Ms. R, age 17, has a history of major depression, obsessive-compulsive disorder, and self-harm through superficial cutting of her arms and inguinal region. She reports that 10 days ago she ingested 7 times her prescribed fluoxetine dosage of 20 mg/d and aripiprazole dosage of 2 mg/d because she no longer wanted to feel emotional pain. She did not tell anyone she did this or seek medical attention.

Ms. R complains of chronic difficulties with her stepfather, who she describes as alcoholic. She feels her depression is worsening and support from her mother has deteriorated. Ms. R’s parents say they are trying to respond to their daughter, but she will not talk with them and some nights she does not return home. Ms. R admits to staying overnight in local mall parking lots to be alone. Her psychiatrist recommends acute inpatient care for Ms. R’s safety.

Admitting an adolescent such as Ms. R to a psychiatric inpatient facility may be necessary to address a crisis. Interdependent links among the patient, family, and support network complicate the determination of whether an adolescent requires inpatient care. To make the best decision, a psychiatrist needs to understand the youth’s difficulties within family, school, and community.

Who needs inpatient care?

Inpatient treatment remains an important part of the continuum of care for adolescent psychiatric treatment.1
Hospitalizing adolescents

Clinical Point
The decision to admit rests on the patient’s risk of harm, functional status, and family/caregiver support

Table 1

Suggested questions for assessing adolescent suicidality

<table>
<thead>
<tr>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you had thoughts of hurting yourself?</td>
</tr>
<tr>
<td>Have you ever tried to hurt yourself?</td>
</tr>
<tr>
<td>Have you ever wished you were not alive?</td>
</tr>
<tr>
<td>Have you had thoughts of taking your life?</td>
</tr>
<tr>
<td>Have you done things that are so dangerous that you knew you might get hurt or die?</td>
</tr>
<tr>
<td>Have you ever tried to kill yourself?</td>
</tr>
<tr>
<td>Have you had recent thoughts of killing yourself?</td>
</tr>
<tr>
<td>Do you have a plan to kill yourself?</td>
</tr>
<tr>
<td>Are the methods to kill yourself available to you?</td>
</tr>
<tr>
<td>Do you have access to guns?</td>
</tr>
</tbody>
</table>

Source: Adapted from reference 7

Inpatient treatment typically is reserved for patients whose psychiatric disorder impairs multiple areas of functioning or poses a significant danger to self or others and for whom less-restrictive treatment resources are not appropriate or available.2 The number of psychiatric hospitalizations for adolescents is increasing, although lengths of stay are decreasing.3, 4

Psychiatric inpatient care is appropriate for patients who require 24-hour nursing care and psychiatric monitoring to stabilize symptoms when they are in acute crisis and have a high risk of harm, and for initiation of treatments required for stabilization and integration into a less-restrictive setting.5 The decision to admit an adolescent rests on:

• the clinician’s ability to evaluate the risk of harm and functional status
• how much support the family and/or caregivers can provide
• the clinician’s knowledge of treatment resources available to the adolescent and family.6

Exploring suicide risk

Understanding potential lethality of suicidal thought and intent is complex and requires assessing suicidal behavior, the patient’s past and current intent, the risk of engaging in or repeating a suicide act, the underlying diagnosis, and protective factors. To quantify imminent suicide risk, directly address suicidality when interviewing an adolescent, progressing from past thoughts to current intent, plan, and ability to carry out such a plan (Table 1).7

Planning and lethality. Also examine the patient’s degree of planning for a suicide attempt, efforts to avoid discovery and rescue, and his or her perceived lethality of a suicide attempt or plan. Patients who develop a coherent plan that would successfully avoid discovery clearly are at highest risk. Lethality of method is frequently misunderstood—especially among younger individuals—and thus their perception of the dangerousness of an attempt is more important than reality. Previous suicide attempts and chronic suicidality with recent escalation imply greater risk.

Motivation. Exploring the feelings that motivate a suicide attempt, intent, or ideation will help assess risk. Common motivations include:

• escaping from stress or hopelessness from perceived intolerable circumstances
• rejoining a dead loved one
• getting notice or attention from a parent, romantic interest, or other important individual
• injuring others around them.

Serious suicide risk may persist if the motivating feelings are not addressed satisfactorily.7

Unclear signals. An adolescent who expresses a clear intent to die, has a plausible plan, and is unable to work with or rejects caregivers’ attempts to help is at high risk and requires a secure setting, such as hospitalization. Typically, however, patients do not give such clear indicators; in these cases, consider other factors.

Unstable and unpredictable behavior implies serious short-term risk. Factors that indicate difficulties in a patient’s ability to maintain a safety plan include:

• a history of multiple suicide attempts or escalating seriousness of ideation
• inability to be truthful and form an alliance with the clinician
• difficulties in expressing and regulating emotions
• presence or likelihood of intoxication.

Psychosis, command hallucinations, high impulsivity, cycling associated with bipolar disorder, and substance abuse also are associated with high suicide risk.

The clinician must determine whether an adolescent can form an alliance to report suicidal ideation, intent, or plan to a family member or other responsible adult, and if the family/caregivers are willing and capable of providing support, supervision, and compliance with future treatment recommendations that will ensure safety. If the answers are no, the patient requires hospitalization.

**CASE CONTINUED**

**Unsafe at home**

Ms. R feels she cannot be safe at home and cannot reliably form an alliance with her mother and stepfather to discuss whether her self-harm behaviors would escalate to serious injury or death. As a result, she is admitted to a psychiatric hospital. Inpatient care includes family intervention and a plan to intensify outpatient therapy. When Ms. R is discharged after 6 days, she reports improved mood and ability to contract with her family.

**Aggressive behaviors**

Besides suicidality, aggressive and combative behaviors in adolescents may lead to psychiatric referral. Overt homicidal ideation is not common; typically, patients exhibit escalating, disruptive, aggressive episodes in the home, school, or community that pose risk to themselves or others. Families seek clinical help because they feel unable to keep their child safe at home.

Aggressive behavior is linked to multiple patient factors, such as male gender, history of abuse and neglect, out-of-home placement in community systems, developmental disorders, mental retardation, disruptive behavior disorders, and learn-
Hospitalizing adolescents

Clinical Point
Hospitalization may be the safest way to de-escalate substance use that complicates an adolescent’s psychiatric illness

Box
Psychiatric hospitalization?
CASII can help determine appropriate care for teens

The Child and Adolescent Service Intensity Instrument (CASII) can help you determine what level of care is most appropriate for your adolescent patient. This scale—developed by a work group of the American Academy of Child and Adolescent Psychiatry (AACAP)—links clinical assessment with standardized levels of care. It includes scoring in 6 dimensions:

- risk and harm
- functional status
- co-occurrence of conditions
- recovery environment
- resiliency and response to services
- primary caretaker involvement in services.

Scores are combined to generate a recommend level of service intensity from 0 (basic services) to 7 (24-hour psychiatric management—admission to a hospital or locked residential unit).

The AACAP strongly encourages clinicians to receive training to use the CASII and provides 1- and 2-day courses.

Source: Reference 14

Psychiatric hospitalization of aggressive adolescents raises safety concerns, and some practitioners perceive that treatment is ineffective for these patients. However, high rates of psychiatric comorbidity and indications that positive outcomes are possible suggest that many aggressive youth can benefit from intervention.1,11

Because of the crisis nature of acute aggression and the often conflicted, hidden, and stressful situations these patients and families or caregivers are experiencing, hospitalization often is needed to stabilize the adolescent.

Assessment work with family/caregivers is vital because patients typically minimize the intensity of their aggressive behavior. Use a structured scale—such as the modified Overt Aggression Scale—to help quantify the severity of aggressive episodes, determine dangerousness, and establish a common language and measurement among caregivers, patients, and clinicians.13

The family/caregivers’ capacity and willingness to provide a safe environment, to avoid triggering events, and to provide support to de-escalate a potential crisis also determine if safety can be maintained in the home or if hospitalization is required. Hospitalization may be appropriate if the adolescent’s aggressive behavior substantially endangers the patient or others, is increasing in intensity, exceeds the ability to be managed in the home or living environment, and cannot be maintained in available less-restrictive settings.

In addition to the patient’s potential for suicidal or aggressive behavior, consider other aspects of potential harm, such as:

- unintentional harm associated with altered mental status from psychosis or intoxication
- the adolescent’s impulsivity or judgment in situations he or she is likely to encounter
- the patient’s ability to recognize potential threats and take appropriate action for safety
- severely impaired self-care.14

The Child and Adolescent Service Intensity Instrument can be used to help determine the level of care an adolescent patient requires (Box).14

Comorbid conditions
Comorbid medical illness, substance use disorders, and cognitive disability are common complications in determining the level of care for an adolescent in crisis. Active or passive noncompliance with treatment for medical conditions can pose an immediate or chronic threat to the individual and may represent a method of self-harm. Medical comorbidities and care requirements frequently preclude quick access to services such as group homes, therapeutic foster programs, and residential treatment. Hospitalization often is re-
required to stabilize psychiatric conditions and medical illness.

**CASE REPORT**

**Multiple comorbidities**

Ms. P, age 16, has type 1 diabetes mellitus, posttraumatic stress disorder from early physical and sexual abuse, and an IQ of 49. She presents after repeated arguments and physical confrontations with her mother, with whom she lives. She has been caught hoarding high-sugar foods.

The most recent fight is over Ms. P wanting to consume large amounts of candy. She has been hospitalized twice for diabetic ketoacidosis in the last 6 months. Her most recent blood sugar levels ranged from 250 to 500 mg/dL. Ms. P states she is angry at her mother and will hit her if she tries to control her diet. She says she doesn’t care if she gets sick, but her recognition of medical complications is limited.

**Developmental delays** may complicate treatment for psychiatric illness or impair an adolescent’s ability to understand the dangerousness of his or her behaviors. Communication barriers make it challenging to assess risk or the patient’s ability to comply with a safety plan. In patients with developmental delay who live in the community, external structure, monitoring, and the ability to manage crises depends on the family/caregivers. Strongly consider hospitalization if an adolescent’s developmental delay has a serious adverse effect on managing the psychiatric condition, causing increased risk of harm to self or others.

**Substance use** frequently accompanies adolescent psychiatric illness and may pose severe risk by disinhibiting impulse control, exacerbating mood symptoms, altering mental status, or causing intoxication or withdrawal syndromes. Substance use also carries inherent risks, such as contracting human immunodeficiency virus or other blood-borne infections.

Substance use is well-documented as a severe risk factor for suicide and suicide attempts and frequently is associated with violence. Hospitalization may be the safest way to manage an adolescent who exhibits escalating substance use that complicates management of the psychiatric illness or indicates progressive endangering behavior.

**Functional assessment**

In addition to exploring risk of self-harm, aggressive behaviors, and medical comorbidities, evaluate the adolescent’s ability to function in interpersonal relationships, self-care, and school. A pattern of severe or worsening functional impairment often indicates illness progression or that management or supports are not meeting the patient’s needs.

Strongly consider hospitalizing patients who demonstrate serious deterioration in interpersonal relationships with peers, adults, or family, as evidenced by escalating threats, episodic violence, or disorganized communication. Additional concerns include severe social withdrawal, neglect of self-care appropriate to developmental level, and inability to perform academically despite appropriate accommodations.

Identify impaired physical functions. When severe medical complications accompany anorexia nervosa or other psychiatric

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**Table 2**

## Adolescents with eating disorders: Admission criteria

<table>
<thead>
<tr>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart rate near 40 bpm</td>
</tr>
<tr>
<td>Orthostasis (pulse change &gt;20 bpm or blood pressure drop of &gt;10 to 20 mm Hg from sitting to standing)</td>
</tr>
<tr>
<td>Hypotension (blood pressure &lt;80/50 mm Hg)</td>
</tr>
<tr>
<td>Electrolyte imbalance (hypokalemia, hypophosphatemia, hypomagnesemia)</td>
</tr>
<tr>
<td>Weight &lt;85% of ideal body weight</td>
</tr>
<tr>
<td>Acute weight decline with food refusal</td>
</tr>
<tr>
<td>Suicidal ideation</td>
</tr>
<tr>
<td>Needs supervision during and after all meals and in bathrooms because of disabling purging</td>
</tr>
<tr>
<td>Suitability of pediatric vs psychiatric unit depends on level of medical care required and respective units’ ability to manage eating disorders</td>
</tr>
</tbody>
</table>

Source: Adapted from reference 17

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**Clinical Point**

Strongly consider admitting patients whose relationships include escalating threats, disorganized communication, or periodic violence. Continued on page 45
patients treated with furosemide plus oral risperidone when compared to patients treated with oral risperidone alone or with oral placebo plus furosemide. No pathological mechanism has been identified to explain this finding, and no consistent pattern for cause of death was observed. An increase of mortality in elderly patients with dementia-related psychosis was seen with the use of oral risperidone regardless of concomitant use with furosemide. RISPERDAL® CONSTA® is not approved for the treatment of patients with dementia-related psychosis. [See Boxed Warning and Warnings and Precautions]

DRUG ABUSE AND DEPENDENCE: Controlled Substance: RISPERDAL® CONSTA® (risperidone) is not a controlled substance.

Abuse: RISPERDAL® CONSTA® has not been systematically studied in animals or humans for its potential for abuse. Because RISPERDAL® CONSTA® is to be administered by health care professionals, the potential for misuse or abuse by patients is low.

Dependence: RISPERDAL® CONSTA® has not been systematically studied in animals or for its potential for tolerance or physical dependence.

OVERDOSE: Human Experience: No cases of overdose were reported in premarketing studies with RISPERDAL® CONSTA®. Because RISPERDAL® CONSTA® is to be administered by health care professionals, the potential for overdose by patients is low. In premarketing experience with oral RISPERDAL®, there were eight reports of acute RISPERDAL® overdose, with estimated doses ranging from 20 to 300 mg and no fatalities. In general, reported signs and symptoms were those resulting from an exaggeration of the drug’s known pharmacological effects, i.e., drowsiness and sedation, tachycardia and hypotension, and extrapyramidal symptoms. One case, involving an estimated overdose of 240 mg, was associated with hypotension, hypokalemia, prolonged QT, and widened QRS. Another case, involving an estimated overdose of 36 mg, was associated with a seizure. Postmarketing experience with oral RISPERDAL® includes reports of acute overdose, with estimated doses of up to 300 mg. In general, the most frequently reported signs and symptoms are those resulting from an exaggeration of the drug’s known pharmacological effects, i.e., drowsiness, sedation, tachycardia, hypotension, and extrapyramidal symptoms. Other adverse reactions reported since market introduction related to oral RISPERDAL® overdose include prolonged QT interval and convulsions. Torsade de pointes has been reported in association with combined overdose of oral RISPERDAL® and paroxetine.

Management of Overdose: In case of acute overdose, establish and maintain an airway and ensure adequate oxygenation and ventilation. Cardiovascular monitoring should commence immediately and should include continuous electrocardiographic monitoring to detect possible arrhythmias. If antiarrhythmic therapy is administered, disopyramide, procainamide, and quinidine carry a theoretical hazard of QT prolonging effects that might be additive to those of risperidone. Similarly, it is reasonable to expect that the alpha-blocking properties of bretylium might be additive to those of risperidone, resulting in problematic hypotension. There is no specific antidote to risperidone. Therefore, appropriate supportive measures should be instituted. The possibility of multiple drug involvement should be considered. Hypotension and circulatory collapse should be treated with appropriate measures, such as intravenous fluids and/or sympathomimetic agents (epinephrine and dopamine should not be used, since beta stimulation may worsen hypotension in the setting of risperidone-induced alpha blockade). In cases of severe extrapyramidal symptoms, anticholinergic medication should be administered. Close medical supervision and monitoring should continue until the patient recovers.

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illness, hospitalization is needed to ensure the patient’s safety and to begin appropriate assessment and treatment (Table 2, page 39).12

Family and environmental factors
The decision to admit an adolescent to a psychiatric hospital or provide a home treatment plan often hinges on the ability and willingness of the patient’s family/caregivers and support systems to meet the patient’s needs. Consider whether family functioning has been disrupted by a parent’s illness, death, divorce, medical problems, psychiatric illness, substance abuse, or financial stress. If you suspect abuse or violence in the home, observe reporting laws in your jurisdiction and intervene with the family to ensure the adolescent’s safety. Hospitalization may be the best means of providing safety during an investigation.

Determine if the family or primary caregivers are able to meet the adolescent’s developmental, material, and emotional requirements, and if help from treatment or support services or community resources could provide these needs. If not, hospitalization likely is required.

CASE CONTINUED
Risk of physical harm
Ms. P is admitted to the psychiatric hospital because her mother reports that in the past week she and her daughter have had 2 physical alterations—resulting from arguments about her daughter’s dietary intake—that caused injuries. She does not feel she can keep her daughter safe. Ms. P’s mother states she feels she is poorly trained in diabetic care and cannot provide the medical intervention her daughter needs.

Know your system
Child and adolescent psychiatric services are in great demand but often fall far short in meeting these needs across ethnic and socioeconomic groups. Availability of resources differs by geographic location and payer source.18,19 Community-funded mental health varies considerably. The best organizations offer a complete system of care, including outpatient therapy, medication management, case management, wraparound services, respite care, group homes, residential programs, and crisis programs.

Be familiar with local and regional programs and methods of accessing them. For patients who have access to a system of care, timely mobilization of appropriate resources often can avoid a hospital admission and place a patient in a less restrictive setting. Such options, however, frequently are not available to patients covered by com-
Hospitalizing adolescents

Clinical Point
To make appropriate referrals for patients with comorbidities, know the level of medical care local psychiatric inpatient units can provide

Dr. Sorter reports no financial relationship with any company whose products are mentioned in this article or with manufacturers of competing products.

commercial payers. For them, the decision typically is reduced to whether the family can manage the patient at home; if the family is unable to ensure safety, the adolescent is hospitalized.

Knowing the capability of available inpatient programs is essential to making an appropriate referral. Consider the level of medical care the psychiatric unit can provide and the accessibility of medical consultation services—both primary and medical subspecialty. Specialized programs for young people with comorbid severe cognitive delays, eating disorders, or forensic difficulties also assist with effective management. The inpatient unit’s collaboration and communication with outpatient providers frequently determines the success of the patient’s transition to less restrictive care.

References

Bottom Line
A stepwise approach to evaluating the need for hospitalization for an adolescent with psychiatric illness includes assessing the potential risk from suicide, aggression, comorbid conditions, and functional status. Understanding the patient’s needs and the family or caregivers’ commitment and ability to provide a safe, health-promoting environment is key to determining if hospitalization is required.