**Introduction**

Identifying suicide risk among young people is a critical component of the comprehensive approach that the juvenile justice system must adopt to prevent suicide. Ideally, this identification is done with research-based screening and assessment instruments. To select effective instruments, it is necessary to be aware of the juvenile justice system’s responsibilities in preventing suicide, the contexts in which screening and assessment instruments are used, current standards for screening instruments and assessment tools used in mental health and juvenile justice settings, and specific instruments that are available to advance suicide prevention efforts. These facets of suicide prevention are explored in this paper, which was developed by the Youth in Contact with the Juvenile Justice System Task Force (http://actionallianceforsuicideprevention.org/task-force/juvenilejustice) of the National Action Alliance for Suicide Prevention (Action Alliance) (http://actionallianceforsuicideprevention.org). The paper was prepared by members of the task force’s Suicide Research Workgroup, which was charged with identifying gaps in literature and in research on suicide and its prevention among juvenile justice-involved youth.

**Measuring Suicide Risk**

The juvenile justice system has two general responsibilities for suicide prevention. The first responsibility is to assure the safety of young people while they are in the system’s custody. This responsibility begins as soon as the youth comes under the system’s jurisdiction and authority regardless of the point of contact. Prevention of in-custody suicide involves detection and assessment of the suicide risk in the immediate or short-term future. This typically occurs at first points of contact, such as during the intake probation interview or soon after a youth’s admission to a juvenile pre-trial detention center or a juvenile correctional intake unit, and is aided by the use of formal screening instruments.

The system’s second responsibility is to facilitate rehabilitation and treatment that will prevent further delinquency and promote positive youth development.

**Background**

Envisioning a nation free from the tragic experience of suicide, the Action Alliance was launched in 2010 by U.S. Department of Health and Human Services Secretary Kathleen Sebelius and former U.S. Department of Defense Secretary Robert Gates. This public-private partnership advances the National Strategy for Suicide Prevention (NSSP) by championing suicide prevention as a national priority, catalyzing efforts to implement high-priority objectives of the NSSP, and cultivating the resources needed to sustain progress. The Action Alliance’s Youth in Contact with the Juvenile Justice System Task Force was established to focus attention on the needs of youth in the juvenile justice system. The task force was co-led by:

- Melodee Hanes, JD – Acting Administrator, Office of Juvenile Justice and Delinquency Prevention, Office of Justice Programs, U.S. Department of Juvenile Justice
- Joseph J. Cocozza, PhD – Director, National Center for Mental Health and Juvenile Justice, Policy Research Associates

The task force comprised four workgroups: Public Awareness and Education; Suicide Research; Suicide Prevention Programming and Training; and Mental Health and Juvenile Justice Systems Collaboration. Each workgroup developed products specific to its respective task.

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This long-range and therapeutic responsibility implies an obligation far beyond the mere identification of suicide risk. The juvenile justice system must employ treatment methods that will reduce the presence of that risk as it relates to the youth’s development. To that end, instruments are necessary for developing a suicide risk-reduction plan. Such plans require a dynamic understanding of the clinical characteristics of the youth as an individual, as well as environmental and social circumstances that contribute to both near-term and long-term risk of suicide for that particular youth.

**Screening and Assessment Procedures**

To fulfill their suicide-prevention objectives, juvenile justice programs must employ two types of evaluation: “screening” and “assessment” (Grisso, Vincent, & Seagrave 2005; U.S. Department of Health and Human Services 2009).

Screening should be administered to every youth at a particular point of contact with the juvenile justice system, such as admission to a juvenile pre-trial detention center. To be feasible in this context, the administration and scoring of the screening tool must not take more than 10–15 minutes. Additionally, the tool cannot depend on administrators with specialized clinical training because the juvenile justice system cannot employ mental health professionals at all stages of its custodial process.

Because of these restrictions, the tools that work best for screening have modest objectives. In a sense, they serve as “triage” by screening out young people who are highly unlikely to be at risk for suicide and screening in a small set of young people who may be at moderate or high risk. The “screened-in” group then needs follow-up – i.e., additional standardized interview questions or consultation by a qualified mental health professional – in order to identify the seriousness of the suicide risk. Tools used in screening, therefore, tend not to provide individualized information about the nature or causes of a youth’s suicidal condition; they merely classify and alert to potential risk.

In contrast, assessment involves identification of more individualized needs of a youth and is often used for intervention. Suicide risk assessment, therefore, seeks information about why a youth is suicidal, focusing on the clinical and social circumstances that must be considered in constructing a plan for intervention. Typically, assessment requires more time and expertise than is feasible for routine use with every youth entering the juvenile justice system.

Almost all instruments that are useful for suicide screening focus on suicide risk alone. They sacrifice individualized information about youth in exchange for the high degree of structure, brevity, and simplicity that is necessary for non-clinical juvenile justice staff to serve every youth. In contrast, tools of assessment usually gather information helpful for assessing suicide risk and that can be also be used to guide interventions to reduce suicide risk. Although the length and complexity of administration precludes administration to every youth entering the juvenile justice system, these tools verify suicide risk with greater precision and provide individualized information vital to planning intervention and treatment.

**Current Standards for Instrument Selection**

Today’s consensus is on the use of “evidence-based” methods for assessing the behavioral health needs of youth (American Psychological Association 2008), meaning that the instruments have undergone scientific study that demonstrates their reliability and validity with a particular population in a particular service setting. There should be evidence that the instruments measure what they are supposed to
measure. Using instruments about which little or nothing is known concerning validity is potentially wasteful of resources and may result in poor suicide risk identification and risk-reduction planning.

The use of evidence-based instruments to identify suicide risk is especially important within juvenile justice settings. Often, the personnel who will be using the method are not mental health professionals trained to perform clinical evaluations. They are probation officers, juvenile detention personnel, or juvenile corrections officers who manage youth and the processing of cases, but are not trained to make clinical judgments about the mental status of young people. The most effective tools in these circumstances have substantial structure, provide clear guidance, and use score-based rules for decision-making.

The most useful screening and assessment tools share a number of characteristics:

- They are structured or semi-structured, involving a set of questions or procedures that are employed in the same way when administered to each youth.
- Their accompanying manuals offer clear and explicit descriptions of the conditions under which the instrument should be used, the specific procedures for administration to the youth, the scoring or rating procedures, and the interpretation of the results.
- The tools provide norms that allow comparison of a youth’s results to groups of young people (e.g., by age, gender, and/or race/ethnicity) in settings and circumstances similar to the one in which the youth is being screened.
- Research has demonstrated that the instruments perform reliably. (i.e., the results will be similar no matter who administers the tool or performs the scoring or rating).
- More than one research study has shown that the results are related to behaviors or events that the instrument was intended to identify (e.g., in research situations, young people scoring higher on a suicide risk tool were observed in other ways to actually have higher risk of suicidal thoughts or behaviors).

Instruments that were designed for use with youth in juvenile justice settings will have advantages over tools developed for use with young people in community mental health settings, since the former will have taken into account the background and training of the people who will likely administer the screening. Moreover, norms that describe how young people have scored in general clinical settings might not be appropriate for describing results obtained in juvenile justice settings.

Regardless of the tool selected to evaluate adolescents’ suicide-risk status, perfection cannot be expected. There are a number of challenges that impede validation of suicide risk instruments for use with juvenile justice populations, including (Grisso 2004):

- The developmental nature of adolescence: “Adolescence” is not a uniform stage of development. It covers, approximately, the age span from 10 to 18, and young people early in this age range are very different developmentally – in behavior, emotions, and capacities – from those in late adolescence. Different factors may contribute to suicide risk or risk-reduction at different ages or developmental stages of adolescence. Thus, instruments with a single set of items might not operate equally well for youth across the full spectrum of adolescence.
• **The course of adolescents’ mental status:** Clinical conditions of adolescents are less often fixed or stable, so that young people’s mental status varies more than that of adults across short periods of time. This means that accurate estimates of suicide risk among adolescents are limited to a shorter future time span.

• **The standard for determining validity:** Validating a suicide risk tool’s ability to “predict suicide” is difficult because suicides are rare; most youth who are at risk do not actually die by suicide. Even suicide attempts offer a limited comparison event to establish validity because an instrument’s warning cannot ethically be ignored to determine accuracy of the instrument. Typically, validation of suicide risk instruments must use indirect comparisons, such as whether young people with histories of suicide attempts score higher on the instrument or whether consistent implementation of the tool in juvenile justice settings reduces suicide attempts compared to those that occurred prior to implementation.

Reviews have identified more than 50 screening and assessment tools for suicide risk relevant for adolescents (e.g., Goldston 2000). A number of these tools have been developed for use in research, rather than in practice. Other tools may have been promising, but were never validated beyond the test developers’ initial studies. Many have not been studied for use in juvenile justice settings or examined for their value with delinquent youth. Selecting tools for suicide prevention with youth in juvenile justice settings, therefore, can be difficult for juvenile justice personnel who are not familiar with the research history of the tools.

**Screening and Assessment Tools**

The tools described in the next two sections are among the most frequently used suicide risk or risk-reduction tools currently employed in juvenile justice settings. They are presented in two categories: screening tools and assessment tools. The focus of this presentation is not on recommending the “best” tool, but on demonstrating how different tools may be “best” for different purposes and juvenile justice contexts.

**Screening Tools**

A limited number of tools are appropriate for screening every youth entering a juvenile justice facility. The purpose of these tools is to identify potential suicide risk, leading merely to additional attention (e.g., clinical consultation or suicide precautions), not to diagnoses, treatment, or long-range risk-reduction plans.

Four of the tools are described here: two that focus entirely on suicide risk and two that contain a suicide risk indicator along with indicators of other behavioral health problems. Each of the tools has its unique benefits and limits, but they do share certain features that qualify them as screening tools appropriate for use in juvenile justice settings:

• They can be managed by non-mental health professionals with minimal in-service training on administration and scoring.

• They require less than 15–20 minutes to administer and score.

• They have been developed for use with adolescents and have been used (or specifically designed) for screening in juvenile justice settings.
Suicidal Ideation Questionnaire (SIQ)

http://www4.parinc.com/Products/Product.aspx?ProductID=SIQ

The SIQ was developed for use with high school-aged youth, and a slightly different version (the SIQ –JR) is available for ages 12–14 (Reynolds 1987, 1988; Reynolds & Mazza 1999). The questionnaires are presented as paper-and-pencil tasks or by computer-assisted administration. There are 30 items (questions) in the SIQ and 15 in the SIQ-JR, all focusing on suicidal ideation. Youth are asked how often they experience the thoughts described in the question, selecting from six responses that range from “never” to “almost every day.” Norms are available indicating the scores that should raise concern about suicide risk.

The SIQ has been studied with a wide range of youth in varied clinical and non-clinical situations, as well as with different cultural backgrounds. Substantial research on the SIQ has demonstrated its good psychometric properties, as well as its ability to identify youth who have histories of suicide attempts or who may make future suicide attempts. The SIQ has been used in juvenile justice settings, although research on its use in those settings is somewhat limited. Administration requires purchase of a manual and forms for scoring. An answer sheet is required for each administration, creating a per-case cost of about one to two dollars.

Suicidal Behaviors Questionnaire-Revised (SBQ-R)


The 14-item SBQ-R (Linehan 1996) and the 4-item SBQ-R (Osman et al. 2001) were originally developed for use with adults, but subsequently have been studied and used with adolescents. On the more-frequently used SBQ-R, youth check any of five responses to whether they have experienced thoughts about killing themselves, whether they have told anyone before about it, and how likely they believe it is that they will attempt suicide someday. The SBQ-R’s brevity makes it the quickest screening method available for suicide risk assessment. Validation research has been favorable (identifying youth who were at risk according to other predictors), but use in juvenile justice settings – and SBQ-R research in those settings – has been limited. The SBQ-R’s greatest value lies in its validation with adolescents in general, its simplicity and ease of administration, and its absence of cost for materials because it is in the public domain.

Massachusetts Youth Screening Instrument-Second Version (MAYSI-2)

http://www.nysap.us/MAYSI2.html

The MAYSI-2 (Grisso & Barnum 2000, 2006; Grisso et al. 2001) was developed specifically to screen for potential behavioral and mental health symptoms at admission to juvenile justice settings. It consists of 52 items about thoughts and feelings. Youth respond either “yes” or “no” based on current or recent applicability of the items. The items contribute to seven scales describing symptom conditions (e.g., Angry-Irritable, Depressed-Anxious). The instrument is administered in paper-and-pencil form or by computer, which allows the youth to see, hear, and respond to the items in English or Spanish. The computer software version (MAYSIWARE) provides for automatic scoring, reports, and database storage.

The Suicide Ideation scale within the MAYSI-2 has five brief questions referring to current or recent feelings (e.g., “Have you wished you were dead?”). A validated cut-off score on the scale alerts staff to the need for follow-up (e.g., suicide precautions, clinical attention). Norms are based on a sample of over 70,000 youth in juvenile justice settings nationwide. A substantial body of research, all of it within juvenile justice populations and settings, has demonstrated the instrument’s good psychometric properties (see bibliography at http://www.nysap.us). Five
studies have examined the MAYSI-2 Suicide Ideation scale in juvenile justice settings and have demonstrated strong relations between its scores and past suicide attempts, other measures of current suicidal thoughts, and suicide indicators in the *Diagnostic and Statistical Manual of Mental Disorders – Fourth Edition (DSM-IV)*. The MAYSI-2 is used statewide in probation, detention, or juvenile corrections programs in over 40 states. Users have access to an on-call MAYSI-2 technical assistance center. A juvenile justice facility that intends to use the tool is required to purchase a manual and to register with the MAYSI-2 center, and registered users have no further per-case cost for use of the MAYSI-2 for routine intake screening.

**Global Appraisal of Individual Needs – Short Screener (GAIN-SS)**

[http://www.gaincc.org/gainss](http://www.gaincc.org/gainss)

The GAIN-SS (Dennis, Chan & Funk 2006; Dennis et al. 2008) is a screening companion to a more comprehensive tool called the Global Appraisal of Individual Needs (GAIN) (Dennis et al. 2006). The GAIN is widely used as a structured way to identify the behavioral and mental health service needs of youth. The GAIN requires up to two hours to administer and the GAIN-SS was designed to “screen out” individuals who might not need the more extensive GAIN evaluation.

The GAIN-SS has four scales: Internalizing Disorder, Externalizing Disorder, Substance Use Disorder, and Crime/Violence. Each scale has five questions, which are posed to the youth in an interview (not paper-and-pencil). There is no suicide scale, but the Internalizing cluster inquires about depressed mood and includes one item on suicide ideation. Thus, the Internalizing component of the GAIN-SS acts as a suicide risk screen within the context of the GAIN assessment system.

The GAIN-SS is in the public domain, and therefore has no per-case cost. It is used in some states’ juvenile justice systems because of state and federal government regulations that require GAIN assessment for access to community behavioral health services. Unfortunately, there is no research evidence to address the ability of the GAIN-SS Internalizing Scale to identify suicide risk among community-based or juvenile justice youth.

In summary, it is clear that each screening tool has its unique values and limits. There may be no “best” tool for use across all juvenile justice settings, financial circumstances, and demands for brevity and validity. As noted earlier, all of the screening tools are limited to a “triage” function that identifies the potential for suicide risk. A high score itself does not prescribe any specific action, other than the need for basic suicide precaution (e.g., “suicide watch”) and a more individualized consultation or assessment with a qualified mental health professional to determine the seriousness of the potential risk.

**Assessment Tools**

As described earlier, suicide assessment tools serve not only to provide a more refined evaluation of suicide risk (during intake and in an ongoing fashion), but also to identify individualized clinical and social circumstances that need to be considered when planning for future risk-reduction. To gain this benefit, risk assessment tools typically require more time than is feasible for routine use with every youth entering the juvenile justice system. Moreover, these tools typically require moderate to substantial clinical training for proper administration and proper use of the results in developing risk-reduction plans.

Five assessment tools are described below. Three of them represent a class of structured interview tools aimed at psychiatric diagnoses, the fourth facilitates diagnoses without the need for clinical training, and
the fifth is a psychometric tool that assesses a range of symptoms and personality styles. All share the following features:

- They attend to suicide risk.
- They provide psychiatric diagnostic information with which to interpret behavioral and mental health symptoms that may be related to the suicide risk.
- They are highly structured, thus minimizing error that would be associated with general, unguided clinical interviews.
- They typically require some clinical training on the part of the user in order to employ the results to achieve risk-reduction potential.

Child and Adolescent Psychiatric Assessment (CAPA), http://devepi.duhs.duke.edu/capa.html
Diagnostic Interview Schedule for Children (DISC-IV) http://www.ncbi.nlm.nih.gov/pubmed/10638065, and
The CAPA (Angold & Costello 2000), DISC (Shaffer et al. 2000), and K-SADS (Kaufman et al. 1997) are all interview schedules. They pose questions about symptoms and behaviors in a highly structured, sequentially controlled way, leading to probable psychiatric diagnoses as defined specifically in the DSM-IV. All of these tools include questions that ask about past suicide attempts and current suicidal thoughts.

When used in juvenile justice settings by clinical psychologists or psychiatrists who are trained in their use, these tools require careful attention to the wording and sequence of the interview questions. To some extent, they allow for exploration of a youth’s answers in order to gain a more individualized understanding. All three of the tools require between one and two hours to administer.

The three tools differ in certain formal respects, such as diagnoses for different time frames. The DISC-IV and K-SADS provide diagnoses for the recent past, the past year, and lifetime, while the CAPA focuses on the past three months and current diagnosis. In addition, the K-SADS allows for interviews of both the youth and parents (although this would not necessarily be feasible in juvenile corrections settings, where access to parents is sometimes limited).

All of these tools have been extensively researched. The results have been sufficiently good that these tools often are used as the defining criterion for psychiatric disorders in major research studies that examine causes and treatment outcomes for adolescents with behavioral and mental health problems. Nevertheless, there has been insufficient research specifically on the tools’ utility in juvenile justice settings.

Voice-Diagnostic Schedule for Children-IV (Voice-DISC) http://promotementalhealth.org/voicedisc.htm
The Voice-DISC (Wasserman et al. 2002) is based on the Diagnostic Interview Schedule for Children (DISC) and provides one or more tentative psychiatric diagnoses based on DSM-IV
criteria. In contrast to the DISC, however, the Voice-DISC interview is software that offers computer-assisted administration. The “Voice” in its title refers to the fact that youth respond on-screen to the DISC questions they hear through earphones.

The interview includes a series of questions about suicide ideation and past suicidal thoughts and attempts, providing an indicator of suicide risk. Answers are automatically scored to arrive at one or more tentative psychiatric diagnoses, as well as the level of suicide risk. Responses to individual or diagnostic groups of items for a youth – such as the cluster of suicide history and suicide ideation items in the DISC interview – can be accessed by the clinician who reviews the results.

The Voice-DISC was developed specifically for use in juvenile justice detention and corrections programs, and it is used in a significant number of states’ juvenile justice programs. The tool can be administered by non-clinical staff trained in its operation and then reviewed and interpreted by a facility’s trained clinical staff. The tool has been substantially validated specifically in juvenile justice settings with delinquent youth, and technical assistance is available from a center that supports the Voice-DISC.

**Millon Adolescent Clinical Inventory (MACI)**

[http://www.millon.net/instruments/MACI.htm](http://www.millon.net/instruments/MACI.htm)

The MACI (Millon 1993) offers a paper-and-pencil or computer-assisted approach to assessing a wide range of youth characteristics. The 97 items of the test, which requires 20–30 minutes to complete, are answered true or false by youth. Their answers contribute to 12 “personality scales” (e.g., Introversive, Egotistic), eight “expressed concerns” (e.g., Peer Insecurity, Family Discord), and seven “clinical scales” (e.g., Impulsive, Depressive). One of the clinical scales is “Suicidal Tendency,” thus providing a suicide risk indicator. High scores on this scale can be examined along with youth’s scores on other clinical, personality, and expressed-concern scales, allowing clinicians to formulate individualized interpretations of factors related to youth’s suicidal feelings. Substantial research with the MACI has been performed on juveniles in custody, although further research is needed to assure the value of its Suicidal Tendency scale specifically. Nevertheless, the MACI was designed and developed in part for use in juvenile justice settings and can be used with confidence for assessment of delinquent youth.

In summary, the assessment tools described above provide a range of options to meet the diverse needs of juvenile justice settings. Each tool, in its own way, offers not only assessment of suicide risk, but also some information about youths’ diagnostic and personality features with which to fashion treatment planning. Unfortunately, the tools lack capability in this area in two ways:

- First, they tend not to provide a picture of the environmental and situational circumstances that might increase or decrease suicide risk for individual youth. The focus of the tools is on frequency and seriousness of past suicide attempts and on clinical characteristics of youth that might increase those risks. But, the tools do not have assessment features that identify the specific social stressors and social contexts surrounding a youth’s past suicide attempts – information that could be important in helping reduce future attempts.

- Second, none of the tools provides specific strategies for combining the information they generate into a treatment plan for reducing the youth’s suicide risk.

These two shortcomings are targets for future research to improve suicide assessment of young people for the purpose of creating individualized treatment plans for reducing suicide risk.
Implementation of Suicide Risk Screening and Assessment

Selecting the proper suicide screening or assessment tool is important for successful suicide prevention in juvenile justice settings. Yet, the best tool will function no better than the manner in which it is implemented. There is substantial evidence that good screening and assessment tools fail if inadequate attention is given to their proper administration in a juvenile justice setting (Grisso, Vincent, & Seagrave 2005; Proctor et al. 2009).

Implementation of suicide screening and assessment tools is based on three activities. First, personnel in the juvenile justice program must develop clear and explicit policies concerning how, when, and by whom the tools will be administered. Policies should include clear identification of the scores or results on a screening or assessment tool that will require a team response. The response itself should also be part of institutional policy.

Second, staff training is critical for properly implementing suicide screening and assessment tools. All staff members need to be trained in the purpose for implementing the tools, the meaning of their results, and the team actions that the responses will require. Training is also needed for those who will be administering the tools. When non-clinical staff will be responsible for administering suicide screening tools, training must include not only “didactic” exposure, but also actual practice administrations under the supervision of a trainer skilled in the specific tool being used. Administration of the tool must adhere closely to the specific conditions described in the tool’s manual; otherwise, the results will have been obtained in a manner that nullifies the tool’s reliability and validity, no matter how well it performed during the research to develop it.

Finally, periodic monitoring for quality of administration and use of suicide risk tools is essential. Across time, a juvenile justice setting’s practices and procedures tend to “drift” away from the standard described in the tool’s manual. Occasional monitoring and re-training is usually necessary to avoid this.

Conclusion

Use of standardized suicide screening by trained staff and assessment tools by qualified mental health providers helps the juvenile justice system identify and plan for the longer-term care and healthy development of youth at risk of suicide. It is strongly recommend that juvenile justice programs become aware of and consistently use tools and procedures for risk identification among youth involved with the juvenile justice system. Screening and assessment should also be part of a comprehensive suicide prevention program that is supported by training; identification, referral, and evaluation; communication; housing (safe environment); levels of observation, follow-up, and treatment planning; intervention (emergency response); reporting and notification; and critical incident stress debriefing and mortality-morbidity review. More information about a comprehensive program is available via the Guide to Developing and Revising Suicide Prevention Protocols for Youth in Contact with the Juvenile Justice System (http://actionallianceforsuicideprevention.org/system/files/JJ-7-P1-ProtocolGuidelines.pdf), also developed by this task force.
References


