy et al., 2004). Acetaminophen levels should be assessed because, seeing as acetaminophen ingestion is a common method of suicide attempt (Bennett et al., 2006).
- The temporal details of a suicide attempt, such as the length of time since ingestion or overdose, are critical to gather as they must inform decisions regarding treatment (Carrigan & Lynch, 2003).

3.2.3 Assessment

Considerations for the assessment setting

Following safety procedures is the initial assessment, which should begin with a therapeutic approach (Fowler, 2012). To instill a comforting atmosphere, a calm, nonjudgmental conversation with the individual is crucial (Bennett et al., 2006; Carrigan & Lynch, 2003; Kennedy et al., 2004). For instance, the assessment should begin with sensitive explanations about what to expect in the ED (Kennedy et al., 2004). A practice review by Fowler (2012) emphasizes how important it is for caregivers to keep in mind that suicidal individuals are under considerable psychological distress during the initial assessment. It is also important to remember that the ED setting may be perceived as chaotic and daunting by youth (Kleepsies et al., 1999). For these reasons, thoughtfulness and sensitive engagement from beginning to end of the evaluation is critical (Fowler, 2012). Refer to Section 3.1 of this report for recommendations on how to build a therapeutic alliance.

Prior to beginning the assessment, talking with the young person’s family and offering education on suicide and the procedures of the ED is highly recommended (Kennedy et al., 2004). This could also take the form of a video tape presentation, where realistic scenarios in the ED are shown (Rotheram-Borus, 1996). Family members are then typically
asked to step out of the room during the first portion of the assessment and invited to take part in later conversations (Hirschfeld & Russell, 1997) and completion of assessments (Shaffer, & Pfeffer, 2001). However, the staff should use their clinical judgment and may decide to let family and close friends take part in the entire evaluation (Kleepsis et al., 1999). After all, family engagement is a critical component of mental health services. Attending to the needs of each individual family is paramount.

Conducting the assessment

The first portion of the formal evaluation or assessment should focus on the youth’s suicidal intent and mental state (Kennedy et al., 2004; Rotheram-Borus, 1996). Clinically-sound conversations about suicidal intent and behaviour do not increase suicidality; rather, when framed in a sensible dialogue, disclosure has potential to offer young people some relief and help them feel less distressed (Shain, 2007). Some sample inquiries include asking whether the youth wants to die, how often they think about dying and what factors in their life contribute to their desire to die (Carrigan & Lynch, 2003).

It can be very challenging to gauge just how serious youth’s suicidality may be (Shaffer & Pfeffer, 2001). The following considerations can help guide the clinician’s evaluation of specific cases of suicidal behaviours (Shaffer, 2004):

- Young people may overestimate the fatality of ingestions (e.g. over-the-counter drugs or prescription medication). For this reason, ingested quantities that may appear trivial to the clinician should still be taken seriously as they may still reflect a serious desire to die.
- Self-cutting cases may appear as ambiguous, since stabbing oneself is a very rare but possible type of suicide. In an attempt to resolve this ambiguity, the clinician must investigate the presence of a true, determined intent to die.
- Since hanging is the most common means of suicide, hanging attempts should be taken particularly seriously.
- The level of effort that the youth exerted to access the means used is an important indicator of risk.
- The level of planning and preparation (e.g. the writing of a suicide note, preparing a will, giving away possessions, taking active steps to avoid discovery, etc.) is another important indication of the level of intent to die, although both premeditated and spontaneous suicide attempts clearly warrant serious attention.

The second portion of the ED initial assessment should be focused on the patient’s history, with particular attention paid to psychiatric history. Refer to Appendix A, Table A1 for a model for the essential history for adolescent suicide.

This portion of the assessment should also explore protective factors in youth’s lives and reasons for living, such as positive feelings about self and significant others. Assessing the significance of key people in the youth’s life may be done by asking the simple question “Who would you be leaving behind?” (Kennedy et al., 2004). A detailed history must always be complemented by the reports of a third party, usually the teen’s parents or guardians (Shaffer & Pfeffer, 2001).

It is extremely important for all assessments and observations to be carefully recorded and filed (Bennett et al., 2006). Suicide notes, if obtainable, may be included in medical records (Carrigan & Lynch, 2003). A Canadian review of pediatrics mental health ED care management protocols reported that several important assessments, including suicide assessments, were missing from clinical records of patients (Newton et al., 2011).
Suicidal youth

Making use of clinical tools

There is currently not one globally accepted test that provides a perfectly accurate assessment of suicidality (Fowler, 2012; Stewart et al., 2002). A factor that partially explains this is the variability and high state-dependency of suicide crises (Fowler, 2012). The American Psychiatric Association (APA) states that it is impossible to accurately predict suicidal emergencies due to their rarity and complexity. This is an important reason why clinicians should never solely rely upon simplistic assessment tools (Kennedy et al., 2004; Shaffer & Pfeffer, 2001). However, such measures can help in assisting decision making and ensuring that the evaluation is comprehensive (Stewart et al., 2002).

HEADS-ED is a rapid screening mental health tool that can be used for the assessment of children and youth in the ED (Cappelli et al., 2012). The clinician-administered tool can be used to investigate a young person’s needs in seven areas of their life (Home; Education; Activities and peers; Drugs and alcohol; Suicidality; Emotion, behaviour, thought disturbance; Discharge resources). The scale’s scoring system is used to indicate the level of action required to address these different needs (i.e. 0 = No action needed, 1 = Needs action but not immediate, 2 = Needs immediate action). Additional information on this tool, including sample assessment questions and training videos, can be found on the HEADS-ED website: http://www.heads-ed.com/en/headsed/HEADSED_Tool_p3751.html

Stewart et al. (2002) propose the use of a clinically sound tool named the Tool for Evaluating Suicide-attempting Teens (TEST) to assess suicidality in the ED. The tool is based on previous empirically validated questions and inquires about specific risk outcomes. Refer to Appendix A for a copy of the tool (Figure A2), along with a list of additional empirically-validated assessment tools (Table A3).

Even with the use of tools, it is critical that the clinician undertaking the assessment does not use a rigid or mechanistic approach to evaluate youth (Stewart et al., 2002; Kennedy et al., 2004; Newton et al., 2010). Rotheram-Borus et al. (1996) suggests using a semi-structured interview format, which allows for more flexibility and flow in the dialogue.

Hard-to-engage youth

Some youth may be reluctant to share their personal story, which can stand as a barrier to understanding their strengths and needs, and ultimately hinder the completion of a comprehensive assessment. The following tips, although not specific to youth, may help caregivers to optimize the dialogue with distressed individuals (Carrigan & Lynch, 2003; Fowler, 2012):

- If a person refuses or shows reluctance in opening up to the caregiver about their personal history, acknowledge this reluctance and focus your questions on the reasons for it.
- Pay attention to the person’s emotional state. Try to put their emotions into words and frame the situation in a broader context non-judgmentally (e.g. “You seem very sad. It seems like you feel as though there is no way out. Is that right?”).
- Be aware of the fact that some individuals may deny suicidal thoughts. With this in mind, remain appropriately circumspect. Do not approach the dialogue with suspiciousness or combativeness, but rather show genuine curiosity and concern.
- Validating a person’s distress can be comforting and reassuring. It can also help to build rapport amidst a stressful situation.
3.2.4 Safety contracting

No-suicide or no-harm contracts

No-suicide contracts between clinicians and patients are verbal or written agreements requesting patients to abstain from any suicidal behaviour. Despite sparse research evidence on their effectiveness, they constitute a frequent practice in psychiatric inpatient facilities (Drew, 2001; Farrow, 2002; Kennedy et al., 2004; Newton et al., 2010; Simon, 1999; Stanley & Brown, 2012).

The main factor that determines the reliability of a no-suicide agreement is the therapeutic alliance between patients and the crisis staff (Simon, 1999). Without an authentic working alliance, the no-suicide contract does not have its presumed value and utility. Any serious disturbance of youth’s mental state also makes the no-suicide contract completely unreliable (Shaffer & Pfeffer, 2001).

There may be several other clinical issues with no-suicide contracts (Simon, 1999):

- They may provide clinicians with a poorly-founded sense of relief or safety, leading to lower clinical vigilance without any targeted management of the suicidal intent itself.
- Patients with a particularly strong urge to die may agree to the contract as a way to lessen their clinician’s concern and divert their attention.
- The use of no-suicide contracts with short-term patients (e.g. in the ED) could be problematic since clinicians may not have sufficient time to assess the patient’s degree of response to a working alliance, let alone form one that is strong and reliable.
- Some contracts state that if requiring immediate help, patients may see or communicate with the clinician outside of scheduled appointment times. In the case of outpatients, this may be an unrealistic promise.

Despite these potential issues, no-suicide contracts can serve practical purposes. One proposed value of no-suicide contracts is that when used sensibly, they may be a way for the clinician to convey their concern, availability and commitment to care (Carrigan & Lynch, 2003; Simon, 1999). However, this is thought to only be the case when the contract is paired with appropriate risk-management and treatment (Simon, 1999). If used in a coercive manner, no-suicide contracts can render the opposite effect; that is, they may discourage youth from communicating openly with the clinician and sharing feelings of distress (Shaffer & Pfeffer, 2001).

Additionally, no-suicide contracts may be used to probe the credibility of the therapeutic alliance and the degree of suicidal risk (Simon, 1999) or to gauge youth’s ability to take the next step and make certain changes (Shaffer & Pfeffer, 2001), according to their willingness or unwillingness to agree to the contract (Simon, 1999). For instance, individuals will sometimes admit that they cannot guarantee that a commitment to the terms of the contract (e.g. going to the ED if requiring immediate help) would override an intense suicidal impulse. Youth who refuse to contract may not always be at imminent risk, but it is a credible indication that there may be a need for further assessment (Simon, 1999) and hospitalization (Carrigan & Lynch, 2003; Stewart et al., 2002). Steadfast refusal to contract at the outset should be perceived as a red flag for clinicians as further evaluation and/or hospitalization is likely required (Simon, 1999). It must be emphasized that a patient’s agreement or disagreement with a no-suicide contract is not a sufficient measure of suicide risk and cannot sidetrack the need for a complete risk assessment (Shaffer & Pfeffer, 2001; Simon, 1999).
Safety planning

Safety planning, which has been proposed as an alternative ED procedure to no-suicide contracts, proposes a more pragmatic approach to safety contracting in the ED (Newton et al., 2010; Stanley & Brown, 2012). While a no-suicide contract may not give directions as to how patients should respond to suicidal impulses, safety planning, on the other hand, incorporates elements of problem-solving and collaboration, where the caregiver and individual together create a plan that they will use during times of suicidal crisis. A model for this approach called the Safety Planning Intervention (SPI) was identified as a best practice by the American Foundation for Suicide Prevention Best Practices Registry for Suicide Prevention (Stanley & Brown, 2012). This model can be a stand-alone intervention in limited timeframes in the ED. Its primary components are (Stanley & Brown, 2012):

a) recognizing warning signs of an impending suicidal crisis
b) employing internal coping strategies
c) using social contacts and social settings as a means of distraction from suicidal thoughts
d) using family members or friends to help resolve crises
e) contacting mental health professionals or agencies
f) restricting access to lethal means

For more information on this practice, consult the website for the Suicide Prevention Resource Center/American Foundation for Suicide Prevention Best Practices Registry for Suicide Prevention: http://www.sprc.org/.

3.2.5 The decision to hospitalize

Psychiatric referral

Youth who are deemed to be at moderate risk for suicide should be referred to a crisis worker such as a social worker or psychiatric nurse. High-risk patients need to be seen and further assessed by a psychiatrist (Stewart et al., 2002). These high-risk individuals include youth who present with (Stewart et al., 2002):

- Acute suicidality (i.e. openly disclosing that they want to die)
- Several suicide completion risk factors
- Recurrent ED presentations, especially within short periods of time
- Lack of social support
- Lack of mental health care
- A specific plan with accessible lethal means
- Impulsivity
- Substance abuse
- Complicated psychopharmacology (e.g. presence of a medical condition in addition to the mental illness)
- Accidentally caught in a suicide attempt
- Unwillingness to disclose history

Hospitalization
Suicidal youth

The decision to hospitalize youth for a short-term admission should be made based on information gathered from the evaluation and other important observations. Individuals who do not respond well to crisis interventions, are reluctant to engage in a reasonable therapeutic alliance and are suspected or openly voicing to have a true desire to die, constitute high-risk cases (Kleepsies et al., 1999). There are several other factors that indicate cases where hospital admission is appropriate:

1. The presence of acute suicidality (Kleepsies et al., 1999; Stewart et al., 2002)
2. Failure to establish a therapeutic alliance (Kennedy et al., 2004; Kleepsies et al., 1999; Shaffer & Pfeffer, 2001)
3. Failure to collaborate on a safety contract (Stewart et al., 2002) or in safety planning
4. The following factors may also indicate the need for hospitalization (Kennedy et al., 2004; Shaffer & Pfeffer, 2001; Stewart et al., 2002):
   - Acute psychosis
   - Psychiatric disorder
   - Recent considerable stressor such as abuse, interpersonal crisis, legal or school crisis and absence of appropriate supports
   - History of suicide attempts
   - History of family psychiatric illness

Some circumstances can make the decision between discharge and hospitalization unclear (Shaffer, 2004). These circumstances can include incomplete assessments, serious concerns with the home environment (e.g. unsecured firearms or medication, intense hostility between the youth and parent, etc.), the imminent arrival of a feared person such as an abusive relative, or absence of a caregiver or responsible person to either accompany the youth to the ED, meet them at the ED or commit to accompanying them to future appointments. The young person should be kept under observation if the decision to hospitalize is ambiguous (Shaffer, 2004).

3.2.6 Discharge planning and follow up care

The time that follows the ED or hospitalization is a high-risk period for suicide re-attempts (Qin & Nordentoft, 2005). Most deaths by suicide following hospitalization occur within the first month post-discharge and in peak numbers within the week post-discharge (Qin & Nordentoft, 2005). Assessing suicide risk at discharge is a particularly challenging task, as is providing continuous care that ensures aftercare is not disjointed or lost (Luxton, June & Comtois, 2012).

Discharge planning should be initiated early during hospital stays to help ensure discharges are risk-informed (Stewart et al., 2002). Discharge is recommended if according to the clinician’s judgement and evaluation, the individual is (Belfer, 1983; Shaffer & Pfeffer, 2001):

- nonpsychotic;
- able to contract to safety;
- can describe adaptive coping strategies for future stresses or crises;
- promises to return to the ED if another suicidal crisis occurs;
- and has a supportive person at home.
As a first step, an appointment should be scheduled with youth shortly after discharge (Shaffer & Pfeffer, 2001). Linking youth with community services to increase support in the home environment is also important (Stewart et al., 2002).

Parental education

One of the most important steps in planning young patients’ discharge from the ED or the inpatient unit is to ensure their parents or caretakers received proper education on means restrictions (McManus, Kruesi, Dontes, Defazio, Piotrowski & Woodward, 1997; Kruesi et al., 1999). Such interventions should consist of three main components (Kruesi et al., 1999):

a) to inform parents, in the young person’s absence, that their child is at increased risk for suicide and reasons why (e.g. previous suicide attempts increase the risk for subsequent attempts);

b) telling parents that they can reduce the risk by limiting access to lethal means which include firearms, medication (both over-the-counter and prescribed) and alcohol; and

c) problem solving with the parents about how to limit access to these means.

Research suggests that without a parental education component, caretakers or parents may not initiate these safety procedures themselves (McManus et al., 1997).

Unsuccessful engagement in outpatient treatment

It is common to see individuals who have attempted suicide engage in outpatient treatment plans reluctantly (Trautman, Stewart, Morishima, 1993). Post-ED noncompliance rates with the first follow-up appointment range from a low 17.5% to 41.6% (Stewart et al., 2002). The ED is said to be a critical opportunity to link people with effective, person-focused care (Larkin & Beautrais, 2010). However, this is a consideration that is often overlooked during the ED visit (Spirito, 1996).

Researchers identify several factors that may affect the appeal, accessibility or feasibility of outpatient treatment for youth suffering from suicidal ideation:

1. **Family characteristics, dynamics and attitudes about outpatient treatment**

   ED-based interventions focused on enhancing family factors (e.g. family’s expectations regarding therapy and family’s supportiveness with regard to follow-up treatment) have shown to increase rates of attendance to treatment (Asarnow, Berk & Baraff, 2009; Rotheram-Borus et al., 1996). Youth’s perceptions of increased family cohesiveness may also keep them engaged in treatment (Rotheram-Borus et al., 1996). One study found that family factors, including less affectionate father-child relationships and maternal depression, hostility and paranoid symptoms were found to have an impact on follow-through with therapy and medication (King, Hovey, Brand, Wilson & Ghaziuddin, 1997). These considerations underscore the importance of meaningfully engaging the family in the ED procedures and paying close attention to family dynamics when assessing the need for additional linkage and support.

2. **Attitudes and beliefs of the ED staff about suicide and the quality of their interactions with the patient and family**

   The ability of hospital staff to build a therapeutic alliance with youth is associated with increased engagement in follow-up treatment (Shaffer & Pfeffer, 2001; Stewart et al., 2002). Specifically, research has found that youth’s first
impressions of the referring staff’s personality can affect their motivation to participate in treatment (Kellam, Branch, Brown, Russell, 1981). Negative initial interactions with the referral also impacts youth’s engagement in treatment (Viale-Val, Rosenthal, Curtiss, Marohn, 1993). These considerations underscore the importance of positive staff attitudes and establishing meaningful rapport with youth in the ED, in addition to performing ED procedures within a therapeutic frame.

3. Barriers to service

Barriers to service (e.g. transportation problems, scheduling difficulties, etc.) can have a determining impact on outpatient treatment session attendance (Spirito et al., 2002). Discussing and addressing treatment barriers, treatment expectations and session attendance with youth and their families can lead to increased engagement in treatment (Newton et al., 2010). As a potential way to address barriers to treatment, an ED case manager can be assigned to youth and serve as a helpful liaison to outpatient treatment and relevant community services (Bassuk & Gerson, 1980).

According to one study, longer hospitalizations, more therapy sessions during hospitalization and scheduling outpatient appointments before discharge are also associated with increased compliance to treatment (Granboulan, Roudot-Thoravalm, Lemerle & Alvin, 2001).

Follow-up contacts

In-person meetings, telephone calls, postcards and postal letters can be used to check in with youth periodically over a certain time period after hospitalization or the ED. An investigation by Luxton et al. (2012) uncovered a promising evidence base for several variations of the follow-up contacts approach. Out of the 11 studies reviewed, two were found to prevent suicide, three showed significant reductions in repeat suicide attempts and four showed non-conclusive but nonetheless promising results (e.g. insignificant results but with trends towards reductions in suicidality). Only two studies did not find a preventative effect for the follow-up contacts approach (Luxton et al., 2012).

For example, caring letters were sent to a sample of suicidal individuals who were no longer engaged in follow-up care (Motto & Bostrom, 2001). The letters featured brief expressions of care from the staff who first interviewed them and were sent periodically (every month for four months, then every 2 months for 8 months and finally 3 months for 4 years). Results from a randomized control trial indicated successful reductions of deaths by suicide. However, it is important to note that overall trends in suicide mortality reduction, although present across the course of the study, were only statistically significant over the first 2 years of the intervention (Motto & Bostrom, 2001).

The effectiveness of such interventions may be enhanced by (Luxton et al., 2012):

- A higher frequency of contacts, which inherently leads to a cumulative effect of repeated caring contacts.
- The degree of personalization of the contact modality (e.g. in-person meetings vs. standardized postcards).
- The degree to which correspondents know the youth before providing the contacts (e.g. through an initial interview or baseline assessment).
- Having an individual as the corresponding contact, as opposed to multiple people (e.g. one professional vs. a treatment team or organization).

Follow-up contacts may be a valuable post-discharge suicide prevention approach, because they appear to increase social support, connectedness and assurance that somebody cares (Luxton et al., 2012). Following-up with youth via
phone calls, letters, etc. is a simple, low-burden intervention (Larkin & Beautrais, 2010) that may help individuals feel more positively about treatment, therefore motivating them to participate in it (Luxton et al., 2012).

3.2.7 Evidence-based interventions for suicidal youth in the ED

The fast, sometimes chaotic pace of the ED may make it a particularly challenging environment for therapy. However, given the increasing numbers of suicide-related presentations, the ED may be one, if not the most important, site for suicide prevention (Larkin & Beautrais, 2010; Newton et al., 2010). Of particular interest may be transition interventions, which are initiated in the ED and complemented with extended support after discharge (Newton et al., 2010). The following interventions for adolescents were tailored to the unique needs of the ED. Refer to Appendix B for contact information of the different program developers.

A. The Family Intervention for Suicide Prevention (FISP)

The FISP is a second-generation adaptation of the Specialized Emergency Room Intervention by Rotheram et al., (1996). It is a brief cognitive-behavioral family intervention that is customized for the fast-paced ED environment, but can be applied to other types of setting given its flexibility (Arsanow et al., 2009). The intervention is framed around goals of empowering family and youth, improving linkage to outpatient treatment and strengthening the protective factors around youth. Specifically, the objectives of the intervention are to (Arsanow et al., 2009):

- a) reframe the suicidal episode as a form of maladaptive problem-solving;
- b) develop adaptive coping and problem-solving skills;
- c) reinforce the belief that follow-up treatment is key to overcoming suicidality; and
- d) enhance protection, support and communication among family members.

A randomized control trial evaluated the FISP’s effectiveness independently of the cognitive-behavioural therapeutic component of the intervention (Arsanow et al., 2011). The results showed that participants who received FISP were more likely to be linked to and receive outpatient treatment compared to patients that did not receive the intervention. However, the data did not show significant reductions of suicidality or other outcomes of functionality. The researchers attribute the reasons for the latter findings to the gaps in the usual mental health outpatient treatments themselves, as shown by previous research in the area.

B. Compliance enhancement intervention using a problem-solving format

The goal of this intervention is to frame the ED experience within a problem-solving therapeutic approach, with the aim of helping adolescents and their parents feel more positively about treatment (Spirito et al., 2002). The intervention consists of a one-hour problem-solving session and is to be carried out after standard ED procedures. The intervention is also paired with a follow-up contact approach, where telephone calls are made to reach youth and their guardians separately at one, two, four and eight week intervals after discharge. The one-hour in-hospital intervention consists of the following main components (Spirito et al., 2002):
Suicidal youth

a) to review expectations for outpatient treatment and address treatment misconceptions
b) to review factors that might impede treatment attendance with youth and parents
c) to make a verbal contract between parents and youth to attend at least four outpatient therapy sessions.

Results from a randomized intervention trial showed that the intervention was effective in increasing treatment adherence compared with standard ED discharge planning, but only when the barriers to service in the community were controlled (Spirito et al., 2002). This indicates that a problem-solving approach can be a beneficial addition to standard care in the ED. However, real-life barriers to service still need to be addressed in a concrete, direct manner. Barriers to service can include transportation problems, scheduling difficulties, delays in getting an appointment, therapist or agency reporting no further treatment was needed despite patient’s or parent’s desire for continued treatment, inability to change therapists due to agency policy, problems with insurance coverage, etc..

C. Brief intervention and contact (BIC)

Brief intervention and contact (BIC) is provided in addition to standard ED care and consists of a 1-hour individual session as close to the time of discharge as possible. This approach is paired with a follow-up contact protocol, which included nine contacts with the young patient, either in the form of telephone calls or in-person visits, by a health or mental health professional at specific time intervals over 18 months. The 1-hour individual session includes information on (Fleischmann et al., 2008):

a) suicidal behaviour as a sign of psychological and/or social distress
b) risk and protective factors of suicide
c) basic epidemiology
d) alternative coping behaviours;
e) referral options.

Results from a five-country randomized control trial support the effectiveness of the intervention as fewer patients died from suicide in the BIC treatment group compared to the treatment as usual group (Fleischmann et al., 2008). Developers state that one of the main advantages of BIC is that it requires little training and is relatively low-cost, compared to more sophisticated CBT treatment approaches.

D. Rapid-response outpatient team model

The rapid-response outpatient team model was developed as an alternative to psychiatric hospitalization for suicidal adolescents when wait-times to access outpatient care are too long (Greenfields, Larson, Hechtman, Rousseau & Platt, 2002). The rapid-response team includes one part-time psychiatrist and one psychiatric nurse who, immediately after discharge from the ED, make telephone calls to patients and their family to schedule a follow-up appointment. Follow-up interventions are focused on reframing misconceptions, maladaptive behaviors and communication patterns contributing to the stresses in the youth’s life. Until community services are accessible and long-term treatment arrangements are made, the response team provides on-going, immediate care for youth discharged from the ED.
Results from a quasi-experimental study found that adolescents who received rapid-response outpatient treatment had fewer subsequent suicide-related hospitalizations at six-month follow-up, compared to those who were not enrolled in the program. Improvements in outcomes of functionality and suicidality were also achieved in both groups (Greenfield et al., 2002). A subsequent investigation of the program suggests that it is a cost-effective program for hospitals to implement, in comparison to alternative forms of care such as psychiatric hospitalization, treatment in an outpatient psychiatric clinic and treatment by a private mental health worker (Latimer, Garièpy & Greenfield, 2014).

3.3 Inpatient treatment

Inpatient care is thought to be of utmost importance for suicide prevention amongst acutely suicidal people (Berrino et al., 2011). The majority of inpatient care facilities identify suicide emergencies as being the most common cause of psychiatric hospitalization (Greenham & Persi, 2014). Despite the prevalence of suicidality in inpatient care settings, there is a lack of research on the effectiveness of admission and specific treatments for suicidal adolescents (Katz, Cox, Gunasekara & Miller, 2004).

Research on generic mental health care in inpatient settings is also extremely limited (Greenham & Persi, 2014). A large-scale survey of Ontario’s current inpatient psychiatric treatment practices revealed that the majority of facilities do not routinely measure outcomes (e.g. pre- and post-treatment) for patients. Global functionality scales were most commonly used to assess symptom changes, despite the presentation of a large variety of psychiatric disorders and specific conditions, including suicidality (Greenham & Persi, 2014).

While hospitalization is necessary in the most severe cases of suicide crises, inpatient treatment should be understood as a highly stressful experience for youth and their family (Greenfield et al., 2002). Despite causing possible disruptions in youth and families’ day-to-day lives (Greenfield et al., 2002), hospitalization can be beneficial for young people if it is viewed by staff as an opportunity to provide sensible and conscientious care for patients. For instance, youth with a history of suicide attempts who were hospitalized for a brief stay in a psychiatric unit were found to be more engaged in outpatient treatment on the basis of higher rates of attendance (Spirito et al., 2002). Hospitalization may increase concern and attention from families, which in turn may encourage them to support their child’s follow-through with outpatient treatment. Inpatient care may also increase a youth’s contact with mental health professionals before beginning outpatient treatment, leading to more continuous aftercare (Spirito et al., 2002). Finally, hospitalization may be an opportunity to build youth’s confidence with the mental health care system (Stewart et al., 2002).

3.3.1 Observation practices

Formal observation practices are widely accepted and used protocols in inpatient care facilities (Manna, 2009). These include 15-minute patient checks, general observation (i.e. when an individual is on a protected unit or on one hour checks) and continuous observation (i.e. when the patient is within staff vision and/or arm’s length at all times) (Manna, 2009). Despite being rooted in principles of safety, the evidence regarding observation practices is largely inconclusive and recommendations on the matter are not unanimous (Janofsky, 2009; Manna, 2009). Research has shown that a significant number of inpatient suicides occur while the patient is on some type of observation status (American Psychiatric Association, 2003; Combs & Romm, 2007) and there is evidence to support the possibility of suicide contagion effects in inpatient care units (Kaminer, 1986).
Suicidal youth

Several issues with current observation practices in inpatient care units include:

- Staff not following or freely modifying observation protocols (Janofsky, 2009);
- Inconsistent observation terminology across mental health facilities (Manna, 2009) and shifts and units of the same facility (Janofsky, 2009), creating inconsistent implementation of the practices (Manna, 2009);
- Differences in perceptions of value, purposes and procedures of observation (Janofsky, 2009);
- Potential overuse of nursing resources (Manna, 2009);
- Intrusive and may be devoid of active engagement or communication (Manna, 2009).

The above considerations suggest that there is a need for better standards of observation of individuals in inpatient treatment. A human factors analysis approach for program improvement called Failure Modes and Effects Analysis (FMEA) was designed to evaluate and improve specific system processes. In a review of the literature, Janofsky (2009) argues that the FMEA approach may be useful in addressing issues regarding observation practices of suicidal inpatients in psychiatric care units. The approach capitalizes on proactivity, problem-solving and predicting future issues. It has been used by hundreds of hospitals in a variety of programs, including patient safety programs (Institute for Healthcare Improvement, n.d.). The Institute for Health Care Improvement web site houses the FMEA tool and a detailed, step-by-step method for using it: [http://www.ihi.org/resources/Pages/Tools/FailureModesandEffectsAnalysisTool.aspx](http://www.ihi.org/resources/Pages/Tools/FailureModesandEffectsAnalysisTool.aspx).

### 3.3.2 Postvention strategies for inpatient suicide

In-hospital suicides are rare (Dong, Ho & Kan, 2005), but are particularly distressing events for families and even hospital staff, other inpatients and physicians. Given the traumatic nature of such an event, postvention efforts in the psychiatric unit following a suicide are imperative. The following recommendations cover the procedures that should take place after an inpatient suicide (Combs & Romm, 2007; Kaye & Soreff, 1991):

1. **Supporting the family**

- The family should be spoken to in person and in a private setting, whenever possible. The clinician should give as much time as needed for the family to ask questions and talk about the loss.
- If family members seem reluctant to engage in a discussion with the clinician, efforts should be made to empathize with the reaction they are having and help them talk about it. Every family’s reaction will be unique and the clinician should welcome any intensity of emotion with complete openness.
- Making the family aware of the efforts exerted to treat and save the youth is important, as it can help provide them with a certain peace of mind. Acknowledging the uniqueness and complexity of grieving a death by suicide, in contrast with any other type of death, may also validate the family’s mix of emotions.
- The clinician should be available beyond the first meeting to provide support through the grieving process, and with any other immediate concerns around specifics such as funeral procedures or media coverage of the death. The contact should be maintained through to the funeral and up until autopsy results are obtained, at which point a referral to long term community support services is most often appropriate.
2. Supporting the hospital staff

- The psychiatrist should inform the different shifts of staff members about the death. This should always be done in a non-judgmental or blaming manner.
- Staff will likely feel an overwhelming range of emotions when coming to grips with the event. Especially distressing can be feelings of guilt, where staff members feel personally responsible for the suicide and review their interactions with the youth prior to their death to pin-point potential oversights. It is crucial to reinforce to staff that suicides are largely unpredictable and that being held completely responsible for a patient’s life is an unreasonably heavy charge for anyone to carry.
- In aiming to discuss the event in open terms and mediate feelings of guilt and perplexity, organizing group support and private team discussions can be key strategies to help with staff’s healing process. Participation in group debriefing should remain voluntary. Alternatively, informal peer contact can be an effective debriefing method for staff and referrals to mental health services should be encouraged. Any form of contact with colleagues, whether it be formal or informal, is thought to be invaluable to the healing process after an inpatient suicide.
- Psychological autopsies may be particularly helpful for postvention, as they give staff an opportunity to openly discuss emotional details of the event with a neutral party. It also gives them the chance to provide personal insight about the event and participate in the process of reforming policy and improving safety and care standards in the unit. This can be a beneficial learning opportunity for staff members as it takes the focus away from what went wrong to what can be learned from the event.
- In most cases, staff is not only accepted but welcome to attend the funeral. This can be a healing opportunity for caregivers to come together, show their support to the family and identify with others’ grieving process.
- Psychiatrists and physicians should also get support for themselves. Speaking with a trusted colleague or peer in the field who has been through a similar experience can be particularly beneficial. Attending the funeral and sending a personal card to the family is most often appropriate.

3. Supporting other patients

- Other inpatients should be informed about the death in a promptly organized meeting, in the presence of both staff and psychiatrists. Creating a setting in which both youth and staff can share feelings about the loss can help bring a sense of community in the unit.
- As a result of the death, youth may feel and express a loss of confidence in the staff’s caretaking ability. This is a concern that ought to be addressed directly, especially if patients are sharing hostile feelings towards staff with others.
- Given the concern around suicide contagion in the hospital setting, a particularly important consideration is to not let other youth feel abandoned in the midst of postvention procedures. Patient-staff meetings are recommended as they can give staff a chance to convey their continued concern to youth and ensure they are receiving sufficient support. Taking an action-focused, teamwork-fueled approach to postvention may also be key to restoring normal functioning and a sense of security in the unit.
3.3.2 Interventions for suicidal youth in inpatient treatment units

Evidence on interventions tailored specifically for inpatient suicidal youth is near inexistent (Katz et al., 2004). Current practice parameters for psychiatric hospitalization of suicidal youth prescribe continuous assessment of youth’s suicidality, discussions about goals of hospitalization and collaborative planning of outpatient treatment, on-going education about suicide and treatment, enhancement of coping skills and group activities (American Nurses Association, 2007). Researchers have argued that treatment programs for youth should target the issue of suicidality specifically, as opposed to solely focusing on the psychiatric disorder (Spirito et al., 2002), which may not present in all cases (Spirito et al., 2002; Bennett et al., 2006).

This search in particular found only two studies that proposed new treatment approaches for inpatient care units. The first study investigated the outcomes of using positive psychology exercises (e.g. gratitude letters, counting blessings and forgiveness letters) with inpatient youth who were suicidal (Huffman, 2014). We omitted reviewing this first study in detail because study outcomes were modest, did not include measures of suicidality and only accounted for post-exercise short-term effects, making clinical inferences difficult to substantiate.

A. Dialectical Behaviour Therapy (DBT)

Now classified as an empirically supported treatment, Dialectical Behavior Therapy (DBT) was initially developed for the treatment of chronically parasuicidal females (i.e. engaging in self-harming behaviours without the specific intent to die) who suffered from borderline personality disorder (Katz et al., 2004). The treatment approach focuses on emotion regulation, distress tolerance and interpersonal skills training (Shaffer & Pfeffer, 2001). Randomized control trials have investigated the effectiveness of the DBT model with outpatient parasuicidal adult females, yielding promising results, including reductions in parasuicidal behaviours, suicidal ideation, depression and treatment dropouts (Katz et al., 2004).

Katz et al. (2004) examined the effectiveness of implementing DBT as a treatment model for suicidal adolescents (i.e. who had made a suicide attempt or suffered from suicidal ideation) in an inpatient psychiatric unit. Specifically, the experimental sample comprised 26 patients enrolled in DBT, while the treatment-as-usual (TAU) group included 27 patients enrolled in psychodynamic individual and group therapy. Study results revealed highly significant reductions in parasuicidal behaviour, depressive symptoms and suicidal ideation at 1 year post-treatment follow-up in both the DBT and the TAU group, even when accounting for outpatient treatment and pharmacotherapy. Additionally, when compared to TAU, DBT was associated with fewer in-hospital behavioural problems, on the basis of staff incident reports (Katz et al., 2004). Despite the preliminary nature of these results, this study shows promise not only for DBT as a feasible treatment model for inpatient psychiatric units, but also for the short term hospitalization and focused treatment of acutely suicidal adolescents.

4. Next steps and other resources

Knowing what works and receiving training on an evidence-informed practice or program is not sufficient to actually achieve the outcomes that previous evaluations indicate are possible. A program that has been shown to improve mental health outcomes for children and youth but that is poorly implemented will not achieve successful outcomes (Fixsen et al, 2005). In order for a program to be evidence-informed, it needs to be applied with fidelity to the design
and it needs to be implemented using supportive “drivers” related to staff competency, organizational leadership and organizational capacity. Choosing a practice is an initial step toward implementation, but the implementation drivers are essential to ensure that the program reaches appropriate clients, that outcomes are successful and that clinical staff members are successful in their work.

For assistance in planning, doing and using program evaluation to strengthen services, the Centre of Excellence has free consultation services. Contact the evaluation support service: http://www.excellenceforchildandyouth.ca/support-tools/evaluation

For assistance in planning to implement a community assessment, contact our implementation support team: http://www.excellenceforchildandyouth.ca/support-tools/implementation

For information on youth and family engagement (evidence-informed practices that should be integrated into all services), including training opportunities: http://www.excellenceforchildandyouth.ca/training/youth-engagement

For general mental health information, including links to resources for families: http://www.ementalhealth.ca
Suicidal youth

References


Appendix A: Useful tools for emergency department management of adolescents with suicidal ideation

Table A1. Essential history for adolescent suicide

<table>
<thead>
<tr>
<th>I. Topics to discuss with all adolescents with suicidal ideation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ideation: Duration, amount of time per day</td>
</tr>
<tr>
<td>2. Plan: Method, potential lethality, degree of planning, motivating factors</td>
</tr>
<tr>
<td>3. Previous suicide attempts: Number and methods</td>
</tr>
<tr>
<td>4. Access to firearms or lethal means</td>
</tr>
<tr>
<td>5. Psychiatric illnesses: Diagnoses, medications, and hospitalizations</td>
</tr>
<tr>
<td>6. Drug and alcohol abuse</td>
</tr>
<tr>
<td>7. Family history of psychiatric illness, substance abuse, or suicide</td>
</tr>
<tr>
<td>8. Relationship with parents or guardians</td>
</tr>
<tr>
<td>9. History of physical or sexual abuse</td>
</tr>
<tr>
<td>10. Sexual orientation</td>
</tr>
<tr>
<td>11. Recent psychosocial stressor (breakup, assault, death)</td>
</tr>
<tr>
<td>12. Reasons for living</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>II. Additional topics to discuss with all adolescents who have attempted suicide</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Method</td>
</tr>
<tr>
<td>2. Intent to die</td>
</tr>
<tr>
<td>3. Suicide note(s)</td>
</tr>
<tr>
<td>4. Steps taken to promote or hinder discovery</td>
</tr>
<tr>
<td>5. Substance use before attempt</td>
</tr>
</tbody>
</table>

Kennedy et al. (2004)
**Figure A2. Tool for Evaluating Suicide-Attempting Teens (TEST)**

<table>
<thead>
<tr>
<th>Empirically validated questions</th>
<th>Risk Factors for...</th>
<th>Clinically useful questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you attempted suicide before?</td>
<td>Reattempt</td>
<td>x</td>
</tr>
<tr>
<td>Have you been diagnosed with a mood disorder? (depression, bipolar/ manic depression)</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Do you not have a physician who you visit?</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Have you had past psychiatric problems?</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Are you doing worse in school lately?</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Do you drink alcohol or use drugs?</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Have you been diagnosed with conduct disorder or ADD?</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Have you gotten into trouble with the law?</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Have you been abused in the past?</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Do you have access to a gun?</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Have you had a recent fight/break-up?</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Do any family members have psychiatric problems?</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Has someone close to you or someone you admire recently committed suicide?</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Did you think the attempt was really going to kill you?</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Was the attempt planned?</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Are you angry or disappointed that the attempt didn’t work?</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Do you feel hopeless about the future?</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Do you have any one who supports you?</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Would you return for an appointment with someone like me?</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Will you agree to return if you feel unsafe/suicidal in the future?</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

Stewart et al. (2002)
### Table A3. Instruments that measure child and adolescent suicidality

<table>
<thead>
<tr>
<th>Scale</th>
<th>Author</th>
<th>Ages</th>
<th>Purpose</th>
<th>Length</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Self-completed by child or adolescent</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beck Hopelessness Scale (BHS)</td>
<td>Beck et al., 1974b</td>
<td>Adolescents</td>
<td>Assesses hopelessness</td>
<td>20 true/false items</td>
<td></td>
</tr>
<tr>
<td>Hopelessness Scale for Children (HSC)</td>
<td>Kazdin et al., 1986</td>
<td>Children and adolescents</td>
<td>Assesses hopelessness</td>
<td>17 true/false items</td>
<td></td>
</tr>
<tr>
<td>Suicidal Ideation Questionnaire (SIQ)</td>
<td>Reynolds, 1987</td>
<td>Adolescents</td>
<td>Measures frequency and severity of suicidal ideation in 11- to 18-yr-old students</td>
<td>30-item (high school) or 15-item (junior high)</td>
<td></td>
</tr>
<tr>
<td>Reasons for Living Inventory for Adolescents (RFL-A)</td>
<td>Osman et al., 1998</td>
<td>Adolescents</td>
<td>Measures life-affirming, adaptive beliefs, which may distinguish suicidal from nonsuicidal</td>
<td>14 items</td>
<td>Gives clinician a blueprint for beginning treatment</td>
</tr>
<tr>
<td>Child-Adolescent Suicidal Potential Index (CASPI)</td>
<td>Pfeffer et al., 2000</td>
<td>6- to 17-yr-olds</td>
<td>Assesses risk for suicidal behavior</td>
<td>30 yes/no items</td>
<td>Excellent reliability and validity</td>
</tr>
<tr>
<td><strong>Clinician-administered instruments</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child Suicide Potential Scale (CSPS)</td>
<td>Pfeffer et al., 1979</td>
<td>6- to 12-yr-olds</td>
<td>Assesses suicidal behaviors and risk factors</td>
<td>17 pages (battery of 8 scales)</td>
<td>Given to child and parent</td>
</tr>
<tr>
<td>Suicide Potential Interview (SPI)</td>
<td>Reynolds, 1991</td>
<td>11- to 18-yr-olds</td>
<td>Evaluates suicide risk</td>
<td>4 pages, 22 items</td>
<td></td>
</tr>
<tr>
<td>Scale for Suicide Ideation (SSI)</td>
<td>Beck et al., 1979a</td>
<td>Limited research on adolescents</td>
<td>Measures frequency, intensity, and duration of suicidal ideation</td>
<td>4 pages, 19 items</td>
<td></td>
</tr>
</tbody>
</table>

Adapted from Shaffer & Pfeffer (2001).
## Appendix B: Contact information for emergency department-based program developers

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Online resource</th>
<th>Contact</th>
</tr>
</thead>
</table>
(310) 825-0408  
jasarnow@mednet.ucla.edu |
| Compliance enhancement intervention using a problem-solving format | N/A.                                                 | Anthony Spirito, Ph.D.  
Clinical Psychology Training Consortium, Brown University.  
Anthony_Spirito@Brown.edu |
| Brief intervention and contact (BIC)                       | [http://www.scielosp.org/pdf/bwho/v86n9/a14v86n9.pdf](http://www.scielosp.org/pdf/bwho/v86n9/a14v86n9.pdf) | Alexandra Fleischmann, Ph.D.  
Department of Mental Health and Substance Abuse, World Health Organization, Switzerland.  
fleischmanna@who.int |
| Rapid-response outpatient team model                       | N/A.                                                 | Brian Greenfield, M. D.  
Montreal Children’s Hospital  
2300 Tupper Avenue, Montreal, Quebec, Canada, H3H 1P3.  
brian.greenfield@muhc.mcgill.ca |