Prevention of Youth Suicide: The Role of the Primary Care Physician
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ABSTRACT
• Objective: To review prevalence and warning signs of suicide, assessment of suicide risk, as well as risk factors, protective factors, and prevention and management strategies related to suicidality among adolescents.
• Methods: Literature review.
• Results: Suicide ranks as the third leading cause of death among adolescents in the United States. Primary care physicians may represent the only providers of mental health services for adolescents or may serve as gatekeepers in identifying and referring high-risk youth. Many factors increase the risk of suicide among adolescents, including a previous attempt, repetitive self-injurious behavior, and depression, while other factors, such as school connectedness, family cohesion, and lack of access to lethal means, help protect against suicidal behavior. Resources exist to help primary care providers improve their skills in identifying, assessing, and managing adolescents considering suicide. Office protocols and mental health partnerships also increase the likelihood of engaging in best practices and facilitating care for suicidal youth.
• Conclusion: Primary care physicians can play a major role in helping prevent youth suicide by screening for risk factors, promoting protective factors, detecting warning signs, assessing suicide risk, and appropriately treating/managing distressed youth and/or referring patients for mental health care. Primary care settings should support physician efforts by establishing office protocols and specific procedures.

Suicide is a critical public health problem and one of the major causes of death for people of all ages. Ranking behind only unintentional injuries and homicide, it is the third leading cause of death among young people aged 10 to 24. On average, every 2 hours in the United States someone under age 25 dies by suicide [1]. Annually, suicides account for 1.4% of all U.S. deaths but 12.0% of deaths among young people aged 15 to 24 [1]. Furthermore, most professionals view the number of reported youth suicides as an underestimate of the amount of adolescents who purposefully take their own lives each year [2].

For every youth death by suicide, an estimated 100 to 200 other youth attempt to take their own lives [1]. Females attempt suicide 3 times more often than males [3]. However, males are over 4 times more likely to die by suicide than females [1]. Differences exist across racial/ethnic groups as well. Native American/Alaska Native and Hispanic females demonstrate the highest rates of suicide attempts among youth, while Native American/Alaska Native and white males show the highest rates of completed suicide [3,4]. According to the 2009 Youth Risk Behavior Survey, during the year preceding the survey 13.8% of U.S. high school students seriously considered attempting suicide, 10.9% planned to attempt suicide, 6.3% attempted suicide, and 1.9% required medical treatment for a suicide attempt [5]. Thus, Healthy People 2020 specifically targets reducing the rates of completed and attempted suicide among adolescents (MHMD-1 and MHMD-2) [6].

CASE STUDY
Initial Presentation
A 15-year-old girl presents to her pediatrician’s office for a sports-related physical examination. During the course of the interview, she admits to feeling sad and depressed for the past several months following her parents’ divorce. She admits to difficulties with initial insomnia, decreased interest in things

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she previously enjoyed doing, and social withdrawal. Her grades have declined as she’s had more and more difficulty concentrating on her academics. She denies substance use or being sexually active. She has never previously suffered from mental health difficulties.

• What is the role of the primary care provider in caring for emotionally distressed youth?

Many adolescents present to primary care providers (PCPs) with high levels of emotional distress, including depression and suicidal ideation [7–10]. Prevalence of major depression among adolescents seen in primary care ranges from 9% to 20% [9]. However, most distressed youth remain unidentified [7,8,10]. PCPs have long struggled to recognize mood disorders and suicidal tendencies among adolescent patients [11]. This situation suggests that contacts with the health care system represent critical missed opportunities to prevent suicide [12,13]. Predicting and preventing youth suicide constitute extremely difficult problems facing PCPs [12]. Still, PCPs can play a major role in suicide prevention [14] and remain an underused venue for providing mental health services to adolescents [15]. PCPs may represent the only providers of mental health services for children and adolescents [15,16] or may serve as gatekeepers in identifying and referring high-risk youth [17]. PCPs are poised to implement some of the most effective strategies for suicide prevention [18], including identifying and responding to warning signs, recognizing and effectively treating depression, and counseling parents/guardians on limiting access to lethal means [19].

Among youth, feeling suicidal most often represents a temporary state experienced in the midst of a crisis. PCPs are positioned to recognize young people in distress and intervene before these youth feel so trapped and hopeless that they view self-destruction as the only option. Although suicidal people desire to kill themselves, many also wish someone would rescue them [20]. A part of them wants to live; however, death seems like the only way to escape their pain and suffering. Health care professionals likely encounter suicidal youth during the time they contemplate whether to live or to die [12]. Researchers found that 23% of persons aged 35 and under who died by suicide contacted a PCP in the month before their death [21]. The sheer intensity of emotions people experience during a crisis may inhibit their ability to deal rationally with a situation or see alternatives to their problems [20]. Often, young people who want to kill themselves are trying to escape from an unbearable situation, problems that seem impossible to solve, or negative emotions that feel overwhelming [22,23]. If PCPs can identify these young people, they can help the adolescents recognize alternatives to suicide, determine reasons for living, break-down problems so circumstances do not seem so overwhelming, develop healthful coping strategies, and facilitate access to mental health care. PCPs must become skilled in interventions that capitalize on their access to and extended relationships with youth [24].

• What are risk factors for suicide?

Adolescent suicide reflects an interaction among myriad personal, interpersonal, and sociocultural factors [25].

Previous Attempt and Self Injury

One of the most powerful predictors of suicide is a previous suicide attempt, elevating risk of death by suicide 10- to 60-fold [26]. A previous attempt indicates the person is capable of moving from suicidal thoughts to behavior. One-quarter to one-third of adolescents who kill themselves had a history of a previous attempt, and the more serious the attempt, the more serious the acute risk [27]. Furthermore, nonsuicidal self-injury (NSSI), such as cutting, burning, scraping, or erasing the skin, has become a significant public health problem among adolescents, and also may increase the risk of suicide [28]. Researchers found that 70% of youth who engaged in NSSI had attempted suicide some time in their lives [29]. Repetitive self-injurious behavior may increase risk of suicide by reducing the pain and fear of self-injury, as well as reinforcing rewarding aspects of the experience [20]. Therefore, current recommendations suggest that clinicians encountering adolescents who self-injure should assess for suicidal intent, glean a history of suicidality, and evaluate current suicide risk [30,31].

Mood Disorders

More than 90% of youth who killed themselves had a psychiatric disorder, and depressive disorders consistently represent the most prevalent disorders among young suicide victims [27]. Table 1 shows some of the behavioral
Suicide Prevention

or physical complaints that may suggest symptoms of depression among youth. Some youth may not have the capacity to describe their feelings, and many distressed youth do not present with psychological symptoms [7,8]. Instead, they present with somatic symptoms such as stomachaches, headaches, or pain [18,32]. Also, boredom constitutes a frequent presenting symptom of depression among youth. PCPs should view a remark from an adolescent patient stating he/she is “bored all the time” as a red flag [33]. They also should remain aware of nonverbal cues of depression such as blunted affect, reduced eye contact, and limited interaction. Depression among youth can look very different from depression among adults. Young people demonstrate the following symptoms more often than adults: irritable or angry mood; unexplained aches and pains; extreme sensitivity to criticism, especially among overachievers; and withdrawing from some but not all people in their lives [34]. Regarding the latter, youth usually maintain at least some friendships, but they may socialize less than before, pull away from parents, or start hanging out with a different crowd. Some suicidal youth may present as more anxious than depressed. Studies examining the relationship between anxiety and suicidality have yielded mixed results when researchers control for depression [35]. Still, comorbid depression and anxiety significantly increases the risk of suicide among adolescents [36].

Table 1. Signs of Depression Among Youth

<table>
<thead>
<tr>
<th>DSM-IV Symptoms of Major Depressive Disorder*</th>
<th>As Frequently Seen Among Youth</th>
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<tbody>
<tr>
<td>Depressed mood most of the day</td>
<td>Irritable or cranky mood; preoccupation with nihilistic song lyrics</td>
</tr>
<tr>
<td>Decreased interest or enjoyment in once-favorite activities</td>
<td>Loss of interest in sports, video games, and activities with friends</td>
</tr>
<tr>
<td>Significant weight loss or gain</td>
<td>Failure to gain weight as normally expected; anorexia or bulimia; frequent complaints of physical illness (eg, headache, stomachache)</td>
</tr>
<tr>
<td>Insomnia or hypersomnia</td>
<td>Excessive late-night television viewing; refusal to wake for school in the morning</td>
</tr>
<tr>
<td>Psychomotor agitation or retardation</td>
<td>Talk of running away from home, or efforts to do so</td>
</tr>
<tr>
<td>Fatigue or loss of energy</td>
<td>Persistent boredom</td>
</tr>
<tr>
<td>Low self-esteem; feelings of guilt</td>
<td>Oppositional and/or negative behavior</td>
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<tr>
<td>Decreased ability to concentrate; indecisive</td>
<td>Poor performance in school; frequent absences</td>
</tr>
<tr>
<td>Recurrent suicidal ideation or behavior</td>
<td>Recurrent suicidal ideation or behavior</td>
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*Adolescents must exhibit at least 5 symptoms that interfere with daily functioning over a minimum of 2 weeks to receive a diagnosis of major depression.

Access to Firearms

Considerable evidence links access to firearms with increased risk of adolescent suicide [20,26,37,38]. Miller et al [39] found that the magnitude of the association between residing in areas where a greater percentage of people live in households with firearms and the rate of suicide was largest for youth aged 5 to 19. Particularly among the 5% to 10% of suicidal adolescents without a psychiatric illness, restricting the availability and accessibility of firearms may represent the best strategy to prevent suicide [40]. Therefore, primary care providers should ask adolescent patients and parents about the availability and accessibility of guns in the home.

Research indicates that parents will take action to limit access to firearms if health professionals explain the risks and recommend they do so [41]. To facilitate conversations about restricting access to firearms, primary care offices can distribute materials about safe storage (eg, www.kingcounty.gov/healthservices/health/injury/lokitup/providers.aspx; www.hsph.harvard.edu/means-matter/files/1N_Gun_Locking_Brochure.pdf).

Other Risk Factors

According to Joiner’s model of suicidal behavior, 2 requisite psychological states to acting on suicidal thoughts involve perceived burdensomeness and failed belongingness [20]. For youth, perceiving oneself as a burden may
reflect feeling expendable to one’s family or unable to meet parental demands [20]. Family history also represents a significant risk factor, likely because of interactions between genes and the familial environment that lead to impulsive aggression [26,42]. Abuse of alcohol and drugs increases the risk of suicide, and may reflect a young person’s attempt to “self-medicate” emotional pain [43]. Intoxication also reduces inhibitions and may cause impulsive behavior that increases the likelihood a young person will act on suicidal thoughts [26,44]. Additional risk factors are exposure to suicidal behavior of others, such as a family member, a peer, or someone in the media [26,27], and a chronic illness [45,46].

Stressful life events often precede a suicide or suicide attempt, and may include a school crisis (disciplinary or academic), a change in family structure (eg, death, divorce, separation, or remarriage), a relationship break-up, or an argument with a parent [23,27,47]. Interpersonal difficulties represent an especially important trigger for youth, particularly females [48,49]. Physical and sexual abuse increase the risk of suicide [23,47], as does involvement in bullying [50–52]. Regarding the latter, both victims and perpetrators of bullying demonstrate elevated risk of suicide compared to their non-involved peers, and those involved as both a victim and a perpetrator report the highest rates of suicidality [53]. Lesbian, gay, and bisexual youth also possess significantly greater suicide risk compared to their heterosexual peers [26,37]. One study found that 29% of males and 52% of females who reported a same-gender sexual experience had attempted suicide, compared to 13% and 25%, respectively, of their counterparts who never had a sexual experience with someone of the same gender. A recent longitudinal study identified several factors that increased risk of suicidal ideation among LGBT youth, including a history of attempted suicide, impulsivity, victimization due to sexual orientation or gender identity, and low social support [54]. Conversely, factors that protect against suicidality among these youth include family connectedness, adult caring, and school safety [55].

• What are the warning signs for suicide?

Adolescents may not actively seek help for emotional health problems, yet most young people will exhibit warning signs of suicide to others. The American Association of Suicidology developed the mnemonic IS PATH WARM to help clinicians and other gatekeepers identify the warning signs or red flags that indicate a person may be at risk and needs help [56,57].

I Ideation: Threatening, talking about, or searching for ways to hurt or kill oneself; communicating thoughts about death, dying, or suicide through talking, writing, or art work, when out of the ordinary for the individual; obtaining a weapon or another means of killing oneself (eg, prescription or over-the-counter medications); behaviors or statements indicating good-byes, including giving away prized possessions

S Substance abuse: increased substance use (alcohol or drugs)

P Purposelessness: expressing the belief that life is meaningless and/or one feels worthless; having no reason to live or sense of purpose in life; neglecting appearance and hygiene

A Anxiety: increased anxiety or agitation; losing or gaining a lot of weight; not sleeping, sleeping all the time, or experiencing difficulty falling asleep

T Trapped: feeling as though one cannot escape his/her current situation; believing suicide is the only solution to one’s problems or the only way to end one’s pain; preferring death to living a life full of pain and suffering

H Hopelessness: believing life will never improve; perceiving one’s situation as hopeless without any chance for positive change

W Withdrawal: withdrawing from friends, family, and society; dropping out of school, social, athletic, and/or community activities

A Anger: rage, uncontrolled anger, seeking revenge could indicate a loss of control and potential for violence

R Recklessness: acting reckless or fearless; engaging in risk activities, seemingly without thinking or care for one’s personal well-being or about the consequences

M Mood Change: suddenly improving following a severe depression; dramatic mood changes could indicate the onset or worsening of a mood disorder

When looking for or inquiring about warning signs, PCPs should remain aware of behavioral patterns. Although young people may not readily verbalize their feel-
ings, some of their feelings will become evident in their behaviors. When assessing behavior change, physicians should inquire about: (1) the duration (has this behavior change persisted for 2 weeks or more?) and intensity of the behavior change, (2) the possible presence of a preceding crisis event, and (3) how the behavior compares to what is considered normal for the particular individual. Behavioral changes represent the red flags others can observe and respond to; they represent invitations to help.

• What protective factors have been identified?

Preventing youth suicide involves not just eliminating negative factors, but also enhancing positive factors – the intrapersonal, interpersonal, and environmental factors that provide youth with a “safety net” that helps them during difficult times. Protective factors promote resilience and reduce the potential for suicide by enhancing a young person’s ability to cope with adversity or stress. The following list presents some important protective factors for youth [26,27,48,58–63]:

- Positive connections to school
- Coping, problem-solving, and emotion regulation skills
- Academic achievement
- Family cohesion/stability
- Help-seeking behavior
- Good peer relationships
- Positive self-worth – confidence
- Impulse control – conflict resolution abilities
- Social integration/opportunities to participate
- Access to care for mental/physical/substance disorders
- Lack of access to means of suicidal behavior.

Young people need to feel comfortable, connected, respected, and supported by prosocial peers and adults [64]. PCPs can capitalize on their extended relationships with youth by becoming a non-parental, prosocial adult to whom distressed adolescents can turn for support, as well as facilitating connections to other adults and institutions in one’s community. For adolescents, feeling engaged within family, school, and community is extremely important and a key to preventing suicide [65,66]. Therefore, a psychosocial interview and/or assessment of suicide risk should glean information about the presence of important protective factors in an adolescent’s life:

- Is the person involved in school or community activities?
- Does the person have a close group of good, prosocial friends?
- Does the person feel strongly connected to a caring adult, within and outside of the family?
- Is the person performing well in school?
- Does the person have goals, hopes, and plans for the future?

• What prevention strategies can be applied in primary care?

Preventing youth suicide through efforts in primary care requires a comprehensive approach. Personnel in primary care settings should create an office protocol to which all staff contribute, develop partnerships with mental health specialists to facilitate referrals and co-management processes, ensure clinical staff possess the requisite training, and implement screening procedures that help identify youth in distress.

Office Protocols

Office protocols regarding screening procedures, assessment approaches, responses to crisis situations, and follow-up and documentation strategies enable staff to prepare in advance for diverse situations and represent an essential component of suicide prevention efforts. Offices providing universal screening (discussed below) for adolescent depression, suicidality, and/or other emotional or behavioral health problems should address issues a priori regarding administration, scoring, follow-up, and billing, among others. The TeenScreen National Center for Mental Health Checkups (www.teenscreen.org) offers a detailed guide to help primary care office personnel prepare to implement universal screening for mental health problems [67], including post-screening procedures and materials [68]. In addition, primary care clinics should develop and disseminate an office protocol for dealing with crisis situations. The Suicide
Prevention Toolkit for Rural Primary Care (herein referred to as the Toolkit) [18] provides a template for addressing relevant issues such as who will conduct the initial assessment; call an ambulance, if needed; and sit with a patient waiting for transport.

**Mental Health Partnerships**
Providing adolescents experiencing mental or emotional health problems with a medical home represents an important strategy for addressing the mental health needs of young people [69]. Co-located mental health specialists in primary care settings may encourage collaboration and increase the likelihood of consultation and referral for mental health problems among youth [70]. Researchers have demonstrated the effectiveness of integrated and collaborative practice between PCPs and care managers/mental health specialists in screening and triaging potentially suicidal adolescents [71], facilitating access to mental health treatment [72], and improving patient symptoms [73]. Telepsychiatry and email mentoring relationships between PCPs and mental health specialists represent additional strategies for integrating mental health services into primary care [74,75]. The Toolkit provides a draft Outreach Letter PCPs can tailor for their needs to initiate communication and develop partnerships with mental health professionals in their area [18].

**Physician Training**
U.S. medical students and residents receive minimal training about suicide prevention. Enhancing clinicians’ ability to identify, evaluate, and assist adolescents in distress requires training opportunities that address general competencies in mental health [76] and specific competencies in suicide risk assessment and management [77,78]. Physicians should know the symptoms of depression and other risk factors for suicide among youth and should recognize when and where to refer depressed adolescents for help [79,80]. Medical schools and residency programs must provide continuous and diverse learning experiences that improve PCPs’ knowledge and skills related to adolescent suicide prevention [81]. Furthermore, PCPs in practice require opportunities to hone their skills through in-service trainings and collaborations with mental health specialists [76, 82]. The Suicide Prevention Resource Center (www.sprc.org) offers high-quality curricula, including online training courses and webinars, and information about evidence-based programs and practices for diverse professionals. Two training opportunities tailored to PCPs listed in the Best Practices Registry include the American Association of Suicidology’s Recognizing and Responding to Suicide Risk: Essential Skills in Primary Care (adolescent version also available) [83] and the QPRT (Question/Persuade/Refer/Treat): Suicide Risk Assessment and Management Training [84]. Both programs are available online.

**Identification/Screening**
Screening of all youth for suicidality, depression, problem-solving and coping skills, and perceptions of vulnerability for early death should become standard practice [85,86]. Suicide screening needs to become better integrated into primary care.

The U.S. Preventive Services Task Force [87] recommends screening adolescents for major depressive disorder when systems are in place to ensure accurate diagnosis, psychotherapy (cognitive-behavioral or interpersonal), and follow-up. Both the American Academy of Pediatrics [88] and American Medical Association [89] also recommend routine screening of adolescents about depression, suicidal thoughts, and other risk factors associated with suicide in routine history-taking throughout adolescence.

PCPs should know that asking youth about suicidal thoughts does not create distress or increase risk [88,90,91]. Instead, discussing suicidal thoughts relieves patients’ anxiety and may increase hope [92].

**Standardized Screening Tools**
Standardized screening instruments for depression and suicidal ideation are available and may assist in opening communication with adolescent patients. Examples of relatively short self-report measures include the Columbia Suicide Screen [93], Suicidal Ideation Questionnaire [94, 95], Risk of Suicide Questionnaire [96], Beck Depression Inventory for Primary Care [97], Patient Health Questionnaire 9: Depression Screener (PHQ-9) [98], Pediatric Symptom Checklist-Youth Report (PSC-Y) [99], and Behavioral Health Screen [100]. PCPs can obtain the PHQ-9 and PSC-Y free-of-charge from TeenScreen (www.teenscreen.org/resources/providers/).

Identifying strengths and assets among adolescent patients also represents an important aspect of screening. Structured questionnaires, such as Bright Futures [101] and Connected Kids [102], may help clinicians incorporate a systematic approach to identifying strengths and protective factors among adolescent patients.
Screening for suicidality in primary care remains limited because of time pressures, cultural and language barriers, concerns regarding the impact of asking questions about suicidal ideation, lack of clear guidelines, and inadequate referral services [17,103,104]. Administering a standardized screening instrument to all adolescent patients at the beginning of each appointment would ameliorate uncertainty about procedure and address time constraints by allowing PCPs to direct further assessment and counseling appropriately. Although screening instruments can address time constraints and help identify youth in distress, they should augment, not replace a thoughtful clinical interview.

Psychosocial Interview

Patients rarely volunteer information regarding thoughts of harming themselves or ending their lives [18]. Young people, especially, do not readily disclose their health-risk behaviors or psychosocial problems to health care providers unless prompted [105]. Ozer et al [10] found that almost 70% of youth who endorsed depressive symptoms had not discussed their mood with their PCP. However, youth frequently want to discuss psychosocial problems with their PCP [16,17], and they will acknowledge suicidal thoughts if clinicians take time to directly ask the difficult questions [11,106]. Thus, PCPs should perceive all appointments with adolescents as opportunities to explore psychosocial issues beyond the presenting complaints.

One way to facilitate a conversation and assess risk and protective factors in an adolescent’s life involves completing a HEADDSSS assessment, which stands for Home, Education, Activities, Diet, Drugs, Safety, Sexuality, and Symptoms of depression/suicidality [33]. An adaptation of this approach begins with questions about an adolescent’s strengths using the mnemonic SSHADESS – Strengths or interests, School, Home, Activities, Drugs/substance use, Emotions/depression, Sexuality, and Safety [107]. Wintersteen found significant increases in inquiry about suicidality and case detection among PCPs after 2 standardized questions were incorporated into their standard psychosocial interview: Have you ever felt that life is not worth living? and Have you ever felt like you wanted to kill yourself? [108].

Risk Assessment

PCPs concerned a young person may harm him/herself should ask the patient about suicidal thoughts as clearly and directly as possible: Are you thinking about killing yourself? Such a direct question leaves no room for misunderstandings that may occur with a question such as Are you thinking about hurting yourself?, which some adolescents interpret as meaning something different [90,109]. Furthermore, a direct question helps clinicians differentiate between non-suicidal morbid ideation and suicidal ideation. The former involves thoughts about death or wishing one were dead without thoughts of killing oneself [109]. An affirmative response to the question Are you thinking about killing yourself? should prompt a series of questions that will help a physician determine a patient’s level of planning, intent, and suicide risk. Table 2 presents questions that PCPs can use to glean information and enhance their understanding of a young person’s state of mind. At a minimum, a clinician should always address the following:

- **HOW**: Does the person have a plan?
- **WHEN**: When does he/she plan to complete suicide?
- **MEANS AVAILABLE**: Does the person have easy access to the means he/she would use?

Prior to making a decision about the disposition of a patient, a physician should evaluate existing support structures in the young person’s life, determine whether the young person anticipates experiencing thoughts of suicide after he/she leaves the clinic, and inquire about possible actions the person will take if suicidal thoughts arise. A physician may ask: What would you do later tonight or tomorrow if you began to have thoughts about killing yourself again? [90]. The person's response could help a clinician determine the patient’s commitment to ensuring his/her own safety (see Safety Planning below for more information). Routine care of adolescents requires PCPs to keep conversations with patients confidential. However, physicians should recognize they may need to break confidentiality if a patient appears in imminent risk of harming him/herself. PCPs with concerns about a young person’s safety or the validity of an adolescent’s self-report should obtain collateral information from corroborative sources such as family, boy/girlfriends, or school personnel.

Assessing suicide risk in primary care can become difficult because of the myriad factors associated with a patient’s clinical presentation. The Figure depicts a deci-
Table 2. Suicide Risk Assessment

**Ideation – frequency, duration, and intensity**
- When did you begin having suicidal thoughts?
- Did any event (stressor) precipitate the suicidal thoughts?
- How often do you have thoughts of suicide? How long do they last?
- How strong are the thoughts of suicide?
- What is the worst they have ever been?
- What do you do when you have suicidal thoughts?
- What did you do when they were the strongest ever?

**Plans**
- Do you have a plan or have you been planning to end your life? If so, how would you do it? Where would you do it?
- Do you have the (drugs, gun, rope) that you would use? Where is it right now?
- Do you have a timeline in mind for ending your life? Is there something (an event) that would trigger the plan?

**Intent**
- What would it accomplish if you were to end your life?
- Do you feel as if you’re a burden to others?
- How confident are you that your plan would actually end your life?
- What have you done to begin to carry out the plan? For instance, have you rehearsed what you would do (eg, held pills or gun, tied the rope)?
- Have you made other preparations (eg, made arrangements for pets)?
- What makes you feel better (eg, contact with family, use of substances)?
- What makes you feel worse (eg, being alone, thinking about a situation)?
- How likely do you think you are to carry out your plan?
- What stops you from killing yourself?

### Case Continued

Given the girl’s symptoms of depression, her pediatrician inquires further about her symptoms. He says, “I’m sorry to hear you’ve been feeling more sad lately. Sometimes young people who are feeling down tell me they have thoughts that life isn’t worth living. Have you ever had those thoughts?” She responds that she has had intermittent thoughts that life isn’t worth living; however, she is adamant that she’s never actually considered taking her life. She is motivated for help and is open to therapy and/or medication and feels comfortable with her mother knowing about her depression. Though there is no family history of thyroid disease, the pediatrician does order a thyroid stimulating hormone to rule out thyroid dysfunction as a cause of her mood symptoms.

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**What interventions can the PCP employ for the distressed adolescent?**

Interventions with distressed youth will vary depending on a clinician’s judgment concerning the patient’s level of risk. Below we discuss some general ideas for connecting with and assisting youth in distress that PCPs can implement regardless of whether they also prescribe medication, refer youth for mental health treatment, or use other management modalities.

### Seek to Understand

People engage in suicidal behavior when other efforts have failed to alleviate their intense psychological...
Patient has suicidal ideation or any past attempt(s) within the past 2 months. See risk factors and assessment questions.

High Risk

Patient has a suicide plan with preparatory or rehearsal behavior

- Patient has severe psychiatric symptoms and/or acute precipitating event, access to lethal means, poor support, impaired judgment
- Hospitalize, or call 911 or local police if no hospital is available. If patient refuses hospitalization, consider involuntary commitment if state permits

Moderate Risk

Patient has suicidal ideation, but limited suicidal intent and no clear plan; may have had previous attempt

- Patient does not have access to lethal means, has good social support, intact judgment; psychiatric symptoms, if present, have been addressed
- Take action to thwart the plan
  - Consider:
    1) psychopharmacological treatment (with psychiatric consultation if desirable/available)
    2) alcohol/drug assessment and referral, and/or
    3) individual or family therapy referral

Low Risk

Patient has thoughts of death only; no plan or behavior

- Evaluate for psychiatric disorders, stressors, and additional risk factors
- Encourage social support, involving family members, close friends, and community resources. If patient has therapist, call him/her in presence of patient

Record risk assessment, rationale, and treatment plan in patient record. Complete tracking log entry, and continue to monitor patient status via repeat interviews, follow-up contacts, and community resources. Make continued entries in tracking log.

Figure. Assessment and interventions with potentially suicidal patients. (Modified and reproduced with permission from Dr. Tamara Dehay, Western Interstate Commission on Higher Education (WICHE) Mental Health Program. Copyright 2011 by Education Development Center, and the WICHE Mental Health Program. All rights reserved.)
pain and suffering. According to Joiner [20], serious suicidal behavior requires a desire for death, which occurs when one feels ineffective (perceived burdensomeness) and disconnected (failed belongingness), and an ability to enact lethal self-injury. PCPs must appreciate the complexity and origin of a young person’s suicidal thoughts. When people are in crisis, they need understanding [110]. Nothing else matters, nothing else will work, until first they feel understood. PCPs can start to help their adolescent patients in distress by taking time to listen and try to understand the context of young peoples’ lives and their perceptions of their experiences. People who feel understood and supported are more likely to deal with negative feelings and move on to other feelings or actions that will enhance their well-being. Initially, a PCP’s goal should involve helping a young person in distress feel understood, cared for, and worthwhile. In the words of author Maya Angelou: “People will forget what you said, people will forget what you did, but people will never forget how you made them feel.”

PCPs can encourage adolescents to verbalize their thoughts and feelings by asking open-ended questions, using active listening techniques, and employing emotional validation. Physicians should seek to understand the experience of an adolescent in crisis by identifying what the young person is thinking and feeling, as well as the problems that death by suicide would solve. The PCP can use this information to demonstrate a profound understanding of a patient’s experience and emotions, help the young person deconstruct problems into manageable pieces, and thus provide a sense of hope. Given the often lengthy wait times to see mental health specialists and low rates of follow through on referrals, supportive interactions and problem-solving with a caring PCP are valuable adjuncts to mental health referral for youth [111].

**Develop a Safety Plan and Crisis Support Plan**

With some people, safety planning may serve a valuable function. If a physician determines a patient is not in imminent danger, the clinician should consider developing a Safety Plan with the patient (Table 3) [18]. A safety plan differs from no-suicide contracts, which have proven ineffective [112]. Instead of focusing on what patients will not do if they become suicidal, PCPs should plan with their patients what they will do [18]. Completing a safety plan is a collaborative effort and requires patients to think deeply about resources and skills that will help keep them safe. This process also provides an opportunity to connect with a young person in distress and strengthen protective factors that may mitigate the risk of suicide. Furthermore, developing a safety plan represents an opportunity to continue assessing a person’s level of risk [90]. Patients unwilling or hesitant to discuss a plan to remain safe may be at higher risk than a physician initially suspected. Prior to sending a patient home, a PCP should ensure the person can, at the minimum, state his/her ability to remain safe.

PCPs should always reassure a distressed adolescent that help is available, and they will do all they can to ensure the person receives the help he/she needs. Clinicians also should assist the young person in identifying other people in his/her life who can offer support, especially other adults. After the adolescent identifies a supportive adult, the physician can facilitate the process of completing a Crisis Support Plan (template available in the Toolkit) [18]. Completing this plan helps the adult become fully aware of the young person’s distress and ways the person can assist the adolescent, such as how to provide encouragement and support, methods to ensure a safe environment, and whom to call in an emergency. This activity also can reassure the adolescent that this adult is fully committed to supporting him/her during a difficult time. Furthermore, the process represents an opportunity for PCPs to enhance a significant protective factor, active support from a prosocial adult, for the young person.

**Document and Follow-up**

PCPs should clearly document all of their interactions with distressed or suicidal youth to further help patients and for legal purposes. Documentation should cover 3 broad categories: risk factors; suicidal ideation, planning, and intent; and the clinical formulation of suicide risk [90]. Clinicians should record risk factors they assessed, indicating those present and those absent, as well as the positives and negatives concerning a patient’s suicidality. In addition, physicians should list resources used to formulate their clinical decisions, including collaborative informants, hospital and clinic records, and consultants. Finally, PCPs should carefully document how their clinical assessment led to a plan of action. Shea [90] identifies documentation concerning the “hows” and “whys” of a clinical decision as the most important area of legal defense.
Clinicians should always follow up with potentially suicidal youth. Any follow-up contacts with suicidal patients may reduce their risk of repeat attempts and death by suicide [18]. In addition, every follow-up contact represents an opportunity to assess for recurrent or increased suicidality. A system of flagging records of patients demonstrating risk of suicide, such as color-coded labels, as well as a suicidality treatment tracking log that remains

Table 3. Implementing a Safety Plan: 6-Step Process

Step 1: Warning Signs
- Ask: “How will you know when the safety plan should be used?”
- Ask: “What do you experience when you start to think about suicide or feel extremely depressed?”
- List warning signs (thoughts, images, thinking processes, mood, and/or behaviors) using the patient’s own words.

Step 2: Internal Coping Strategies
- Ask: “What can you do, on your own, if you become suicidal again, to help yourself not to act on your thoughts or urges?”
- Assess likelihood of use: Ask: “How likely do you think you would be able to do this step during a time of crisis?”
- If doubt about use is expressed, ask: “What might stand in the way of you thinking of these activities or doing them if you think of them?”
- Use a collaborative, problem-solving approach to address potential roadblocks and identify alternative coping strategies.

Step 3: Social Contacts Who May Distract from the Crisis
- Instruct patients to use Step 3 if Step 2 does not resolve the crisis or lower risk.
- Ask: “Who or what social settings help you take your mind off your problems at least for a little while?” “Who helps you feel better when you socialize with them?”
- Ask for safe places they can go to be around people (i.e., coffee shop).
- Ask patient to list several people and social settings in case the first option is unavailable.
- Remember, in this step, the goal is distraction from suicidal thoughts and feelings.
- Assess likelihood that patient will engage in this step; identify potential obstacles, and problem solve, as appropriate.

Step 4: Family Members or Friends Who May Offer Help
- Instruct patients to use Step 4 if Step 3 does not resolve the crisis or lower risk.
- Ask: “Among your family or friends, who do you think you could contact for help during a crisis?” or “Who is supportive of you, and who do you feel that you can talk with when you’re under stress?”
- Ask patients to list several people, in case one contact is unreachable. Prioritize the list. In this step, unlike the previous step, patients reveal they are in crisis to others.
- Assess likelihood patient will engage in this step; identify potential obstacles, and problem solve.
- Role play and rehearsal can be very useful in this step.

Step 5: Professionals and Agencies to Contact for Help
- Instruct patients to use Step 5 if Step 4 does not resolve the crisis or lower risk.
- Ask: “Who are the mental health professionals that we should identify to be on your safety plan?” and “Are there other health care providers?” [may need to help adolescent patients or their parents with this information]
- List names, numbers, and/or locations of clinicians, local urgent care services.
- Assess likelihood patient will engage in this step; identify potential obstacles, and problem solve.
- Role play and rehearsal can be very useful in this step.

Step 6: Making the Environment Safe
- Ask patients which means they would consider using during a suicidal crisis.
- Ask: “Is there a firearm, such as a gun or rifle, in your home?” and “What other means do you have access to and may use to attempt to kill yourself?”
- Collaboratively identify ways to secure or limit access to lethal means: Ask: “How can we go about developing a plan to limit your access to these means?” [may need to involve parents for adolescent patients]
in a patient’s file, can alert clinic staff about high-risk patients and outcomes of follow-up contacts [18]. PCPs can complete a tracking log for each “contact” (in person or on the telephone) with a suicidal patient to obtain information about suicidal thoughts and behaviors, current level of risk, medication usage, adherence, and side effects, other interventions, and mental health treatment.

Case Continued

When her mother returns to pick her up, the pediatrician invites the patient’s mother in to discuss her daughter’s depression. Given the presence of “passive” suicidal ideation and symptoms consistent with major depressive disorder, the pediatrician recommends individual psychotherapy as well as a trial of fluoxetine 10 mg by mouth daily. The patient and her mother are in agreement. Further discussion of a safety plan takes place, during which the patient and her mother brainstorm short-term coping strategies as well as identify one or more adults who can assist if her symptoms worsen. The pediatrician provides them with the number for the local crisis service and, privately, discusses with the mother the importance of ensuring the patient has no access to guns or weapons. He further recommends that all medications (prescribed and over-the-counter) be locked up. Arrangements are made for follow-up with the pediatrician in 1 week to check-in and see how the patient is tolerating the medication.

CONCLUSION

PCPs represent an essential component of suicide prevention efforts. Many adolescents present to PCPs with high rates of emotional distress and suicidal ideation, and physicians must have the knowledge, skills, resources, and supports to identify and address these issues [8]. PCPs can perform a central role in spearheading important public health interventions to prevent youth suicide by screening for risk factors, promoting protective factors, detecting warning signs of suicidality, assessing suicide risk, and providing active and appropriate treatment and/or referral [12,14]. Primary care settings should support physician efforts by establishing office protocols and procedures for identifying, assessing, and managing suicidal youth. The Suicide Prevention Toolkit for Rural Primary Care [18] and TeenScreen National Center for Mental Health Checkups [99] offer resources to help physicians address the problem of youth suicide in primary care settings. PCPs are encouraged to take advantage of their unique position to prevent suicide among their adolescent patients.

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REFERENCES


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