Mental health risk assessment
A guide for GPs

Background
Risk assessment of patients in general practice is a challenging area of clinical practice. Competing interests of managing patient wishes, consideration of duty to warn others and invoking the Mental Health Act while practising in a medicolegally accountable manner can be difficult.

Objective
This article summarises the risk assessment of patients with possible mental disorders and provides suggestions regarding measures that may be undertaken to manage risk in psychiatric emergencies.

Discussion
The evidence of effectiveness for risk assessment interventions in acute settings is limited. While it is not possible for general practitioners to predict the future, and particularly to predict fatal outcomes, they can be expected to meet a standard of care that identifies those at risk and provide an acceptable clinical response.

Keywords: risk management; mental health; forensic medicine; suicide

Suicide accounts for 1.6% of deaths in Australia. It comprises more than 20% of deaths in men between the ages of 20 and 39 and men are four times more likely to die by suicide than women. The 2007 National Survey of Mental Health and Wellbeing showed that 1880 deaths in Australia were classified as suicide in that year, an overall nonage adjusted rate of 8.9 per 100 000. The prevalence of suicidal ideation was 2.3%, with 0.4% of respondents in the general population reporting previous suicide attempts.

The majority of research on suicide risk assessment has been conducted in tertiary settings and direct translation of this evidence to the general practice setting may be inappropriate. Reports suggest that health professionals find it difficult to deal with suicidal patients. For example, staff in a hospital emergency department reported feelings of anxiety, fear, helplessness and anger (or ‘counter transference’) when dealing with suicidal patients, possibly leading to negative interactions. Compounding this situation is the fact that the ability of clinicians to predict rare adverse outcomes such as suicide and homicide has been show to be poor, either using clinical judgment or actuarial rating scales.

It may appear difficult to predict with certainty those who will complete suicide. However, predicting those at an elevated risk of suicide may be considered feasible and risk in these patients can be managed. General practitioners who come in contact with persons at risk of suicide need to perform an adequate assessment and implement appropriate management strategies. While medical practitioners are not expected to predict fatal outcomes, they are expected to meet a standard of care that identifies those at risk and provide an acceptable clinical response.

Assessing risk of harm to self
A recent review of suicide prevention interventions concluded that "the evidence regarding effective interventions for adolescents and young adults with suicide attempt, deliberate self harm behaviour or suicidal
ideation is extremely limited. Many more methodologically rigorous trials are required.\(^5\)

While it is not known to what degree contact with mental healthcare and GPs can prevent suicide, it is reported that 45% of persons who complete suicide had consulted a GP within 1 month of their act.\(^6\)

Persons who survive lethal suicide attempts have similar clinical and psychosocial profiles as suicide completers and over 50% of those who complete suicide initially presented with self-harm.\(^7\) Although it is to be noted that self-harm behaviour can serve a range of purposes other than to communicate a wish to die, it does need to be taken seriously and not dismissed as ‘attention seeking’ as it may lead to suicide.

The attitude of the GP toward suicidal patients is of paramount importance for a positive outcome. The interviewer should be calm, nonjudgmental, objective and empathic. If patients experiencing suicidal ideation are able to discuss suicide without condemnation they often feel relieved, and the suicidal plan or ideation may be replaced by addressing the real suffering that caused the pain that led the individual to consider suicide to be a solution. The healing effects of careful listening to the patient’s story and the development of empathy, so that the patient feels truly understood, cannot be overemphasised. This assists in the formation of a stable therapeutic relationship, which is likely to lead to a good outcome.

Suicide risk factors can be categorised as static or dynamic (Table 1).\(^8\) Static risk factors are fixed and historical. Dynamic risk factors are changeable and fluctuate. Suicidal behaviour may be considered along two dimensions: 1) the potential medical lethality or damage resulting from the suicidal plan and 2), the suicidal intent and planning, including the degree of preparation, the desire to die versus the desire to live and whether plans have been made to avoid discovery.

### Assessing risk of harm to others

Males are 10 times more likely than females to be violent and younger persons are more likely to be violent than older persons (violence peaks in late teens and early 20s). The assessment of violence is multifactorial and similar to suicidal ideation with static and dynamic risk factors, which are not well understood (Table 2).\(^8\) The relationship between the presence of a mental disorder and violence is complex: in psychosis, positive psychotic symptoms such as delusions of persecution or grandiosity are more likely to lead to violence whereas negative symptoms (blunted affect, apathy, withdrawal) are less likely to lead to violence. Similarly, command hallucinations (instructions to act violently) or thought insertion are more likely to lead to violence. Overall, it appears that less than 10% of serious violence, including homicide, is attributable to psychosis. Strangers (including treating medical professionals) are not the typical victims of violence committed by those with psychosis. The scientific literature refutes the stereotyping of mentally ill patients as dangerous: substance use and personality disorder seems to have much higher correlation with violence than psychosis.\(^9\)

In clinical settings, assessing risk of violence can be challenging due to the variables involved. The assessment should focus on exploring precipitating events, degree of planning and premeditation, severity of intended injury and capacity for restraint. Clear delusions of persecutions with perception of threat to self, morbid jealousy and other violent ideas focused on a particular victim require serious attention. However, there is little evidence based guidance currently available to clinicians who must monitor, treat and make decisions about potentially violent individuals on an ongoing basis, whether in the community or in an institution.\(^10\) A recent review of violence risk assessment in mental health settings concluded that current risk assessment techniques have severe limitations with high rates of false positives and false negatives.\(^11\) It reported ‘an absence of evidence showing that risk assessment of any variety can reduce the harms associated with psychiatric disorders’.\(^11\)

### Management of risk in the general practice setting

The cornerstone of effective management of patients at risk of harm to self or others is thorough assessment. For this to occur, rapport and therapeutic alliance needs to be established through active, empathic listening. It is important to question patients directly about suicidal ideation (Table 3). If possible, and with the patient’s permission, information should be sought from the patient’s family, support networks and previous care providers. If in doubt, consultation with an experienced colleague or specialist in the field is recommended.

The treatment plan should be individually tailored and informed by the GP’s assessment of risk.\(^12\) Many patients who express ideas of harm to themselves or others have underlying disorders that require treatment: these may be substance use disorders, psychiatric illness, personality

<table>
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<th>Table 1. Risk factors for suicide(^8)</th>
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<td><strong>Static</strong></td>
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<tr>
<td>Previous self harm</td>
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<tr>
<td>Diagnosis of mental disorder (especially depression)</td>
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<tr>
<td>Substance abuse (especially alcohol)</td>
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<tr>
<td>Family history of suicide</td>
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<tr>
<td>Recent stressor or loss</td>
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<td>Age, gender, marital status (older age, male, divorced)</td>
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<th>Table 2. Risk factors of harm to others(^8)</th>
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<tr>
<td><strong>Static</strong></td>
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<tr>
<td>Previous violence (robust predictor)</td>
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<tr>
<td>Antisocial personality disorder</td>
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<tr>
<td>Poor impulse control</td>
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<td>History of substance abuse (especially alcohol)</td>
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disorders or a combination of the above. Managing the patient’s disorder is the best way to manage the risk for the patient. Addressing dynamic risk factors may mean removing access to lethal means, activating support systems or referring patients to specialist services.

Where there is a good rapport with the person, good support systems are in place and appropriate steps have been taken to address underlying psychosocial factors, substance use or psychiatric disorders, the patient may be judged to be manageable in the community (see Case study). The GP may choose to do this if they feel that the ideas of harm to self or others may be fleeting, resisted and lacking intent. The use of ‘no self harm’ contracts should be avoided as they are generally held to be ineffective and not supported by evidence. Instead, a safety plan for the patient can be drawn up and this can include information such as help lines (particularly in an emergency out of hours), follow up appointments and online resources. An excellent resource is The Royal Australian College of General Practitioners operated GP Psych Support website (see Resources). Family and support persons can be enlisted to monitor and assist the patient, where possible. In cases of significant psychiatric or substance use disorder, referral may be made to an outpatient psychiatric, addictions or psychotherapy service as deemed appropriate. This creates a safety net for patients that can instil hope and confidence in recovery.

Case study

John comes to see you because he is not sleeping. He admits to depressed mood, insomnia, lack of energy and intermittent suicidal thoughts of wanting to drive his car into a tree. You establish that he has been drinking 6–8 beers each night to help him get to sleep. He has not previously made any suicide attempts. He states that he wants to get help and does not really want to die. He agrees to cut down his alcohol use and commence an antidepressant. With his permission, you advise his wife to support him and you make an appointment with him for a review in another 3 days. You provide him with emergency contact numbers if he becomes distressed after hours, and he gives an undertaking to ring you earlier or go to the emergency department of the local hospital if needed. You discuss referral to a psychiatrist if the situation deteriorates and document your advice to the patient.

If the risk of harm to self appears to be acutely elevated and cannot be safely managed at home, referral to specialist services, either in the community or in an inpatient setting needs to be considered. This is particularly appropriate for patients with mental disorders who have clear and immediate plans of harm, are prone to impulsivity, use substances, have unstable supports or lack other protective factors. Discussion with the local mental health service or inpatient psychiatry service is appropriate on these occasions. Where possible, patients should be actively involved in this decision making process and be encouraged to participate in psychiatric treatment on a voluntary basis.

At times, referral may need to be undertaken without the consent of the patient using the relevant Mental Health Act legislation. This would be considered as a last resort and only in exceptional circumstances. Although state based Mental Health Act legislation may vary (Table 4), most allow for a referral for psychiatric assessment without the consent of the patient where:

- the patient appears to be mentally unwell
- there is a risk to life or substantial risk to health of self or others, and
- it is reasonable to believe that treatment will reduce those risks and that this cannot be provided in a less restrictive manner.

In a situation where there appears to be a high likelihood of harm to others, the GP needs to consider whether psychiatric admission is required in order to treat an underlying mental disorder. Violence in the absence of a mental disorder is primarily a matter for the police.

Table 3. How to ask about suicide

- Do you ever feel like giving up?
- How does the future seem to you?
- Does your life ever seem so bad that you wish to die?
- How severe are the thoughts? How frequent?
- Have you made any plans?
- How close have you come to doing something? (Access to methods of suicide, eg. firearms, stockpile of medications)
- What stops you doing something? (Protective factors such as religious beliefs or love for children/family members)

Note: Suicidal ideation that includes a plan for suicide or evidence that the individual has been engaging in preparations for a suicide attempt are signs of significant short term risk.

Table 4. Criteria for referral under the Mental Health Act

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<td>Queensland</td>
<td><a href="http://access.health.qld.gov.au/hid/MentalHealth/CareInformation/involuntaryTreatment_is.asp">http://access.health.qld.gov.au/hid/MentalHealth/CareInformation/involuntaryTreatment_is.asp</a></td>
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Good practice also dictates that medical professionals should consider warning specific individuals (via the police if possible) if they assess a risk of harm to any individual.14 There is an exception to the GP’s duty of confidentiality where there is an overriding duty in the ‘public interest’ to disclose information, as in the case where a patient threatens harm against another person.15

**Conclusion**

Although it is impossible to predict which individual will complete suicide or commit homicide, these risks may be reduced and managed. The risk of suicide may be reduced if individuals at risk are correctly identified. Suicide is often a complication of psychiatric disorders, whereas homicide and violence appear to be less so.

Prediction of long term risk is made more difficult by the fact that transient factors may significantly increase risk. An evaluation of known background (static) risk factors and their interplay with acute (dynamic) variables provides a good framework for professional clinical judgment and decision making. Hence, patients who are identified as being at an acutely elevated risk of harm to self or others by means of careful history and mental state examination should be offered appropriate diagnosis and treatment, including specialist referral if necessary.

Documenting the rationale for decision making and including important information such as risk-benefit analysis, consultation with colleagues or communication with the patient’s support persons and advice given to the patient, completes the process of managing risk.

**Resources**

- The RACGP operated GP Psych Support website contains information that can assist GPs, patients and carers in addressing mental health issues: www.psychsupport.com.au/public_links.asp
- GPs may also contact GP Psych Support via email or telephone to request patient management advice from a psychiatrist. The service is available 24 hours per day, 7 days per week. Access www.psychsupport.com.au for contact information.

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**References**

The suicidal patient

Background

PEOPLE attempt or complete suicide to escape intolerable emotional pain, convinced by the "delusion" of depression that there is no hope of recovery, or cessation of the pain. If you are lucky enough never to have suffered a depressive illness, it may be difficult to understand why patients who develop depressive illness state: "Now I know why people want to kill themselves."

Similarly, when people have recovered from their episode of depression, they often state: "I cannot believe I had such thoughts of suicide."

I often quote to depressed and suicidal patients a remark attributed to Dr John Horden, past president of the British College of General Practitioners. He reportedly said that he had suffered renal colic, an MI and depressive illness, and that the depressive illness was the most painful of the three conditions. This quotation is from a book appropriately called Malignant Sadness, a personal account of the life-threatening depression suffered by Professor Lewis Wolpert, a professor of embryology in London. The analogy between depression and malignancy is apt, as depression is often long-standing before it is detected, is difficult to eradicate completely, sows the seeds of its own relapse and can be fatal.

A useful way to understand and explain depression is that it is a slowly advancing negative delusion and/or distortion of how the patient sees the world. People usually trust their own perceptions, so if they think the world has become a crueler place, they think they must be right. It can be hard to believe that the world hasn't suddenly become drier — instead the individual's perceptions of the world have changed, becoming increasingly dark. As this darkening of view progresses, there is increasing mental and emotional pain, accompanied by the increasing conviction that this state of affairs cannot be changed. In the face of this gross distortion of perception and thinking, suicide seems the only logical option to stop the pain. The intensity of the emotional pain involved is summarised in the word "psychache", coined by a doctor in the field of suicide prevention, Dr Ed Shoridman, who defined as such immeasurable mental anguish that unconsciousness seems the only solution.

Practice points

Depression causes escalating emotional pain, and this progressive "delusion" that things will never improve. The GP's role is to relieve the emotional pain, both immediately and in the long run, and to vigorously challenge the distorted thinking.

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Epidemiology

THE good news is that we are slowly winning the battle against suicide worldwide, fundamentally because GPs are more frequently diagnosing and treating depression. Our Australian suicide rate peaked at 2700 in 1997 when we had a population of 18.5 million people. Our 2010 rate of suicide was just over 3000, with a population of about 23 million. However, it is estimated that for every completed suicide (the phrase "successful" suicide is avoided) 105-109 people engaged in deliberate self-harm (acts with a risk of death) or attempted suicide. Each week in Australia, over 40 people die from suicide (about the same death rate as for prostate or breast cancer) and up to 2000 people engage in deliberate self-harm. This latter figure does not include the number of people who self-mutilate (self-injury with the intent to cause pain but not death), which is also an indicator of emotional pain estimated to occur in about 10% of teenagers.

Groups at risk

In an Australian Bureau of Statistics survey, 13% of the people population admitted to a complete strength that they had considered suicide at some point in their lives. It is likely that the real figure is higher than this. The point prevalence of such thoughts is estimated to be about 3% in the Australian population.

Age is a leading cause of death in young adults. Teenagers and young adults are about twice as likely to die from suicide than in a car accident.

Survivors of deliberate self-harm are most at risk of completed suicide in a subsequent attempt. The risk is highest, 100 times that of the general population, in the 12 months following the attempt, particularly in males, and older people (who are more likely to be depressed). It is estimated that 3% of males and 2% of females who have previously attempted suicide will die by suicide in the subsequent 15 years. While depression accounts for 50% of completed suicides, depending on various research reports and international "psychiatric autopsies", patients with other illnesses are also at risk. About 95% of patients with schizophrenia will make a suicide attempt at some stage during their illness, and 5-10% of patients with schizophrenia will die by suicide. Patients with alcoholism have a drastically increased rate of suicide, particularly in the month or two following the break-up of a significant relationship, a period during which weekly or twice-weekly visits to their GP are quite appropriate. Bipolar illness and borderline personality disorder both have suicide rates of about 10%. Suicide is a recognized risk in eating disorders, in the early stages of dementia, and in those who have seriously self-mutilated. Panic disorder and severe anxiety may also drive people to depression and suicide.

Women attempt, men succeed

A rather cynical phrase attributed to trends in suicide and suicide attempts. A male expressing suicidal thoughts is of particular concern, as 75-80% of completed suicides are male.

Patients recently discharged from psychiatric treatment units are at particular risk during the first 1-4 weeks after discharge. Those with a family history of suicide are at high risk, due to both genetic and environmental influences — birthsdays, Christmas and the anniversary date of the suicide are significant risk periods. Patients abusing alcohol and other substances increase their risk of suicide.

The peak group for suicide consists of males aged 21-44, and family breakdown is implicated. Aging isolated males, especially soon after the loss of a major relationship through death or divorce, especially if they are alcoholics, are another risk group. Expanding conditions, chronic debilitating pain and illness increases the risk of depression and helplessness, with subsequent suicidal ideas. From a sociological perspective, marked disruption in society, for example after a war or following migration to a very different culture, causes a phenomenon described as "nooni", which is said to increase suicide rates in affected groups. Suicides rates among Aborigines and Torres Strait Islanders are 4%, compared with 1.6% of the general Australian population, and the NT has a significantly higher suicide rate than Victoria or NSW. Of particular relevance for GPs is the fact that GPs experience depression more than the general population average, and suicide is closely correlated with depression. It is known that female GPs have higher suicide rates than similarly educated professionals. Specialties are not exempt, with anesthesiologists and psychiatrists, together with dentists, traditionally having high suicide rates.

The chronically suicidal patient

There are two major groups of patients who are suicidal over prolonged periods of time, not simply as an acute episode in an acute depressive illness. Firstly, there are those left with chronic depression, estimated to be about 15% of patients who suffer depression. I recently conducted a survey, with replies from 300 psychiatrists, that indicated psychiatrists achieve remission (total abolition of symptoms) in only 50-75% of the depressed patients they treat.

Secondly, there are the patients with significant personality disorders of various types, particularly borderline personality disorder, who are often emotionally desperate and see life as meaningless. "Psychiatric autopsies" reported in various countries identify about 7% of patients who have not met formal diagnostic criteria for any of the major psychiatric syndromes. While many of these will meet the criteria for personality disorder, there are some people for whom life is so emotionally empty that life itself seems pointless. Again, many of these patients have been traumatised or disillusioned by previous relationships, or distressed by unresolved emotional issues from their childhood such as emotional, physical or sexual abuse. Establishing an empathic relationship and offering a long-term therapeutic relationship may be a last chance for such people to stop feeling suicidal.

Youth suicide

This remains one of the most distressing areas of suicide, and while the actual number of young people who die from suicide is relatively low, the number of those at risk is very high. Furthermore, the suicide of a young person evokes intense emotions in families, friends and the wider community. Suicide rates among young people tripled in Australia between 1960 and the late 1990s, but have been declining steadily since. It is now recognized that depression is very common among young people. Substance abuse, family disfunction, sexual abuse and eating disorders all increase the risk. For many young people, suicidal ideas are precipitated by an event they perceive as personally very painful or publicly humiliating, ranging from the breakdown of a friendship or relationship to a sense of rejection by peers or family. It seems that a particular phenomenon amongst young people is an ill-defined reaction to distressing events, as they lack the life experience to determine the significance of these events. A fundamental factor in suicide prevention in young people is to try to convince them that the way they feel at present will not continue forever.

Disarming high-achieving young people are another group at risk of suicide. There have been cases where an outstanding student in a school dies from suicide around the time of end-of-school examinations. Many of these young people are highly successful due to a combination of intelligence and the relentless driving force of an obsessive, perfectionistic personality. Unfortunately, perfectionists have intense difficulty coping with minor lapses and failure to achieve total perfection. Exams are a perfect example to find out the limits of a candidate's abilities. For perfectionists, particularly young people with depression and self-harm problems, finding problems in life, a belief that they will perform below their own expectations or those of others, can be seen as an irreversible, unacceptable humiliation. It is sometimes effective to remind perfectionists that the standard by which their performance is judged is that of the average person, not their own impossibly high standards.

Practice points

Anyone in severe emotional pain is at some risk of a suicide attempt. The risk is higher in those with a previous suicide attempt, those who are depressed on antidepressants, especially a psychiatric inpatient unit, and those who are affected by substance abuse. Other risks are particularly acute after the recent loss of a relationship, and those with a family history of suicide are at higher risk.

Influences and interventions

FROM an academic perspective, the infrequency of suicide makes it almost impossible to conduct trials large enough to show the effectiveness or otherwise of a given intervention. However, there are certain strong statistical correlations.

Public measures to prevent access to the means of suicide, such as the restriction of access to intimate and firearms have been shown to have an effect on suicide rates. Patients who have survived a suicide attempt have 100 times the risk of completed suicide of the general population, such that intensive follow-up of these patients over the next 12 months with at least one visit to a psychiatrist is indicated.

The daily suicide rates worldwide in the past couple of decades is strongly correlated with the increasing prescription of antidepressants. GP's, therefore, need an introduction of SSRIs for a year or two compared with the rest of the world, resulting in a delay in the suicide rates being similarly delayed. The prohibition on the use of SSRIs in treatment of young adults has been shown in the US and the Netherlands to have been correlated with
Assessing suicide risk

DO not be afraid to ask! Some people are afraid that questions about suicide risk will raise the thought in the mind of the distressed patient. In fact research shows that suicide risk and suicidal thoughts are not increased by such a line of questioning. In particular, there is such a stigma surrounding suicide that patients feel embarrassed to raise the topic, and are often very relieved when a doctor can discuss what they thought was a taboo subject.

A useful first question, which needs to be asked of everybody with depression, is "Are things ever so bad you wish you did not wake up in the morning?", followed if necessary by "Do you actually wish you were dead?". If the answer is "Yes" to these two questions about passive suicidal ideas, it is then necessary to move on to asking about active suicidal ideas, and rating the severity of these active ideas on a 0-10 scale.

A suggested sequence of questions is summarised in the adjacent box. Questions range from vague thoughts of ending one's life, to the intimacy of plans and preparations, to previous suicide attempts.

It is very important at the end of such questioning to offer the hopeless drivers suffering patients to contemplate suicide by immediately giving respected and firm guarantees that they can be helped. Patients may or may not disclose their intended means of suicide. The risk of completed suicide can be indicated by the patient's plan. A planned overdose of an agent with low lethality is different from plans for hanging, which is the method used in more than 50% of completed suicides.

Obviously, if a patient chooses to be less than honest about their suicidal thoughts, their risks are increased. Very disturbed patients are unable to give dependable answers and are liable to rapid oscillations in their thinking.

Unfortunately, 50% of deaths occur on the first attempt. A reversal of previous trends, leading to an increase in suicide rates in this age group, at least in the initial years. Having children and/or having a partner are protective factors reducing suicide rates. Indeed, many patients are convinced they would have committed suicide, were it not for their obligations to their young children.

Professor Riaz Hassan from Flinders University, in his book Suicide Explained shows that suicides occur in sparcally globally, and that more suicides occur on Mondays or Tuesdays if it has been a long weekend. The media are in a very difficult position with regard to reporting suicides. Glamorising the suicide of a public figure or pop star, giving details of how the suicide was committed, giving the exact location of the suicide, and any other unverified dramatisation of such deaths from psychiatric illness, all have been shown to raise suicide rates and run the risk of inducing copycat suicides. As a result, the Australian Press Council has developed standards of practice for reporting suicide, which are binding on major newspapers and magazines in Australia. Experiments in Austria whereby the media stopped reporting certain forms of suicide for a six-month period caused a reduction in the suicide rate. On the other hand, it is only by increased community awareness of depression and the risk of suicide that more resources can be brought to bear on this area.

There is a myth that people who talk about suicide never act. In fact, most of those who have died from suicide have indeed talked about death relatively recently. In contrast, given that at least 3% of the population have thoughts of suicide at any point in time, and actual suicides and suicide attempts are a tiny fraction of this number, it is difficult to pinpoint those at most risk. Very few of those who have died from suicide or have attempted suicide, have been receiving mental health care from a specialist or a GP.

Some do make impulsive suicide attempts by inflicting deliberate self-harm, sometimes fatal, soon after perceived perceived distress in their lives. The stereotype is the businessman suddenly faced with financial ruin. More common is the young person facing a relationship breakdown or a perceived humiliating event. Spurred on by alcohol or other substances, such individuals seek oblivion from the pain and their self-esteem, and in many instances do not know or care whether such oblivion will be temporary or permanent. If they survive their suicide attempts, most such patients are glad to be alive some hours later.

Questions to risk survivors of suicide attempts

• Was this a sudden decision, or something you had been thinking about for a while?
• How do you feel now about still being alive?
• Did you contact anyone after the act?
• Did you seek physical isolation and take precautions against discovery?
• Did you schedule the attempt to avoid intervention?
• Did you take all the tablets?
• Did you give any warning, or discuss suicide?
• Did you conduct final activities (giving presents, arranging business affairs)?
• Did you leave a suicide note?
• What was the purpose of the attempt?

Warning signs of impending suicide

• Individuals may tidy up their paperwork, or even tidy their room. In preparation for the handing of their affairs after their suicide.
• A suicidal patient giving presents is particularly ominous. A present to you may well be saying "Thank you for your efforts, but goodbye." A present to others, particularly a young person giving away personal possessions, may well imply the person does not expect to be able to use personal items in the future.
• A patient distressed by their suicidal ideas, who suddenly becomes significantly less distressed, may well have correctly resigned to the inevitability of suicide, and achieved calmness by giving up the fight.
• Be aware of "terminal malignant alteration". Suicidal patients are almost always depressed; depressed patients are nearly always unexpectedly irritable. Occasionally, regardless of the huge efforts you have expended in the care of such a patient, the patient may appear more cheerful, more in control, more socially competent, more listless, more immature, more impulsive, more dishevelled, more incompeptence, etc. The human part of you will feel like cutting at all future contact with that patient. The professional part of you needs to accept immediately as a symptom, accept that the patient has almost certainly been behaving the same way with everybody close to them, and avoid being blinded by this symptom as a personal attack. In the heat of an argument, just as in the midst of a death struggle, we know people say things they really do not mean.

Occasionally, one comes across patients who see themselves as failures at everything in life including their recent attempts at suicide, and who bitterly fear ever such failure. At the other extreme are those, who knew, or believed, their self-destructive act would not be fatal, but who were using their behaviour as a form of communication. A patient who, after an overdose, mixes with other people's political contacts them via SMS, Facebook or telephone is very different from one who takes what they believe will be a fatal dose of medication and stays alone, waiting to die. A suicide note implies the patient did not expect to be alive to say the things that were written in the note.

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Preventing suicide and suicide attempts

It is important to keep in mind that the patient has an extremely painful mental illness and is being rebuffed, medicated and held against his will. I believe there is no hope of things improving. To add to the suffering and the frustration that the patient with depression feels a sense of personal guilt for having the illness, feels stigmatised by it, and feels alone in the belief that others do not understand.

Keeping the above scenario in mind, I suggest the following steps in dealing with patients who express suicidal ideas (see also table 1).

Table 1: Summary of reasons for suicide and their management

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<th>What kills people</th>
<th>What saves people</th>
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<tr>
<td>Emotional-physical pain</td>
<td>1. Immediate &quot;emotional analgesia&quot;, such as benzodiazepines, quetiapine or other sedating agents. It is adequate doses.</td>
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<td></td>
<td>2. Treatment of the underlying cause, usually depression.</td>
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<td>3. Confront the patient with &quot;You would never achieve a friend to die. Tell yourself what you would tell a friend.&quot;</td>
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Hopelessness

Instruct hope. Frequently guarantee and reassure patients about recovery. For many patients, you are the most trusted and believable person who can understand this nightmare, and who knows what to do.

Innience and anxiety, with intrusive suicide thoughts

Access to safe but effective medications, such as hypnotics, benzodiazepines and quetiapine, allowing sleep and "non-fatal obduracy".

Follow-up

The patient needs to be seen frequently, even after recovery. Antidepressant patients need repeated support and empathy and repeated guarantees that they will recover, to counterbalance the relentless input from their depressive delusion that makes them feel recovery is impossible.

Daily or second daily review is appropriate at this stage, even if it only involves a brief visit to reinforce the life-saving bond between you and the patient. Continue frequent visits as the patient is recovering.

Paradoxically, the early stages of recovery from depressive illness are a period of increased risk from suicide. Depression is a mixture of intense emotional pain and relative psychomotor retardation. Antidepressants improve the paradox by reducing the emotional pain, so patients are consequently physically enabled to act on their suicidal thoughts.

If possible, it is advisable to be available for urgent telephone calls. Agree with the patient what they can do when they feel they cannot wait between appointments to see you. Long phone counselling sessions are inappropriate, however, and ask them if anything has happened to make them feel more desperate.

It is important to reiterate your empathy and guarantees of recovery, offering an earlier appointment if needed, and encouraging the use of emotional analyses to lessen their distress.

In the hours you are not available, emphasise that it is extremely dangerous to take any antidepressants, to take any antidepressants, to take the risk of suicide induced by depression.

Slow and cautious use of SSRIs or SNRIs - the SSRI fluoxetine is considered the safest - with the patient and family asked to watch for agitation and other unpleasant side effects such as agitation. Antidepressants and diuretics is seen by many adolescents as an appropriate form of treatment. This is a safe and effective antidepressant, but may be safer, and does not have side effects such as weight gain and decreased libido. Antidepressants are generally ineffective, and dangerous in overdose.

"Emotional analgesia" and access to "non-fatal oblivion" when suicidal ideas are intense can be provided by the use of benzodiazepines and other sedating agents that are mildly sedative, but usually induces weight gain.

Support and referral

GP support from a psychiatrist is available from PsychSupport.com.au, or directly from a local psychiatrist.

The need for psychiatric referral or hospital admission depends on whether on your evaluation of each patient's suicide risk. Asking the patient to rate their active suicidal thoughts on a 0-10 scale at every visit gives you some further indication as to the extent of the risk with which you are dealing. A suicidal patient who is dangerously ill, is not responding or is severely disordered, is an avoidable semi-emergency or emergency.

Referral to a psychiatrist in preference to a psychologist is usually appropriate for very ill patients. Many psychologists are understandingly extremely apprehensive about being asked to treat a suicidal patient, especially as they are not trained in the prescribe medication that is often an essential component of the treatment of these patients.

It is a good idea, if possible, for you or your staff to make the appointment with the patient to see the patient a day or two later. Indeed, given the hopelessness of depression, and the difficulty of getting an early appointment with a psychiatrist, it may well be life-saving or result in avoidance of suicide attempts, if you can ensure the patient has an appointment in hand before leaving your premises. It is important for you to continue to see the patient regularly, even if they are also starting treatment with a specialist. Otherwise, the risk is that the patient will feel that you are not interested in any contact regular visits to you in comparison with the visits to the psychiatrist. This can result in an increased and bound between you and the patient, which is a vital component in their prevention.

Many psychiatrists are still reluctant to combine antidepressants. Patients should be closely monitored if their psychiatrist decides to stop a partially effective antidepressant, wait for the washout period, which is usually at least six weeks, for antidepressants, and then start a new antidepressant, which unfortunately may
not work. Patients often despair as their depressive and suicidal ideas return with renewed intensity at this time and it is a high-risk period for suicide.

Frequent visits to you, together with increasing doses of benzodiazepines and mood stabilisers or atypical antipsychotics (particularly sedative agents such as quetiapine), are quite appropriate if this situation arises.

A patient who is very distressed, very agitated, or whose promises to stay safe until the next visit do not convince you, should be considered for hospitalisation. This is a complex decision, and identifying the patient who will attempt or complete suicide out of the large number of people with suicidal ideas is very difficult.

In essence, you are weighing up the power of the illness vs the management strategies that you have put in place. Consider voluntary admission for patients with significant levels of active suicidal ideation as a hospital may be a safer environment than home. On the other hand, this risks the patient losing the therapeutic bond with you and facing the stigma of psychiatric hospitalisation.

In addition, many cases will need to be reviewed by hospital staff and management teams, who do not agree with your assessment of the risks, a worrying and frustrating situation for both GPs and psychiatrists.

**Practice points**

Guaranteeing that recovery will occur, ensuring sleep and the aggressive use of antidepressants and emotional reassurance are the cornerstones of suicide prevention.

Compulsory hospitalisation should only be considered in rare cases. If a patient is overtly ill, especially if they have a psychiatric illness, or severe bipolar disorder, you may not be able to lead any significant weight to their promise not to harm themselves. If such patients refuse voluntary admission, it will be necessary for them to be detained under the relevant Mental Health Act. This forces them to undergo assessment at least by the duty psychiatrist in their local psychiatric hospital. The risk is that such a step will alienate the patient in this area in subsequent episodes of illness. It can be helpful to explain to the patient that this is a very difficult decision, not made lightly and is made for their safety.

The first 30 days after discharge from a psychiatric unit is a very high-risk period for suicide, despite the best interventions of the unit involved. It is a good idea to see the patient as soon as possible after discharge, regardless of what follow-up may have been arranged by the psychiatrist, and to see the patient fairly frequently during this period.

Normal depressive illness has at least a 50% risk of relapse and the severe depressive illnesses that bring with it suicidal ideas has an even higher rate of relapse. Furthermore, in my opinion, patients who have been suicidal in the past become desensitised to suicide and will become more rapidly suicidal in their next episode of depressive illness.

**References**


**Online resources**

Author’s own websites

- Depression — an only readable overview: www.depression.com.au
- Suicide prevention: www.suicideprevention.com.au

**Further reading**

- Horgan D, Dodd S. Combination antidepressants — use by GPs and psychiatrists. Australian Family Physician 2011;40:397-400.

**Statement of competing interests**

Clinical Associate Professor David Horgan has received speaker fees and travel support from multiple pharmaceutical companies. He is the founder and medical director of the registered tax deductible charity, the Australian Suicide Prevention Foundation.
**Case studies**

**Case 1:**
DR A developed post-vascular depression while working in a hospital, and was unable to work as a doctor for the next 15 years. Having previously seen 12 psychiatrists for a range of treatments, she was referred to see me, asking to be "put down like a sick dog". She was reassureed I would never give up, and was reassured I understood how much she suffered. ECT did not help her. She was given benzodiazepines to reduce her subjective anxiety.

When the benzodiazepines were inadequate, she was given quetiapine (Seroquel), which did relieve her insomnia without adequately relieving her agitation and anxiety. She was also given olanzapine (Zyprexa), which did control her diarrhoea.

She was trialled on every available antidepressant until one agent was found that produced some symptom relief. The dose of this antidepressant was reluctantly increased to far beyond the manufacturer's recommended dose, with informed consent. The informed consent acknowledged that there were unknown risks involved in such an approach. When the peak effect of this antidepressant was reached, reboxetine (Edronax) was added. After 18 months, the patient was back to work full-time as a doctor. Over the next year, it was possible to wean her medication to a low dose, and she remained on the same dose for a number of years. Her symptoms returned to a slight extent recently, and were abolished simply by a moderate increase in the dose of sertraline (Zoloft).

**Case 2:**
Ms R was referred because her bipolar illness was unstable, and her own psychiatrist became unwell with depression. She was subject to sudden, severe exacerbations of depression, with self-rated suicidal ideation of 9/10, when she would comply with treatment and would attend daily, and would guarantee her safety from visit to visit. However, when well, she would not bother to take preventive medication, despite being told to do so. When I was away on holiday one year, she rang the psychiatric covering my practice and was told he was currently seeing another patient and would return the call in 20 minutes. Despite being assured by the accuracy that this was no problem, the patient declined the offer, stating that I would be back in a few days and she would ring me then. She killed herself that afternoon.

No one is immune from depression, and bipolar illness kills 10-15% of its sufferers, especially in the absence of treatment.

**INSTROCTIONS**
Complete this quiz online and fill in the GP evaluation form to earn 2 CPO or PDP points. We no longer accept quizzes by post or fax.

The mark required to obtain points is 80%. Please note that some questions have more than one correct answer.

**ONLY ONLINE**
www.australiananddoctor.com.au/cpd/ for immediate feedback

1. **Which TWO statements regarding the epidemiology of suicide are correct?**
   a) Over 2000 people died by suicide in Australia in 2010
   b) For every completed suicide, about 15 people engage in deliberate self-harm or attempted suicide
   c) Every week in Australia, over 40 people die from suicide (about the same as prostate or breast cancer) and up to 2000 people engage in deliberate self-harm
   d) It is estimated that about 2% of teenagers self-harm

2. **Which TWO statements are correct?**
   a) GDP offers less depression than the general population average
   b) Teenagers and young adults are more likely to die in a car accident than to die from suicide
   c) Suicide thoughts are estimated to be experienced by about 30% of the Australian population at any time
   d) About 11% of male survivors of a suicide attempt will die from suicide over the next 15 years

3. **Which THREE statements regarding conditions associated with suicide are correct?**
   a) Depression is a major risk factor and accounts for 50-60% of suicides
   b) About 10% of patients with schizophrenia will make a suicide attempt at some stage during their illness
   c) Bipolar illness and borderline personality disorder both have suicide rates of about 5%
   d) Alcoholism, eating disorders and the early stages of dementia are risk factors for suicide attempts

4. Jane is 18 years old and in Year 12 at school. Her mother is concerned as Jane seems to be withdrawing and very anxious. She has also noticed some recent cuts on Jane's forearms. Which THREE issues about Jane would you make you concerned about making a suicide attempt?
   a) Jane has a history of a prior suicide attempt but has not been told by anyone about her mental health
   b) Jane has just split up with her boyfriend and is now very anxious
   c) Jane has been to the school counsellor but has been told that it will not help
   d) Jane has a history of smoking marijuana

5. Peter, 35, presents with suicidal ideation. Which three factors would place him in a High-risk category for a suicide attempt?
   a) Family history of suicide
   b) Father of two young children
   c) Recent diagnosis of a chronic medical condition
   d) Loss of a close relationship
   e) Addiction to alcohol
   f) Legal problems

6. **Which THREE questions are important to ask Peter when assessing his suicide risk?**
   a) Do you actually wish you were dead?
   b) Do you think that you are being too dramatic?
   c) Do you have a plan?
   d) Would you consider using violent methods?
   e) Do you feel that you are a burden to others?
   f) Do you have suicidal thoughts?

7. Peter tells you that he has been very depressed and survived a previous suicide attempt six months earlier. In assessing a particular episode of deliberate self-harm, you are assessing the determination to die, indicated by the patient's actions and words. Which of the following THRE points should be checked with Peter?
   a) Did he contact anyone after the attempt?
   b) Did he conduct final activities, for example, giving presents or arranging business affairs?
   c) Did he leave a suicide note?
   d) Does he feel that his risk of completing suicide in the next 12 months is now 100 times the population average?

8. Which THREE statements regarding depression, counselling and substance use are correct?
   a) Almost every patient with depression feels a sense of personal guilt for having the illness, feels stigmatised by the illness, and feels alone in the belief that others do not understand
   b) It is important for GPs to give intensive reassurance and guarantee of recovery to suicidal patients
   c) Patients should be asked to sign a letter asking them to promise their own safety
   d) Patients should be advised not to drink alcohol or take illegal drugs while suicidal
   e) Which THREE statements regarding medication are correct?

9. Which THREE statements regarding follow-up are correct?
   a) Consider voluntary admission for patients with significant levels of active suicidal ideation, as a hospital may be a safer environment
   b) If a patient is being referred to a psychiatrist, it is advisable for the GP or staff member to make the appointment rather than leaving this to the patient
   c) Patients have a decreased suicidal risk after they have received inpatient treatment and have been discharged from a psychiatric unit
   d) Families need to have post-suicide support provided to protect the next generation

**CPD QUIZ UPDATE**
The RACGP requires that a brief CPD evaluation form be completed with every quiz to obtain category 2 CPD or PDP points for the 2011-13 triennium. You can complete the quiz online with the quiz at www.acnd.com.au or with the quiz at www.australiananddoctor.com.au. Because this is a requirement, we are no longer able to accept the quiz by post or fax. However, we have included the quiz questions here for those who like to prepare the answers before completing the quiz online.

**NEXT WEEK**
Bedwetting is a common problem in children. It is a source of considerable anxiety to the child and the family, but many children do not receive medical attention for the problem. The next How to Treat looks at the causes and management of nocturnal enuresis. The authors are Dr Adrienne DeShapio, fellow, department of urology and Centre for Kidney Research, the Children's Hospital at Westmead, and PhD student, school of public health, Sydney Medical School, University of Sydney and Dr Patricia Caldwell, staff specialist, department of nephrology, the Children's Hospital at Westmead, and renal function, discipline of paediatrics and child health, Sydney Medical School, University of Sydney, NSW.
Suicide is a public health problem and a leading cause of death. The number of people thinking seriously about suicide, making plans, and attempting suicide is surprisingly high. In total, primary care clinicians write more prescriptions for antidepressants than mental health clinicians and see patients more often in the month before their death by suicide. Treatment of depression by primary care physicians is improving, but opportunities remain in addressing suicide-related treatment variables. Collaborative care models for treating depression have the potential both to improve depression outcomes and decrease suicide risk. Alcohol use disorders and anxiety symptoms are important comorbid conditions to identify and treat. Management of suicide risk includes understanding the difference between risk factors and warning signs, developing a suicide risk assessment, and practically managing suicidal crises.


AUDIT = Alcohol Use Disorders Identification Test; BBW = black box warning; FDA = US Food and Drug Administration; SAFETY = Suicide Assessment Five-step Evaluation and Triage

Suicide is the eleventh leading cause of death in the United States, accounting for more than 1% of all US deaths annually. In 2007, there were 34,598 deaths by suicide, more than half involving firearms. Recently, concerns have been raised, via anecdotal reports, that the US suicide rate may be rising. These worries are based on population-level effects of the persistent increased unemployment rate due to the severe recession. Serious thoughts of suicide, plans for suicide, and suicide attempts are surprisingly common in the general population (Table 1). Despite that frequency, death by suicide is still a low base-rate occurrence and impossible to predict accurately. Although a relatively uncommon event, suicide has a lifelong and profound effect personally on the families, friends, and physicians of the person committing suicide.

In this concise review, we provide a pragmatic and clinically relevant background on suicide risk management for nonpsychiatrists. We will use frequently asked questions based on our clinical experiences and review key principles of depression treatment as they relate to suicide risk management. We will update and synthesize information gained from research into concerns associated with the antidepressant black box warnings (BBWs) for suicidality and highlight their 2009 revisions. We will then close by describing basic principles in identifying those at risk of suicide, assessing them, and devising practical patient management strategies.

IMPORTANT TO PRIMARY CARE

Two practice realities have spurred interventions to improve primary care recognition and treatment of depression as a public health suicide prevention strategy. First, patients dying by suicide visit primary care physicians more than twice as often as mental health clinicians. A review of studies analyzing this clinical scenario estimated 45% of those dying by suicide saw their primary care physician in the month before their death. Only 20% saw a mental health professional in the preceding month. Women and older patients are more likely to have sought care in the month before suicide than men and younger patients. Second, generalists (internists, pediatricians, family physicians) write most antidepressant prescriptions (62%) in the United States. When these 2 facts are considered together, it becomes clear that primary care clinicians provide most antidepressant treatment and are the group most likely to see patients at risk of suicide in the month before their death.

These findings have generated multiple suicide prevention efforts in primary care. Some research shows that educating primary care clinicians can help protect against suicide, primarily by improving the recognition of depression and leading to the increased prescribing of antidepressants. These effects are stronger when collaborative care models of depression treatment are used.

PATIENT GROUPS AT RISK

Years of research on suicide show those with current psychiatric illness are the most common group dying by suicide.
TABLE 1. Prevalence of Suicidal Thoughts and Behavior in US Adults

<table>
<thead>
<tr>
<th></th>
<th>Percentage</th>
<th>No.</th>
</tr>
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<tbody>
<tr>
<td>Serious thoughts</td>
<td>3.7</td>
<td>8.3 Million</td>
</tr>
<tr>
<td>Made plan</td>
<td>1.0</td>
<td>2.3 Million</td>
</tr>
<tr>
<td>Suicide attempt</td>
<td>0.5</td>
<td>1.1 Million</td>
</tr>
<tr>
<td>Suicide deaths&lt;sup&gt;6&lt;/sup&gt;</td>
<td>0.01</td>
<td>34,598</td>
</tr>
</tbody>
</table>

<sup>6</sup>Data for suicide deaths are for 2007 and are from the Centers for Disease Control and Prevention.<sup>1</sup>
Adapted from the 2008 National Survey on Drug Use and Health Report: Suicidal Thoughts and Behaviors among Adults.<sup>5</sup>

Psychological autopsies, incorporating information from medical records and interviews with families and friends of those dying by suicide, find that more than 90% have a psychiatric disorder.<sup>18,19</sup> Specific disorders associated with suicide include mood (ie, bipolar disorder and major depression),<sup>23</sup> substance use,<sup>22</sup> anxiety, impulse control, personality disorders,<sup>20,21</sup> and psychotic disorders.<sup>24</sup> Anxiety, depressive disorders, and alcohol use disorders are the most common psychiatric illnesses seen in general practice.<sup>25</sup> Patients with more than one psychiatric illness are at higher risk, particularly those with both depressive disorders and substance use disorders.<sup>5,26</sup> We will focus on management of depressive disorders, the need for recognition of substance use disorders, and the interplay among mood, substance use, and anxiety disorders.

**PRIMARY CARE DEPRESSION TREATMENT AND SUICIDE**

Research shows that identification of depression—a critical first step in its management—has improved.<sup>27</sup> Clinical management of 3 other vital suicide risk factors in depressed patients continues to be poor.

First, comorbid alcohol problems frequently remain unidentified and thus untreated. In a study evaluating a patient cohort for receipt of recommended care for 25 acute and chronic conditions, only 11.0% of patients with alcohol use disorders received recommended care vs 82.7% of those with senile catatarias.<sup>29</sup> Alcohol use disorders had, by far, the lowest appropriate treatment rates of any disorders studied.<sup>28</sup> Separate research, conducted in depressed patients in general care settings, found that only 24% of patients were assessed for alcohol use.<sup>27</sup>

Second, treatment is often too short or otherwise inadequate. A 2007 study<sup>27</sup> found 46% of depressed patients received 2 or more months of treatment, when the recommended length of treatment is at least 4 to 9 months after remission of symptoms.<sup>29</sup> Also, most patients unresponsive to initial treatment did not have their medication adjusted.

Third, suicidal thoughts and suicidal behavior are poorly managed. The same study revealed suicidal ideation was assessed in only 24% of patients.<sup>27</sup> When it was identified, generalist physicians typically neither treated it themselves nor referred patients for mental health consultation. In patients with current suicidal ideation and/or documentation in the medical record of having made a suicide plan or attempt, only one third were referred for consultation.

**DON'T ASK, DON'T TELL, DON'T KNOW**

Further reinforcing these findings, a 2007 study<sup>20</sup> found only 36% of simulated patients requesting antidepressant medication were even asked about suicide. Patients with simulated major depressive disorder were slightly more likely to be asked,<sup>20</sup> although more than half of these patients were not asked. Physician-specific factors that were related to training (eg, time since training) or that could have had a bearing on individual beliefs (eg, sex) did not explain the results.<sup>20</sup> Notably, physicians who had personally experienced depression, those who had family or friends with depression, and those who worked in academic settings were more likely to ask about suicide.<sup>20</sup>

Although this study found no association with level of physician training, residency training for depression and suicide-related behavior is perceived as inadequate.<sup>31</sup> Residency training directors surveyed in family medicine, pediatrics, and internal medicine reported substantial dissatisfaction in the adequacy of their program’s depression and suicide training.<sup>31</sup> More family medicine directors reported general satisfaction with the training quality, whereas most pediatrics and internal medicine residency training directors were significantly less likely to be satisfied.<sup>31</sup>

**SUICIDE INQUIRY**

Every patient being evaluated for possible depression or with a history of depression should be asked about suicidal thoughts and behaviors. We recommend using a step-wise approach (Figure 1) that starts with a general question and becomes more specific with each successive question.<sup>32</sup> Clinicians should start by asking whether the patient feels hopeless or has thoughts of death. They should then ask whether the patient has explicit thoughts of suicide, a specific plan and means for carrying it out, and the intention to carry it out. In addition to assessing the patient’s current suicidal thoughts and behaviors, clinicians should gather further information about the patient’s family history of suicide and previous suicide attempts.

In assessing suicide risk in patients requiring hospitalization, the yield may be low, but the stakes are high. In a 2009 study<sup>33</sup> that screened nearly 1000 patients in a cardiology clinic for depression and suicidality, 109 patients (12%) expressed suicidal ideation. These patients were immediately assessed...
by mental health professionals, and suicide risk was high enough in 4 patients to require emergent hospitalization.31

RISK FACTORS VS WARNING SIGNS

To better understand and prevent suicide, research has focused on identifying risk factors from clinical samples of convenience and cross-sectional general population studies. Many factors increasing risk of death by suicide are known.34 Unfortunately, most of these factors are immutable, as for example being white, male, or divorced, having made a previous suicide attempt, or having a family history of suicide.34 These factors are nonspecific, highly prevalent, unchanging over time, and not modifiable. As a result, many people may have an elevated risk profile, but only a very few will die by suicide. Predictive prospective models do not exist for the general population,34 psychiatric outpatients, or psychiatric inpatients as to which individuals will eventually attempt or commit suicide. The intensity of care required (ie, outpatient vs psychiatric inpatient) differentiates lifetime vs immediate risk.25,35

Distinguishing between warning signs and risk factors is helpful clinically (Table 2).36 Warning signs are specific symptoms or behaviors that are acute or subacute in nature. They can be identified, explored further, and addressed with clinical and psychosocial interventions. Anxiety, psychomotor agitation, sleep problems, poor concentration, hopelessness, social isolation, and excessive or increasing use of alcohol or drugs are all worrisome factors that can be modified with prompt interventions.

Although highly treatable with pharmacological interventions, including benzodiazepines and antipsychotic medications, severe psychotic anxiety is particularly worrisome because of its prominent association with suicide in the hospital or immediately after discharge.37 Also concerning is the poor impulse control sometimes seen with exacerbations of such psychiatric illnesses as bipolar disorder or borderline personality disorder. Such poor impulse control may respond to more assertive treatment of the underlying disorder. Recent population-level research20,21 points to anxiety and impulse control disorders as an integral part of progression to suicidal behavior associated with depression.

PREDICTION VS INTERVENTION

Most clinical risk factors for suicide (eg, depression, substance use disorders) are conditions that merit treatment in any case, irrespective of their role in elevating suicide risk. Conversely, we cannot identify those persons already receiving life-saving interventions. The US Preventive Health Services Task Force recommends screening for alcohol misuse in adults, providing brief counseling, and referring for specialized treatment if needed.38 Screening and treatment of depression are also recommended but only if staff-assisted depression care supports are in place.39,40

EDUCATION VS PRACTICE MODEL CHANGE

As noted earlier, initial research12,15,41 raised hopes that improving identification and treatment of depression could

<table>
<thead>
<tr>
<th>TABLE 2. Warning Signs vs Risk Factors for Suicide</th>
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<tbody>
<tr>
<td>Warning signs</td>
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<tr>
<td>----------------</td>
</tr>
<tr>
<td>Proximal</td>
</tr>
<tr>
<td>Clinically derived</td>
</tr>
<tr>
<td>Individuals</td>
</tr>
<tr>
<td>Intervene to resolve</td>
</tr>
<tr>
<td>Transient</td>
</tr>
<tr>
<td>Threats to harm self</td>
</tr>
<tr>
<td>Planning for suicide</td>
</tr>
<tr>
<td>Talking or writing about suicide</td>
</tr>
<tr>
<td>Hopelessness</td>
</tr>
<tr>
<td>Rage, anger, seeking revenge</td>
</tr>
<tr>
<td>Impulsive or reckless actions</td>
</tr>
<tr>
<td>Feeding trapped</td>
</tr>
<tr>
<td>Increasing alcohol or drug use</td>
</tr>
<tr>
<td>Withdrawing from others</td>
</tr>
<tr>
<td>Anxiety or agitation</td>
</tr>
<tr>
<td>Increased or decreased sleep</td>
</tr>
<tr>
<td>Dramatic mood changes</td>
</tr>
<tr>
<td>No purpose or reason for living</td>
</tr>
</tbody>
</table>

Adapted from Suicide and Life Threat Behav.46 with permission. Data from J Clin Psychiatry.47

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PRACTICAL SUICIDE-RISK MANAGEMENT

prevent suicides. This prevention effort focused on intensive education of primary care physicians. Importantly, when the intensive intervention stopped, suicide rates returned to previous levels. From the authors' experience in multiple care settings, one-time educational interventions are destined to be unsuccessful. Pragmatically, all primary care practices screen for and manage a multitude of different disorders and problems. To be successful, additional screening must become part of the practice's routine clinical flow and involve more than identification and treatment initiation. Treatment of depression must be effective, and follow-up mechanisms aimed at ongoing remission and monitoring of symptoms must be in place. Collaborative care models for treatment of depression are particularly suited for this. They show promise in not only decreasing suicidal behavior but also increasing overall levels of combined treatment with pharmacotherapy and psychotherapy plus faster time to remission vs treatment as usual.

For example, the Prevention of Suicide in Primary Care Elderly: Collaborative Trial (PROSPECT) was more effective than treatment as usual in reducing suicide risk in patients aged 60 years or older. This finding was present in urban, suburban, and rural practice sites. Collaborative care patients were more likely to receive treatment and had higher rates of remission of major depression at 4 (26.6% vs 15.2%), 8 (36.0% vs 22.5%), and 24 months (45.4% vs 31.5%). Suicidal ideation in the collaborative care group was 2.2 times less likely after 24 months than in the treatment-as-usual group. The adoption and widespread use of collaborative care models for depression could result in reduced suicide rates nationally.

Collaborative care involves multiple tools and strategies for managing depression in a primary care practice population. These interventions include education and decision support for primary care clinicians, along with use of depression care managers, often specially trained primary care nurses. Care managers continuously monitor patient outcomes, provide patient education, encourage and monitor treatment adherence, and facilitate communication among patients, their primary care physicians, and mental health clinicians. Meta-analyses have shown collaborative care for depression to be both more effective and, at larger population levels, more cost-effective than treatment as usual.

MANAGEMENT WITHOUT COLLABORATIVE CARE

The 2009 US Preventive Health Services Task Force recommendations no longer advise general screening for depression unless collaborative or supportive care staff models (eg, nurse care managers) or other systematic depression treatment approaches are in place. Data from screening alone have not been shown to change outcomes. However, the US Preventive Health Services Task Force notes that there may be considerations for screening in individual patients. Our recommendation for a primary care group practice without a collaborative care model is to strongly consider the feasibility of developing one within the practice. The evidence base for collaborative care’s efficacy in reducing costs and improving outcomes in depression is strong and growing stronger.

If practice size, staffing, or reimbursement issues prevent implementing a collaborative care approach, we advise standardizing treatment. Clinicians should focus on assessing longitudinal outcomes in depressed patients and improving screening of, and interventions for, patients with alcohol use disorders. Time-effective assessment is available for both depression and alcohol use disorders. Unfortunately, many practices have no strategies for objectively assessing and following up a patient’s response to treatment or lack thereof.

A number of self-administered tools for identifying depression are effective and rapidly administered. It is beyond the scope of this article to review all the surveys available for assessing depression severity. The Patient Health Questionnaire-9, a self-report survey with 9 questions that is based on the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, criteria for depression and that specifically asks about suicide, is commonly used for both baseline screening and monitoring of outcomes over time in primary care. A burgeoning number of studies support its use for screening in primary care settings.

Likewise, a number of tests for screening alcohol use disorders are available. Although the 4 CAGE questions (cut down, annoyed, guilty, eye-openers) are widely used in training programs and practice settings to identify alcohol dependence, the instrument is limited by its failure to screen for hazardous drinking. We recommend the Alcohol Use Disorders Identification Test (AUDIT) in either its full 10-question form or a briefer 3-question version (AUDIT-C) that consists of the 3 consumption questions from the AUDIT. Developed by the World Health Organization, the AUDIT and AUDIT-C are also free and have a strong research base. They are between 50% and 90% sensitive in picking up alcohol misuse, abuse, or dependence and approximately 80% specific in ruling it out.

We will not review the laboratory state markers for alcohol dependence or physical signs and associated symptoms with alcohol-related problems. However, consideration of collateral history, physical signs, and state markers is critical. If patients meet screening criteria for hazardous drinking, brief counseling should be provided, and patients who use alcohol excessively or are dependent


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on alcohol should be referred for specialized assessment and treatment.

**ANTIDEPRESSANT EFFICACY**

Popular media reports have highlighted recent studies implying that antidepressants are ineffective for the treatment of depression.\(^5\)\(^5\)\(^5\) Unfortunately, these superficial reports do not address the complex issues raised by these research findings for clinical practice.\(^5\)\(^5\) Data from multiple investigations comparing antidepressants and placebo show that antidepressants work best for patients with moderate to severe, acute depressive episodes.\(^9\) For patients with long-term depressive symptoms, antidepressants are also effective.\(^9\) For a much more detailed review of antidepressant use in primary care, see the June 2010 issue of *Mayo Clinic Proceedings*.\(^2\)

**ANTIDEPRESSANT BBW**

The 2004 US Food and Drug Administration (FDA) BBW for “suicidality” in patients taking antidepressants confused the public, prescribers, and patients.\(^5\)\(^5\) The BBW was based on reported increases in drug-related suicidal ideation or behaviors, defined as “suicidality,” compared with placebo. These increased suicidality reports came from analyzing short-term antidepressant clinical trials. After the initial 2004 BBW release, depression diagnosis and antidepressant prescriptions were reduced across all age groups.\(^6\)\(^6\)\(^6\) Further research has clarified some of the questions raised by the BBW.

In a move that was less publicized than the initial BBW, the FDA modified the BBW in 2009 on the basis of further analyses.\(^8\) The warning applies only to those up to the age of 24 years. Importantly, FDA analyses indicated a decrease in suicidality in patients aged 65 years or older who take antidepressants (Table 3).

The BBW revision advises that “Patients of all ages who are started on antidepressant therapy should be monitored appropriately and observed closely for clinical worsening, suicidality, or unusual changes in behavior. Families and caregivers should be advised of the need for close observation and communication with the prescriber.”\(^9\)

**MAKING SENSE OF THE BBW**

Two recent studies\(^9\)\(^6\) help synthesize practice and research observations and provide helpful guidance for antidepressant prescribing. The first, from Finland,\(^8\) looked at national rates of patients filling, and subsequently refilling, their antidepressant prescriptions vs those filling only their initial prescription and not continuing treatment. The group continuing with treatment showed a significant decrease in all-cause mortality, including suicide.

<table>
<thead>
<tr>
<th>Age range (y)</th>
<th>Drug-placebo difference in number of cases of suicidality per 1000 patients treated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drug-related increases</td>
<td></td>
</tr>
<tr>
<td>&lt;18</td>
<td>14 additional cases</td>
</tr>
<tr>
<td>18-24</td>
<td>5 additional cases</td>
</tr>
<tr>
<td>Drug-related decreases</td>
<td></td>
</tr>
<tr>
<td>25-64</td>
<td>1 fewer case</td>
</tr>
<tr>
<td>≥65</td>
<td>6 fewer cases</td>
</tr>
</tbody>
</table>

From reference 9.

The second study,\(^6\) a nested longitudinal case-control study, followed a large cohort (10,456 cases with 41,815 controls) using a dataset of patients receiving managed care between 1999 and 2006. This study, which controlled for multiple confounding variables, including depression severity, comorbid conditions, and other medications, found antidepressant use to be associated with a decreased risk of attempting suicide.\(^6\) A key finding, however, was that those receiving antidepressant treatment were at higher risk of attempting suicide in the periods after initiation of treatment, after discontinuation of treatment, and after changes in antidepressant dosing. This evidence\(^5\)\(^6\) has important implications for clinical practice, suggesting that patients should be monitored closely at the beginning of treatment, should receive an adequate antidepressant trial, and should be encouraged to contact their physician before stopping their antidepressant or making dose changes.

**SUICIDE-RISK MANAGEMENT**

Initial clinical management after identification of depression and/or an alcohol use disorder should emphasize 3 areas specific to suicide-risk: (1) the importance of recognizing comorbid anxiety or agitation and its treatment, (2) the performance of a suicide risk assessment, and (3) the implementation of some practical office management tips.

**TREATMENT OF ANXIETY AND AGITATION**

On the basis of clinical experience and research, acute anxiety and agitation are critical suicide warning signs.\(^8\) Of patients hospitalized in psychiatric or other hospitals who died by suicide, only 20% endorsed suicidal ideation before their suicide, but 80% either endorsed or manifested severe anxiety or agitation.\(^1\)

After controlling for other psychiatric comorbid conditions, an international epidemiological study\(^8\) found that anxiety disorders (posttraumatic stress disorder, panic disorder, social anxiety disorder, generalized anxiety disorder) influenced suicidal behavior more than other disorders. All psychiatric disorders predicted a higher risk of onset of sui-
cidental ideation, but anxiety and impulse control disorders affected transitions to suicidal behavior.

After controlling for other variables and effects, US National Comorbidity Survey Replication data also found that depression predicted development of suicidal ideation.\(^\text{21}\) Depression alone did not predict transition to suicidal plans or attempts among those with ideation. Similar to international research findings, persons with disorders characterized by marked anxiety or agitation or poor impulse control were more likely to move from merely thinking about suicide to making a plan or an attempt.\(^\text{21}\) Although larger population research does not translate into individual clinical presentations, it provides support for clinical practice concerns associated with severe anxiety and agitation.

Clinically, asking patients if they feel like “jumping out of their skin” or that they “are going to explode” or have a feeling that they must “take action” or “do something” because they feel so restless inside is very helpful in eliciting reports of internal distress. Some patients denying these subjective symptoms may objectively demonstrate the increased motor movements or restlessness indicative of severe agitation or appear ruminative and overwhelmed. Patients with such symptoms and signs should be considered emergent cases and treated aggressively using benzodiazepines and/or antipsychotics. Oral forms of medication should be tried first.\(^\text{62}\) Age and previous or ongoing exposure to medication should be considered, and the adequacy of treatment should be frequently reassessed.\(^\text{62-64}\) Clinicians should vigilantly monitor for adverse effects, including possible worsening of agitation with medication-induced akathisia and possible Q-T interval prolongation.\(^\text{26,64}\) Evaluation for psychiatric admission should be strongly considered.

## SUICIDE RISK ASSESSMENT

As a National Patient Safety Goal in both general and psychiatric hospitals, the Joint Commission mandates suicide risk assessments for patients who are identified as being at risk.\(^\text{65}\) This mandate stems from inpatient suicides being a frequent sentinel event over time.

Performance of a suicide risk assessment is a long-standing psychiatric practice recommendation. It is typically documented in the assessment/plan of a clinical note; identifies and discusses risk factors or warning signs that increase the likelihood of suicide; describes possible protective factors that may decrease suicidal behavior; states the level of suicide risk as low, medium, or high; and defines the care setting required to maintain safety (eg, outpatient, referral to the emergency department, hospitalization). Although this assessment is primarily a documentation requirement, with almost no research data to support its validation of risk levels or its effect on future suicide, it allows for a structured process to organize clinical impressions and decision making to suggest clinical interventions.

The Suicide Assessment Five-step Evaluation and Triage (SAFE-T)\(^\text{66}\) provides a framework for performing a suicide risk assessment and is publicly available. Clinical decision making begins by identifying the presence of warning signs and risk factors increasing the likelihood of suicide-related behaviors (Table 1).\(^\text{34,36}\) These include psychiatric diagnoses and particular symptoms known to increase immediate suicide risk, including agitation or anxiety, command hallucinations, and sleep problems.

Protective factors may include the ability to manage stress appropriately, religious beliefs that increase the stigma of suicide, and the capacity to tolerate frustration. External factors that may mitigate risk include a sense of responsibility to family or friends, a healthy network of social supports, and positive therapeutic relationships. However, in the setting of acute risk and multiple risk factors in unfamiliar patients, the ability of protective factors to decrease risk should not be overestimated. In a crisis, protective factors may be easily overwhelmed, particularly in an impulsive, intoxicated, or otherwise disinhibited patient.

In questioning the patient perceived to be at risk, clinicians should ask specifically about suicide with a focus on suicidal thoughts, plans for suicide, and intent. The level of risk and care required should then be defined using the general recommendations in the following paragraph. As a caveat, when questions about level of risk or management remain, consultation with an experienced colleague or psychiatric clinician is valuable.

According to the SAFE-T model, low-risk patients—with or without suicidal ideation—have no specific plans or intent to commit suicide and have no history of active suicidal behavior. These patients should have recommended outpatient follow-up. Those at moderate risk include those with suicidal ideation plus a plan but with no intent or behavior. The decision whether to urgently refer a patient to a psychiatrist or emergency department depends on that patient’s presentation. Patients who are referred may be hospitalized if further evaluation reveals that their level of illness or other clinical findings warrant it. High-risk patients include those with serious thoughts of suicide, those with a plan and/or intent to commit suicide, and those with prominent agitation, impulsivity, psychosis, or a recent suicide attempt. In such cases, clinicians should ensure constant observation and monitoring before arranging for immediate transfer for psychiatric evaluation or hospitalization. As the final steps in the process of suicide risk assessment, clinicians should document the data supporting the assigned level of risk, the level of care required, and treatment plans to reduce suicide risk.
PRACTICAL MANAGEMENT

In any given person, suicide risk is not fixed but fluctuating, with periods of increased risk in response to precipitating stressors. Sudden interpersonal losses or rejections—the death of a family member or a breakup of a relationship with a significant other—may trigger a suicidal crisis. Hospitalization can provide a safe environment to stabilize patients while allowing the crisis to pass and precipitating stressors to be resolved. Helpful treatment modalities for inpatient units include medication initiation, individual and group psychotherapy, rest, and social services interventions.

Particularly for patients being released from their office or during discharge from the hospital or emergency department, clinicians should recommend that family or friends secure or remove firearms, large quantities of medication, or other obvious means of self-harm and involve family and significant others in crisis planning and treatment.

The Joint Commission National Patient Safety Goal mandates providing patients a 24-hour emergency number. The National Suicide Prevention Lifeline number at 1-800-273-TALK (8255) is an important resource and available 24 hours a day regardless of practice location. Clinicians should ensure that patients know how to use their on-call phone numbers in the event of a suicidal crisis and inform them of the availability of local emergency services. If patients call outpatient offices in suicidal crises, clinicians or office staff should call 911 or law enforcement as needed to ensure that patients are safe and that they are being transported safely to receive more intensive treatment.

Environmental factors may be even more relevant in management than usual. For patients in the emergency department, general hospital, or outpatient offices, the potential of medical equipment (e.g., intravenous tubing) or the patients’ own belongings being used in a suicide attempt should be carefully evaluated. Great efforts may be made to ensure a patient is referred for evaluation to an emergency department, while immediate safety needs may be missed (e.g., patients may overdose on medications they have in their possession or on their person). If evaluation in the emergency department or hospitalization is thought to be necessary, patients should be transferred by ambulance. Although family or friends may offer (and desire) to provide transport, patients should be transferred safely using trained personnel following standard protocols. Clinicians should consider the possibility that some patients being evaluated for suicide risk may have overdosed or harmed themselves immediately before seeking care. Clinical situations should be reassessed as needed and the level of physiologic monitoring increased on the basis of changing presentations. Patients should be monitored closely both before and during their transitions between care settings during emergency evaluations. Although uncommon, suicides can occur in the emergency department, general hospital, and outpatient offices.

CONCLUSION

Patients with suicidal thoughts and behavior are often seen in primary care practices. Treatment can be effective, and collaborative models of care may have particular benefit in improving depression outcomes and, potentially, reducing suicidal outcomes. Although no way exists to predict those who will go on to die by suicide, treating clear warning signs for suicide can reduce patients’ suffering. Asking about suicidal thoughts, plans, and past behavior is essential, while being sensitive to agitated states and aggressively treating them may resolve a psychiatric emergency.

REFERENCES


CME Questions About Practical Suicide-Risk Management

1. Which one of the following most accurately represents how many more times likely primary care physicians are to see patients in the month before their death by suicide than mental health clinicians?
   a. No more likely
   b. 1.5 times more likely
   c. More than 2 times more likely
   d. 3 times more likely
   e. Less likely

2. Which one of the following percentages most accurately reflects the percentage of US antidepressant prescriptions written by generalists?
   a. 45%
   b. 52%
   c. 57%
   d. 62%
   e. 71%

3. Which one of the following percentages most accurately reflects the percentage of those dying by suicide who have psychiatric illness?
   a. 75%
   b. 80%
   c. 85%
   d. 90%
   e. 95%

4. Which one of the following statements is accurate regarding symptoms reported or observed (suicidal ideation and anxiety) by inpatients in their last contacts before dying by suicide?
   a. 80% endorsed suicidal ideation; 40% were anxious or agitated
   b. 50% endorsed suicidal ideation; 40% were anxious or agitated
   c. 20% endorsed suicidal ideation; 80% were anxious or agitated
   d. 80% endorsed suicidal ideation; 80% were anxious or agitated
   e. 60% endorsed suicidal ideation; 40% were anxious or agitated

5. In a 2007 study assessing care in simulated patients asking for antidepressant treatment in primary care practices, which one of the following best reflects the percentage who were asked about suicide?
   a. 27%
   b. 36%
   c. 56%
   d. 68%
   e. 83%

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