



CRS Report for Congress

Screening for Youth Suicide Prevention

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Summary

Suicide remains a leading cause of death among U.S. youth. Most experts maintain that screening for high-risk youth within the context of a comprehensive suicide prevention program is a cost-effective strategy. While the federal government does not mandate screening, it provides grant funds that are used for screening programs, with active parental consent. This report discusses the issues surrounding screening as a strategy for youth suicide prevention.

Background

The overall rate of suicide among youth has declined slowly since 1992.¹ However, suicide remains the third-leading cause of death for adolescents and young adults age 10 to 24, accounting for 4,482 deaths in this age group in 2005.² While there is no national compilation of suicide attempt data, it is estimated that for every completed youth suicide, there have been many attempts.³ According to the self-reported 2005 Youth Risk Behavior Survey (YRBS) conducted by the Centers for Disease Control and Prevention, in the previous 12 months, 16.9% of high school students indicated they had seriously considered suicide, 13% reported making a plan to attempt suicide, 8.4% reported

¹ Lubell KM, Swahn MH, Crosby AE, and Kegler SR, "Methods of suicide among persons aged 10-19 years — United States, 1992-2001," *Morbidity and Mortality Weekly Report (MMWR)*, vol#53, 2004, available at [<http://www.cdc.gov/mmwr/PDF/wk/mm5322.pdf>].

² Centers for Disease Control and Prevention (CDC), Web-based Injury Statistics Query and Reporting System (WISQARS) at [<http://www.cdc.gov/ncipc/wisqars/>]. The two leading causes of death for this age group are unintentional injury (17,096 deaths) and homicides (5,686 deaths).

³ American Association of Suicidology, a national nonprofit organization that promotes research, public awareness programs, public education, and training for professionals and volunteers, and serves as a national clearinghouse for information on suicide, has reported that there are 100-200 attempts for every completed youth suicide.

attempting suicide, and 2.3% reported making a suicide attempt that needed medical attention.⁴

Suicide and suicide prevention have received increased national attention since the late 1990s. Surgeon General David Satcher's *Call to Action for Suicide Prevention*⁵ in 1999 was followed by the release of the National Strategy for Suicide Prevention⁶ in 2001. This was followed in 2002 by the Institute of Medicine's *Reducing Suicide: A National Imperative*,⁷ and in 2003 by the President's New Freedom Commission Report, *Achieving the Promise: Transforming Mental Health Care in America*.⁸ Suicide reduction also has been included in the U.S. Department of Health and Human Services (HHS) Healthy People 2010 public health objectives, with one of the two suicide objectives being to decrease the annual suicide attempts of adolescents requiring medical attention, from 2.6% as reported in the 1999 YRBS to a goal of 1.0% in 2010.

This report discusses three issues raised by the availability of federal funds — through the Garrett Lee Smith Memorial Act and other Substance Abuse Mental Health Services Administration (SAMHSA) appropriations — to carry out screening programs: (1) Is screening, either alone or in combination with other measures, an effective suicide prevention strategy? (2) What are the practical considerations of obtaining active parental consent for screening? (3) Does the federal government promote screening youth for suicide?

In order to address these questions, the report first presents data on the efficacy of screening for suicide, then reviews the practical considerations in light of federal recommendations for screening adolescents vulnerable to suicide, and concludes with options based on the public health approach and available evidence. Many research studies are currently ongoing in the field. As new developments emerge, this report will be updated as warranted.

Is Screening Effective in Preventing Suicide?

A screening program, per se, is not intended to prevent suicide. It merely identifies those who may have mental or emotional problems that increase his/her risk for suicide.

⁴ Eaton et al., "Youth Risk Behavior Surveillance — United States, 2005," *Morbidity and Mortality Weekly Report (MMWR)*, vol. 56, June 2006, available at [<http://www.cdc.gov/mmwr/PDF/SS/SS5505.pdf>]. The YRBS, which is a self-reported survey conducted nationally among high school students every two years, includes questions about suicide attempts and ideation.

⁵ Office of the Surgeon General, "*Call to Action for Suicide Prevention*," 1999, available at [<http://www.surgeongeneral.gov/library/calltoaction/calltoaction.htm>].

⁶ Department of Health and Human Services, "*National Strategy for Suicide Prevention*," 2001, available at [<http://mentalhealth.samhsa.gov/suicideprevention/strategy.asp>].

⁷ Institute of Medicine, "*Reducing Suicide: A National Imperative*," 2002, available at [<http://www.nap.edu/books/0309083214/html/>].

⁸ President's New Freedom Commission on Mental Health, "*Achieving the Promise: Transforming Mental Health Care in America*," 2003, available at [<http://www.mentalhealthcommission.gov/reports/FinalReport/toc.html>].

In order to prevent suicide, an individual who has a positive screen will need to see a mental health professional and receive appropriate care. There are a number of issues with a school-based screening program's ability to effectively identify all students who may be suicidal. These issues are outlined below.

First, when a screening program is implemented in a school setting, it misses a large section of the youth population, including youth who are in the juvenile justice system, those who miss school on the day of the screening, and those who have dropped out. These youth who are not screened are believed to be at higher risk for suicidal behavior. *Second*, screening programs provide information about a child's suicidal ideation⁹ on the day of the screen. They miss a child who was considering suicide in the days prior to the screen, or a child who develops suicidal thoughts during the days following the screen. *Third*, screening tools vary in their performance, as measured by a screen's sensitivity¹⁰ and specificity.¹¹ Preliminary research findings question the feasibility of a screening tool being sensitive enough and specific enough to be cost-effective in the general population.¹² A screening tool that has high sensitivity tends to have low specificity. In other words, while it may capture all those individuals who have significant mental and emotional problems, it will give a false positive result to many other individuals who do not have such problems. Conversely, a screening tool with high specificity but low sensitivity will miss many individuals with significant problems. A list of tested screening tools and their reported sensitivity and specificity is in **Table 1**, below.

Table 1. Sensitivity and Specificity of Screening Tools

Screening Tool	Sensitivity	Specificity
Columbia Suicide Screen	75%	83%
Diagnostic Predictive Scales	67% - 100%	49% - 96%
Suicide Ideation Questionnaire	100%	49%
Suicide Ideation Questionnaire - JR	80%	86%
Risk of Suicide Questionnaire	98%	37%
Suicide Risk Screen	87% - 100%	54% - 60%
Suicide Probability Scale	48%	80%

Source: Pena and Caine, Center for Study and Prevention of Suicide, Department of Psychiatry, University of Rochester Medical Center, New York.

Note: Sensitivity and specificity vary depending on mental health diagnosis.

What are the Considerations Regarding Parental Consent?

Parental consent for a child to be screened by a school for suicidal ideation may be active or passive. Active parental consent involves not screening a child unless a parent

⁹ "Ideation" is a medical term for having thoughts about suicide, which may be as detailed as a formulated plan, without an actual suicide attempt.

¹⁰ Effectiveness of the tool in identifying all individuals who have mental problems. Also known as "no false negatives."

¹¹ Effectiveness of the tool in identifying only individuals who have mental problems. Also known as "no false positives."

¹² Pena JB, and Caine ED, "Screening as an approach for adolescent suicide prevention," *Suicide and Life Threatening Behavior*, vol. 36, issue 6, pp. 614-37, December 2006.

responds to a school's notice and gives permission. Passive parental consent involves screening a child unless parents send a response denying permission to the school to screen their child. In general, most communities have accepted screening programs conducted with active parental consent. However, it has been observed that requiring active parental consent leads to screening 50%-60% of youth. Requiring passive parental consent leads to screening 80%-90% of youth.

Requiring active consent lowers the screening rate primarily because of youth not showing a notice to their parents. Mental health in general and psychological testing, specifically, are cultural issues. Due to privacy concerns and stigma around mental illness, some parents and groups are reluctant to allow schools to screen their children for suicidal ideation. Aside from addressing these concerns, proponents note that a screening program that requires active consent builds community support for the issue, and builds the necessary infrastructure to ensure that a child who screens positive receives follow-up care. Moreover, community ownership and involvement reportedly increase the chances that a program will be sustained after initial grant funds are exhausted.¹³ Some parents also are concerned about unnecessary medication of children with psychotropic drugs.

Due to the limitations caused by the selection bias and the screening tool itself, some experts question the usefulness of screening programs that are not part of a comprehensive public health approach to suicide prevention. Such an approach involves recognizing and decreasing risk factors, enhancing protective factors, and providing mental health services and follow-up care to individuals who screen positive for suicidal ideation.

Does the Federal Government Promote Screening of Youth for Suicide?

The federal government does not mandate mental health screening for children. However, a recent presidential commission on mental health recommended targeting screening in high-risk settings with active parental consent. SAMHSA funds youth suicide prevention programs, including screening, through the Garrett Lee Smith grants, and makes grants to local education systems to evaluate and identify evidence-based practices for facilitating treatment for at-risk youth.

President's New Freedom Commission on Mental Health. In its July 2003 report, the President's New Freedom Commission on Mental Health concluded that the U.S. mental health care system is fragmented and inadequate, and beyond simple repair.¹⁴ The Commission recommended a wholesale transformation of the nation's approach to mental health care, one involving consumers and providers, policymakers, and both the public and private sectors.

While early detection of mental illness is one of the goals of a transformed mental health system, the Commission did not recommend mandatory screening of all children

¹³ Lodi K et al., "Coalition Sustainability: Long-Term Successes & Lessons Learned," *Journal of Extension*, vol. 40, no.1, 2002, at [<http://www.joe.org/joe/2002february/a2.html>].

¹⁴ New Freedom Commission on Mental Health, *Achieving the Promise: Transforming Mental Health Care in America. Final Report*. DHHS Pub. No. SMA-03-3832. Rockville, MD: 2003. The report is available at [<http://www.mentalhealthcommission.gov>].

to identify those at risk of mental health problems, because it believed the research on screening for children to be inadequate.¹⁵ Dr. Michael Hogan, Chairman of the New Freedom Commission, reiterated the Commission's position on mental health screening in a letter to *The Washington Times*.¹⁶

The commission did not call for mandatory universal mental health screening for all children.... Recognizing the need to balance suicide-prevention and access to medical care with the rights and responsibilities of parents, and being aware of the devastating impact of youth suicide, the commission proposed broad screening only in settings where many children are known to have untreated behavioral problems. Beyond this, the commission promoted programs that provide voluntary screening only with parental consent.

The Commission's final report includes the following language relating to mental health screening for children.

The Commission supports implementing systematic screening procedures to identify mental health and substance use problems and treatment needs in all settings in which children, youth, adults, or older adults are at high risk for mental illnesses.... [Recommendation 4.3]

Clearly, school mental health programs must provide any screening or treatment services with full attention to the confidentiality and privacy of children and families. [Recommendation 4.2]

In this *Final Report*, whenever *child* or *children* is used, it is understood that parents or guardians should be included in the process of making choices and decisions for minor children. This allows the family to provide support and guidance when developing relationships with mental health professionals, community resource representatives, teachers, and anyone else the individual or family invites. [Footnote to Executive Summary]

The Commission cited Columbia University's TeenScreen Program as a model for early intervention. TeenScreen identifies and connects children suffering from mental illness, or who may be at risk for suicidal behavior, with treatment providers in their area. The program is used in a variety of settings, including juvenile detention facilities, high schools, juvenile shelters, and youth drop-in centers, to screen children who are at high risk for suicide.¹⁷

Garrett Lee Smith Memorial Act of 2004 (Smith Act).¹⁸ SAMHSA uses funds available through the Smith Act to provide grants to states and colleges for suicide prevention programs. Neither SAMHSA nor the Smith Act mandates screening youth for

¹⁵ Screening for depression in adults was recommended in 2002 by the U.S. Preventive Services Task Force (USPSTF). The USPSTF recommended "screening adults for depression in clinical practices that have systems in place to assure accurate diagnosis, effective treatment, and follow-up." The USPSTF concluded, however, that "the evidence is insufficient to recommend for or against routine screening of children or adolescents for depression." Further information on these recommendations is available at [<http://www.ahrq.gov/clinic/uspstf/uspstf/uspstfdepr.htm>].

¹⁶ Hogan M "Long-Term Study Needed," *Washington Times*, October 21, 2004.

¹⁷ Information on TeenScreen is available at [<http://www.teenscreen.org>].

¹⁸ P.L. 108-355.

suicide. However, many grantees screen youth using one or both of the most popular screening programs, Columbia Teen Screen, and Signs of Suicide. All grantees are required to obtain active parental consent before screening a child. The Smith Act has received a total of approximately \$92 million over the last three fiscal years (FY2006-FY2008).

Appropriations. In FY2005, both the House and Senate appropriations reports for the first time included language that specifically addresses mental health screening. The House report did not include a specific dollar amount for screening, but noted that “SAMHSA is overseeing a very promising pilot study utilizing evidence-based¹⁹ screening techniques and tools to screen and identify teenagers who are at risk.”²⁰ The House report urged SAMHSA “to evaluate the effectiveness of [the] study and ... report on concrete steps being taken to promote early screening and detection programs available in schools.” The Senate report also recognized the pilot study, adding that “[s]everal promising screening techniques to identify youth at risk exist but they need further testing.” Unlike the House, the Senate included \$4.5 million for testing the use of screening mechanisms and identifying evidence-based practices.²¹ The FY2005 conference report provided \$2 million to make grants to local educational systems “to further test the use and identify evidence-based practices for facilitating treatment for teenagers suffering from mental, emotional or behavioral disorders.”²² In FY2006, the House and Senate appropriations reports included level funding to continue testing these programs.²³ In FY2007, the appropriations committees recommended that SAMHSA use its suicide prevention funds to continue developing and testing evidence-based interventions, including screening.²⁴ In FY2008, the appropriations committees recommended that SAMHSA strengthen its efforts to assist local educational systems and non-profit entities to implement mental health screening programs.²⁵

Conclusion

Federally funded screening programs currently require active parental consent. On the one hand, this policy may decrease the number of children who are screened. On the other hand, involving parents before the screening program makes it more likely that a child who screens positive will receive follow-up care from a mental health professional. Implementing an effective school-based screening program requires careful consideration of the issues outlined above. While observers generally acknowledge the value of early identification, referral, and treatment of a suicidal child, there are also concerns about the effectiveness and cost-efficacy of a relatively less-focused effort. Instead of a universal screening program, recent studies have recommended a selective screening program that targets children who are known to be at high risk for suicide.

¹⁹ In its 2001 report, *Crossing the Quality Chasm*, the Institute of Medicine defined evidence-based practice as “the integration of best research evidence with clinical expertise and patient values.”

²⁰ H.Rept. 108-636.

²¹ S.Rept. 108-345.

²² H.Rept. 108-792.

²³ H.Rept. 109-143, S.Rept. 109-103.

²⁴ H.Rept. 109-515, S.Rept. 109-287.

²⁵ S.Rept. 110-107, H.Rept. 110-231.