## SUICIDE RISK ASSESSMENT: A REVIEW OF RISK FACTORS FOR SUICIDE IN 100 PATIENTS WHO MADE SEVERE SUICIDE ATTEMPTS

## EVALUATION OF SUICIDE RISK IN A TIME OF MANAGED CARE

Richard C. W. Hall, M.D. Courtesy Clinical Professor of Psychiatry University of Florida, Gainesville

Dennis E. Platt, M.D.

Ryan C. W. Hall

Address & Phone: 100 East Sybelia Avenue, Suite 210 Maitland, FL 32751 (407) 539-3993

At the time this study was undertaken, Dr. Hall was Medical Director of Psychiatric Programs, Center for Psychiatry, Florida Hospital, Orlando, Florida. Dr. Platt was Chief of Psychiatric Emergency Services, Center for Psychiatry, Florida Hospital, Orlando, Florida. Ryan Hall was a research assistant to the office of the Medical Director, Center for Psychiatry, Florida Hospital, Orlando, Florida, and biology major/premed at the Johns Hopkins University, Baltimore, Maryland.

We wish to thank Mrs. May Bartels for her editorial and secretarial assistance in the preparation of this

manuscript.

#### Abstract

Clinicians must increasingly take into account the demands made upon them by third parties (i.e., health maintenance organizations, "HMOs"; preferred provider organizations, "PPOs"; professional review organizations, "PROs", etc.) while assessing patients at risk for suicide. Many third party payers use admission protocols to help determine whether or not they will pay for a hospitalization or authorize transfer from a medical to a psychiatric unit. Often the criteria are "proprietary," are based on no specific scientific data, and are unknown to the physician seeing the patient.

In a study at a large tertiary metropolitan hospital, 100 patients who had made serious suicide attempts were examined (by DP), paying particular attention to the presence or absence of previously defined criteria used for the prediction of suicide. We reviewed the records of patients who, by virtue of the seriousness of their attempt, required medical treatment prior to their admission to Psychiatry. That is to say, these patients either received medical treatment in the emergency room or were treated on the medical/surgical floor or in the ICU for their self-induced injuries before being released to Psychiatry for inpatient admission. We reviewed all such cases for a two year period until 100 cases were seen. Our results confirmed much of what had been previously reported in the literature as predictors of suicidal behavior and pointed out serious flaws with some of the managed care protocols employed in our city. Several unexpected but significant differences from national data were noted in our population at risk.

The patients who made serious suicide attempts but survived tended to be younger (17-35), and to display depressive symptoms such as feelings of worthlessness, helplessness, hopelessness, global or partial insomnia; anxiety and panic episodes; anergia and severe anhedonia. Other predictive indicators included: recent severe interpersonal conflict, loss of an important relationship, inability to maintain a job and/or attend school, alcohol and/or other substance abuse and prior chronic medical illness. Several had recently been diagnosed with a life threatening illness.

At a time when managed care had achieved a 35% "penetration" of the health insurance market, 86% of the patients seen in this study were covered by some form of managed care, suggesting that managed care patients were significantly over represented. Eighty-three percent had seen a "mental health specialist" during the month prior to their suicide attempt. Several managed care protocols required that for admission approval, the patient had to have a specific suicide plan or to give a history of suicidal rumination with a specific intent to commit suicide. In our review of 100 serious suicide attempts, 84 patients had no specific suicidal plan prior to their impulsive suicide attempt. This was a first suicide attempt for 67% of these patients. Only 10% left a suicide note. Sixty-nine percent had no suicidal rumination prior to their attempt. Most of these serious attempts appeared to be more spontaneous and impulsive than planned.

This lack of previous suicide planning and specific suicidal intent with rumination is important in determining whether to admit a person for observation and evaluation because many managed care protocols not only require that suicidal thoughts be present prior to admission, but also require either a previous suicide attempt or a well-formulated plan of suicide before a patient can meet their guidelines for admission. This study suggests that such criteria are not valid tools for approving admission to hospital and therefore should not be used as screens for admission.

2

# TABLE 1

Sex	
Male	42%
Female	58%
Tennae	2070
Race	
Caucasian	90%
Black	4%
Hispanic	4%
Asian	2%
Marital Status	
Married	34%
Divorced	12%
Separated	6%
Single	45%
Widowed	3%
Wildowed	570
Religion	
Roman Catholic	15%
Protestant	33%
Moslem	1%
No religious belief	
or affiliation	51%
Agitation	
For 1 week prior to attempt	10%
No agitation prior to attempt	89%
Unknown	1%
Past History of Assaultive Behavior	1%
Method of Suicide Attempt	
Single-drug overdose	76%
Multiple-drug overdose with alcohol	17%
Stabbing to chest or abdomen	3%
Deep cuts to wrists, severing major	
vessels	1%
Carbon monoxide poisoning	3%

## Table 2

Those elements of history most predictive of a serious suicide attempt included:	
1)	Severe anxiety (92%) and/or panic attacks (80%)
2)	Depressed mood (80%)
3)	Recent loss of close personal relationship (78%)
4)	Alcohol or substance abuse (68%)
5)	Feelings of hopelessness (64%), helplessness (62%), worthlessness (29%)
6)	Global insomnia (46%) Partial insomnia (DFA or SCD or EMA) 92%
7)	Anhedonia (43%)
8)	A chronic deteriorating medical illness (41%)
9)	Inability to maintain job or student status (36%)
10)	Recent onset of impulsive behavior (29%)
11)	Recent diagnosis of a life-threatening illness cancer, AIDS (9%)

[Insert Table 3]

#### Introduction

Managed care has dramatically affected the delivery of services to psychiatric patients.<sup>1 2</sup> Many managed care organizations have created their own criteria to justify admission to psychiatric hospitals. These criteria are often applied to define whether or not patients can receive any psychiatric treatment at all. Several recent articles have appeared in the literature, suggesting that these criteria may be unrealistic and not based on scientific standards.<sup>3 4 5 6 7</sup> Many of these criteria are considered proprietary and are therefore kept secret so that even the providers delivering services for these companies are not aware of the specific criteria used for the authorization of treatment.

In Florida, several managed care organizations and The Peer Review organization (PRO) retrospectively disallowed admissions to psychiatric hospitals for patients who were deemed to be acutely suicidal when seen and evaluated in the emergency room. One of the criteria used to deny payment was the fact that a patient did not have a specific suicidal plan at the time that they were seen. Another criteria used to disallow admission was that the patient did not have acute suicidal ideation or suicidal ruminations and had not made a previous suicide attempt.

In a study of 100 emergency room patients who made serious suicide attempts, a detailed review of symptoms was undertaken to determine whether or not these and other symptoms were present prior to the commission of the attempted suicide. This report defines those data and shows, we believe, that the specific managed care criteria defined above do not predict who will make a serious suicide attempt or commit suicide.

#### Method

One hundred consecutive patients who had made serious suicide attempts were interviewed (by

DP) and their charts were carefully reviewed until a cohort of 100 patients was obtained. All required treatment in the Emergency Room or were admitted to either the Intensive Care Unit or a medical or surgical unit of a large urban hospital prior to their admission to an inpatient psychiatric unit. All patients required inpatient admission. The study was undertaken from January 1, 1992, until December 31, 1993, with the authorization of the hospital's institutional review board. A survey instrument was used to assess common risk factors (available on request).

Items surveyed included the presence or absence of significant depression with symptoms such as worthlessness, helplessness, hopelessness, global or partial insomnia, anergia and anhedonia; generalized anxiety; panic; interpersonal conflict; inability to maintain a job or to remain in school; the presence of chronic medical illness; impulsive or dangerous behavior, and prior suicide attempts. The investigators also determined whether the suicide attempt had been planned or was the result of an impulsive act. They specifically inquired as to whether any suicide note had been left or others had been informed that a suicide was contemplated. A full psychiatric history was obtained for each patient. The type of insurance and whether the patient was in an HMO, PPO, or other managed care insurance plan was determined. A detailed review of the data was then developed.

#### Data

Demographic data is shown in Table 1.

Eighty-six percent of the patients had some form of managed care in a community where managed care penetration was reported to be 35%.

Ten percent of the patients reported that they had been agitated for at least one week prior to the time of the suicide attempt, 89% reported that they were not agitated, and one patient's degree of agitation was unknown. Ninety-eight of the patients denied any history of assaultive behavior, one admitted to assaultive behavior, and in one case it was unknown as the patient refused to provide information.

Of the types of suicide attempts made: 76 were by overdose, 17 were by overdose of drugs and alcohol, four were by stabbing to chest or abdomen or by severe cutting of the extremities; and three were by carbon monoxide poisoning. The self-inflicted gunshots that occurred during this time period were all fatal and are not included in this survey as we were unable to confirm data for these patients.

The most frequent drugs used for overdosing were the benzodiazepines. Twenty-five of the 53 patients who overdosed did so using benzodiazepines, with the most commonly used drug being Xanax (10 patients). These were also the patients who reported the most extreme anxiety. Withdrawal anxiety between doses of Xanax was common. Klonopin represented the second most commonly used drug with seven overdoses.

Thirteen of the 53 patients who overdosed did so with over the counter analgesics, taking large doses of between 100 and 500 tablets. Overdoses with aspirin, Tylenol, and Advil represented serious medical risks. Several of these patients developed gastrointestinal bleeding as a result of their overdoses. Overdoses with various psychotropic drugs were the third most common category, with three patients overdosing on Dilantin, three on lithium, three on Prozac, three on Pamelor, and three on Thorazine.

The patients' ages are shown in Table 3. The peak incidence for suicide attempts in this study occurred in patients between the ages of 26 and 35. As noted, 58% of the attempters were women,

42% were men. Other ages of high incidence were the 15- to 25-year-old age range and the 36- to 45-year-old age range. This was the first suicide attempt for 67 of the 100 patients, the second suicide attempt for 17 patients.

Twenty-nine of the patients reported that they had suicidal thoughts that were persistent and serious prior to their attempted suicide. Sixty-nine percent reported that they had only fleeting thoughts of suicide or no suicidal thoughts at all prior to their suicide attempt. These 69 patients reported no specific plan prior to their impulsive suicide attempt. Only nine patients left a suicide note; 90 did not. In one case it was unknown if a note was discovered. <u>Only 14 of the 100 patients reported a specific suicidal plan</u>. Eighty-four of the 100 cases denied any plan whatsoever, and in two cases this data was unknown.

There was a positive family history for suicide in nine of these patients and no family history of suicide in 84. The family history for suicide was unknown in seven cases. Where a family member had attempted suicide, in two cases it was the mother, in one case the father, in four cases a brother, and in the remaining two cases it was some other family member.

Depressive symptoms were by far the most important psychiatric symptoms experienced. A history of major depression meeting DSM-IV criteria was present in 43% of the patients.

It was noteworthy that 42% of these patients had seen a physician within a month prior to the suicide attempt, while 41% had been seen by a mental health counselor or non-medical provider of some sort. Thus 83% had made contact with some "health provider" within the month prior to their suicide attempt. Fifty-five of these 83 patients reported that they had not been asked by their health provider about their emotional state or if they were suicidal when seen. Sixty-two percent reported that

they were dissatisfied with their "health care provider." Eighty-six percent of the patients were insured by some form of HMO or managed care plan. The "penetration" of managed care in the community was reported to be between 33% and 35% of covered lives during the time of this study. Thus, managed care was over represented in these attempted suicide cases by 245%. All patients with managed care were admitted by the ER physician and the companies were then advised since these attempts all required immediate medical intervention.

Of the types of depressive symptoms, hopelessness was by far the most important, with severe hopelessness being reported by 64% of the patients. Global insomnia was reported by 46%, partial insomnia by 92%, anhedonia by 43%, feelings of worthlessness by 29% and helplessness by 62%. Seventy-six percent of the patients reported that they had a family support system available to them who they could have called. Eighteen percent reported there was no one available to them. Six percent reported that they could have relied on friends.

Seventy percent of the patients denied ever having abused substances prior to the time of their current depressive episode. Twenty-six percent reported a past history of extensive previous substance abuse.

Ten percent of the patients reported they had been the victims of sexual abuse. Eleven had been physically abused and seven had suffered significant emotional abuse.

The majority of these patients, 78%, were experiencing a current important relationship conflict with spouse, lover, or family. Where conflictual relationships occurred: 32% were with a spouse; 21% were with life partners to whom the patient was not married; 11% were with parents or in-laws; 9% were with siblings; 8% were with children; and 3% occurred at work. One patient reported serious

problems with a long term friend. Thirty-six percent were no longer able to maintain their activities at school or work. Forty-one percent of the patients suffered from a chronic deteriorating medical illness. Nine percent reported that they had been recently diagnosed with a life threatening illness, i.e., cancer, AIDS, multiple sclerosis, etc. Twenty-nine percent had a history of impulsive or dangerous past behavior. Sixty-two percent reported profound helplessness.

Of the losses experienced, 19% had significant financial losses, such as a business failure or a firing. Twenty-one percent had experienced a human loss such as the death of a close relative or friend or the disruption of a relationship. At the time of the suicide attempt, 43% were drinking, 5% were using some sort of a psychoactive medication, and 20% were using drugs, alcohol and psychoactive medication.

The most commonly made previous diagnoses included: 1) major affective disorder, 43%, 2) adjustment disorder with anxiety and depression, 15%, 3) anxiety disorder, 12%, 4) borderline personality, 10%, 4) organic mood disorder, 8%, 5) phobia, 5%, 7) grief reaction, 3%, 8) antisocial personality disorder, 3%, 9) HIV dementia, 3%, 10) confusional state, 2%, and 11) schizophrenia, 2%.<sup>1</sup>

Discharge diagnoses included: 1.) Major affective disorder, 65%; 2.) Anxiety disorder, 7%; 3.) Adjustment disorder with anxiety and depression, 10%; 4.) Borderline personality, 12%; 5.) Antisocial

<sup>&</sup>lt;sup>1</sup> Total=106 as some patients carried more than one diagnosis.

personality disorder, 3%; 6.) HIV dementia, 3%; Schizophrenia, 2%<sup>2</sup>

The most common psychiatric diagnoses made in family members included: major depression in 16 cases, alcohol abuse in 16 cases, a diagnosis of "nervous breakdowns" in 11 cases, cocaine abuse in one case, bipolar disorder in three cases, and schizophrenia in four cases.

#### DISCUSSION

Suicide remains the ninth leading cause of death in the United States, resulting in almost 30,000 deaths annually. The rate has been constant for some time at approximately 11 to 12 per 100,000 people.<sup>8 9</sup> In recent years, there has been concern that the suicide rate may actually be increasing as care becomes less generally available and managed care bureaucracies make it more difficult to provide appropriate help to an individual in a timely fashion.<sup>3 4 5 6 7</sup> Recently there has been concern of increased rates of suicide among adolescents and the elderly.<sup>9 10</sup>

The most consistent demographic factors associated with risk for suicide include: being male, over 45 years of age, white, living alone, and suffering from a chronic medical illness where the patient perceives poor health. Completed suicides are reported to be most likely in males over the age of 60 who use lethal means such as shooting or hanging in settings where there is a poor chance of rescue. These patients often have an associated mood disorder and substance abuse.<sup>9 10 11 12 13 14</sup>

Suicidal ideation is common and has been reported to occur in up to a third of the population.<sup>12</sup> It is estimated that there are eighteen suicide attempts for every completed suicide, with women having

<sup>&</sup>lt;sup>2</sup>Total=102 as some patients carried more than one diagnosis.

a much higher rate of attempted suicide but much lower rates of actual suicide.<sup>14</sup> We know that men are four times more likely to commit suicide than women and that suicide is higher among whites and native Americans than among African Americans, Hispanics, or Asians. In fact, 73% of all suicides in the United Stated are committed by white males.<sup>9 13 15</sup>

The strongest predictor for suicide is the presence of a psychiatric illness.<sup>9 16</sup> Depression and alcohol abuse are the most frequently made diagnoses in individuals who suicide.<sup>16</sup> More than 90% of all persons who commit suicide have a diagnosable psychiatric illness.<sup>16</sup> Five percent of suicides occur in patients with chronic medical illnesses.<sup>17</sup> These patients are often encountered psychiatrically by the consultation-liaison service. Spinal cord injuries, multiple sclerosis, cancer and HIV disease have all been associated with increased rates of suicide.<sup>17 18 19 20 21</sup> Other patients at risk for suicide include those with a diagnosis of schizophrenia, borderline personality, asocial personality, manic-depressive disease, dysthymia, substance abuse, malignant narcissism, and anxiety disorders.<sup>9 10 11 22</sup>

### Patient Profile and Factors Predictive of Attempted Suicide

Our data is at variance with other studies and the national data that suggest a higher incidence of significant suicide attempts and completions in older white males.<sup>10 13 14</sup> In our survey, the highest incidence of serious suicide attempts occurred in 26- to 35-year-old white females, followed by 15 to 25-year-old white females. White males made more violent attempts by stabbings to the chest and attempting to suffocate themselves with carbon monoxide.

The most frequent means of attempting suicide in our study was by overdose of drugs alone or overdoses of drugs and alcohol.

The bulk of our patients who made serious attempts lived alone and were either divorced,

separated, single, or widowed. The majority were not religious. Most showed no significant degree of agitation prior to the time of their serious attempt. Many had recently lost their jobs or dropped out of school. In contradistinction to findings reported elsewhere in the literature,<sup>11 13 14</sup> these patients had no significant past history of any aggressive or assaultive behavior.

Obtaining a history in the emergency room of transient, non-affect laden suicidal thoughts prior to the time of the attempt would not have been a useful predictor, as 69 of these 100 patients had no persistent significant suicidal thoughts prior to their impulsive suicide attempt. Eighty-four percent reported fleeting thoughts of suicide which were similar to those reported by hundreds of other patients seen who did not attempt suicide. Only nine patients left a suicide note or message. A history of a previous suicide attempt was also not a useful predictor, as this was the first attempt for 67% of these patients. Eighty-four percent had sought the counsel of a health care provider in the month prior to their attempted suicide, seeking help for their emotional state. Eighty-six percent of these patients were seen by some form of managed care provider. Most reported they had not been asked about their emotional state or suicidal potential during their visit. Most reported dissatisfaction with their health care provider.

The presence or absence of a specific suicide plan prior to the attempted suicide was likewise not a significant indicator as most of these attempts were impulsive and reactive to some environmental event. Only 14 of these patients had suicidal thoughts with any previous plan prior to the time of their attempted suicide.

A family history of attempted or completed suicide likewise was not a good predictor of patients who would attempt suicide as 84% of the patients who attempted suicide had no family history of attempted or completed suicide.

Twenty-five percent of the patients who attempted suicide had no history of psychiatric symptoms or illness prior to this episode; 25% had been experiencing psychiatric symptoms for two weeks or less; 11 for two to four weeks; and 12 for one to three months. Only 17 patients suffered from a psychiatric illness with a duration of more than six months. Thus, a history of chronic psychiatric disorder was not predictive of a suicide attempt in this sample of patients. Again this finding is in contradistinction to previous reports in the literature.<sup>23 24 25 26 27</sup>

Although a past family history of attempted suicide was not useful, 51% of the patients did report a positive family history of psychiatric disorder.

The current recent onset of substance abuse was an important indicator of an impending suicide attempt. Forty-three percent of these patients reported that they were abusing alcohol at the time of the act; 5% were taking drugs in ways other than prescribed; and 20% reported the simultaneous use of alcohol and a drug (prescribed or illicit). The majority of these patients, 70%, however, had no past history of substance abuse prior to the time of this episode.

One of the most useful indicators was the presence of a severe relationship conflict, which occurred in 78% of these patients, the most important being with a spouse, followed by significant other, a parent, in-law, sibling, child, or in a work setting. Hopelessness was a powerful predictor of future suicide, occurring in 64% of the patients. These findings are quite similar to other reports in the literature.<sup>10 13 14 28</sup>

In reviewing factors useful in assessing patients for potential suicide in the emergency room or in a consultation/liaison setting on a ward, the following seemed most helpful, based on our data: Suicide attempts were most common in individuals who lived alone, who were between ages of 17 and 35; and who complained of severe hopelessness, anhedonia and sleep disorder. They had seen a physician or mental health counselor within the past month complaining of depressive symptoms. They experienced intermittent bouts of severe anxiety and/or panic. They complained of interpersonal conflict and inability to function in school or at work, and had recently been abusing either alcohol or drugs.

Major psychiatric depressive symptoms were highly associated with a serious suicide attempt (worthlessness, helplessness, hopelessness, anergia, anhedonia, recent loss, tearfulness). The presence or absence of suicidal ideation or a specific suicide plan did not define patients at risk for a serious suicide attempt. The vast majority of these patients experienced the recent onset of psychiatric symptoms, with almost 50% of psychiatric symptoms first occurring within two months prior to the time of the suicide attempt. A past history of major depressive disorder distinguished these patients, but a history of past suicide attempts did not.

Our findings are consistent with those previously reported by Robins, that the majority of patients suffered from an <u>acute</u> psychiatric illness, with the most prevalent conditions being affective disorders and/or substance use.<sup>10</sup> Our overall incidence of psychiatric disorder, however, was lower than that reported by Robins (75% vs. 94%)<sup>29</sup> We note, however, that Robins' study dealt with successful suicides while ours dealt with attempts. It is expected that some of our suicide risk factors would be at variance with data from studies of completed suicides. Although our suicide attempts were serious and would have been lethal without medical intervention, our patients did, in fact, survive. Our data certainly confirms that of other studies which suggest that the prevalence of mood disorders in persons committing suicide ranges between 45% to 77%.<sup>29 30 31 32</sup> Patients who have a history of mixed bipolar disorder in the depressed phase seem to be at particularly high risk because of their highly

dysphoric mood and high energy level combined with significant perturbation.<sup>31 32</sup> Psychotically depressed patients, particularly those with delusional depressive features, are reported to be at five times greater risk for suicide than patients with other mood disorders.<sup>33</sup>

Our data confirms that reported by Fawcett et al from the ten-year follow up of the NIMH collaborative program on the psychobiology of depression, that severe anxiety and panic attacks are a significant short term risk factor for suicide.<sup>34</sup> Factors correlated with suicide in that study included panic attacks, severe psychic anxiety, diminished concentration, global insomnia, alcohol abuse, and anhedonia. Fawcett notes that a significant number of patients with short term suicide risk factors, who killed themselves, did not report any suicidal ideation. These six variables were highly correlated with a patient making a suicide attempt within the first year of treatment following a diagnosis of depression. Three additional factors were correlated with suicide attempts that occurred after the first year of study, during the next nine years that patients were under scrutiny. These included a history of previous suicide attempts, suicidal ideation, and hopelessness. We concur with Fawcett's criteria for short term suicide risk as they parallel our data except for the early presence of hopelessness which we would place with the early prediction of attempt. These factors were excellent markers for assessing potential suicide in our study. They were present in a significant proportion of the one hundred patients that we evaluated, were readily obtained on psychiatric interview, and had clear predictive value. In addition, the importance of aggressively treating a patient's anxiety and panic, severe insomnia, and hopelessness are emphasized by our data. Anxiety has also been found to be an important factor in predicting possible suicidal behavior by Weissman, et al.<sup>35</sup>

Our findings also confirm previous work that patients using alcohol or other substances are at

high risk for impulsive suicide attempts.<sup>36</sup> Previous literature suggests that chemical dependence on either alcohol or drugs increases the suicide risk five-fold. The majority of suicides occur in persons who are multiple substance abusers. After mood disorders, chemical dependence is the most frequently encountered diagnosis among suicide victims.<sup>9 13 15 36</sup>

Our data is very similar to that reported by Rich et al in the San Diego suicide study, which showed that mixed substance abuse was identified in 67% of completed suicides among young adults and youths and in 46% of individuals over the age of 30.<sup>37 38</sup> Our data suggested that 47% of the severe suicide attempts occurred in people who had recently been abusing alcohol. In 59% of our cases, alcohol and/or some other substance had been abused. We note that the San Diego study was one of completed suicides, while that of Roy et al studied alcoholics who attempted suicide.<sup>39</sup> Our data confirms Roy's finding that the majority of alcoholics who attempted suicide suffered from a significant depression and that depressive symptoms were good predictors of an attempt, particularly hopelessness, global insomnia, and anhedonia. Many of Roy's patients were diagnosed with major depressive disorder as well as having a history of mixed substance abuse, panic disorder and generalized anxiety disorder.<sup>39</sup>

#### Assessing a Patient for Suicide

Even with all of these epidemiological facts at our disposal, in a time of managed care, one is still left with the question of how does one assess the acute suicidal potential of patients seen on a consultation-liaison service or in the emergency room, and more importantly, how does one act on that assessment?

First, one needs to inquire about the patient's current life situation and determine if they feel

hopeless, depressed, or suicidal. Next, one needs to make an evaluation of the patient's sociodemographic risk factors. Such things as being an elderly male who is widowed or divorced; being white or Native American, living alone, being worried about financial problems; the recent loss of a friend, child, spouse or the beginning of retirement all increase risk. Does the patient suffer from anxiety, panic, depression, manic depressive disease, or schizophrenia? Do they abuse alcohol, over-thecounter medications or some other substance?

Patients at highest demographic risk may have had a history of previous attempts, feel hopeless, experience anxiety and panic attacks, and suffer from anhedonia. The relative importance of items on this list, however, is the subject of this report As access to care is controlled and often denied by managed care companies currently protected by ERISA, physicians need to realize that they and their patients are not so protected. Physicians need to be more inclusive of these risk elements when assessing patients for possible suicide rather than more rigid and restrictive about who can receive care.

Our data suggest that the symptoms most predictive of severe suicide attempts are: hopelessness, insomnia; severe, relentless anxiety often with intermittent panic attacks and a depressed mood. These patients have a past history of impulsive behavior and often express feelings of helplessness and anhedonia. The majority of these patients have had symptoms develop within three months prior to their suicide attempt, and most have experienced a recent significant loss. Recently emerging partial or global insomnia is an important predictor, as is a history of a major acute conflict in an important interpersonal relationship. The majority of the patients included in this study attempted suicide impulsively. Only 10% had told others of the impending attempt or left a note. <u>Only 16% of our</u> <u>patients planned their suicide attempt</u>. A third had made a previous attempt, and a third reported persistent suicidal rumination prior to their attempt. The majority of patients described fleeting, intermittent, transient but disturbing thoughts of suicide (84%), not persistent thoughts with a plan.

Forty-one percent of the patients in our study suffered from some chronic deteriorating medical illness. Eight had been medically hospitalized within six months of the time that they attempted suicide. All of these patients felt frustrated with their ability to access medical care and to get appropriate medical treatment for their condition. Many were specifically angry with their managed care provider and felt they were not being treated seriously or appropriately.

Hirshfeld and Russell note<sup>20</sup> that "the suicide assessment should include sociodemographic risk factors, current stressors, the presence of depression, the presence of alcohol (or other substance) abuse, and current thoughts about suicide." They define "imminent risk" for suicide as a suicide attempt occurring within 48 hours of the time the patient is seen, "short term risk" within days or weeks, and "long term risk" within weeks to years.

Every patient seen in the emergency room and on the consult service must be evaluated for both imminent and short-term risk. Hirshfeld and Russell suggest that imminent risk is best predicted by the presence of psychosis, particularly if command hallucinations advise the patient to commit suicide, and expressions of despair, hopelessness, and extreme pessimism about the future (e.g., "it will never get better.") Co-existing depression, alcohol abuse and high levels of anxiety, particularly with panic attacks, are factors they relate to short term risk, even in the absence of suicidal ideation. They report a history of previous serious suicide attempts and a family history of suicide as further increasing the risk.

In our study of 100 severe suicide attempts, there were no patients who experienced command hallucinations. Two patients had been previously diagnosed with schizophrenia, 59 had a history of

substance abuse, and 12 had a history of bipolar disorder.

#### Recent Court Ruling and Implications for Managed Care

In a recent Federal Court case upheld on appeal,<sup>40</sup> the judge spoke forcefully to a PRO (a professional review organization to manage Medicaid admissions and utilization) denial of medical necessity for suicidal patients admitted to hospital. This ruling establishes precedent in the states of Georgia, Florida, Alabama, and Mississippi, and will receive judicial notice in other jurisdictions though not necessarily precedential He ruled that medical necessity was determined by a two-prong test of facts in the circumstances surrounding each case. The first prong requires that inpatient services during admission and treatment be consistent with appropriate medical care. The second prong requires that alternative placements be considered when ordering inpatient services. He noted in defining *appropriate*, that services that alleviate a harmful medical condition are consistent with "appropriate medical care." "Services alleviate a harmful medical condition if they are reasonably calculated to prevent, diagnose, correct, cure, alleviate, or prevent the worsening of conditions in the recipient that endanger life, cause suffering or pain, result in illness or infirmity, threaten to cause or aggravate a handicap, or cause physical deformity or malfunction." It is important that physicians keep this definition of appropriate medical care in mind when dealing with managed care denials of "appropriate care." The two definitions are often not synonymous. Physicians would do well to understand the legal definition of appropriate medical care when dealing with managed care as it is this definition that determines sound medical judgment and medical responsibility.

The judge went on to state that services are <u>consistent with appropriate medical care</u> if they are provided to protect the patient's life, prevent significant illness or disability, or to alleviate severe pain.

Services must be "<u>consistent with individualized treatment</u>." They must be "<u>specific and consistent with</u> <u>symptoms or a confirmed diagnosis of the illness or injury under treatment</u>." He ruled that inpatient admission and other services were consistent with appropriate medical care if they "<u>do not exceed the</u> <u>patient's individual needs</u>." He noted that such services may "not be primarily intended for the convenience of the recipient or the provider."

He further spoke to the Keystone Peer Review Organization ("KEPRO," a specific PRO) severity of illness criteria and discharge screens for determining medical necessity (Illness Severity Discharge "ISD" criteria). He specifically noted that the ISD criteria represent a list of signs and symptoms and diagnostic and therapeutic services. He ruled that they are<sup>40</sup> "general guidelines for determining medical necessity of inpatient services" and "are not dispositive of medical necessity." He further went on to state that these criteria "are not binding on the treating physician." The judge noted that the treating physician can override these managed care criteria, 'based on his or her clinical judgment concerning a particular recipient. The clinical judgment to override ISD criteria must be consistent with appropriate medical care."<sup>41</sup> [*Emphasis added.*] In reviewing four cases where the KEPRO ruled that hospitalizations were not appropriate, the judge commented that the ISD criteria were correctly overridden by the treating physician and that the clinical judgment of those physicians was consistent with appropriate medical care, as was the patients' subsequent inpatient care. The physicians felt that there was not adequate alternative care available and admitted these patients for stabilization of their acute psychiatric condition. Two of the patients who were admitted were felt by the admitting physicians to represent a danger to themselves and others but did not meet the admitting criteria of the KEPRO. The judge specifically stated that the physician did the right thing in admitting

these patients.

In conclusion, the judge stated that "the medical determination of those who qualify for hospitalization is a difficult task and a risky one for physicians and hospitals in today litigious society." He noted that the denial rate is far greater for psychiatric services than for other acute care services and that it is difficult for physicians to find alternative placement for acutely depressed, confused or agitated patients, who are often seen in the middle of the night. He also noted that many psychiatric patients come to hospital emergency rooms from alternative facilities that provide lower levels of care. When physicians and hospitals provide services and are subsequently told that they are "medically unnecessary" by payers, the payers, whether they be government or private insurance companies, shift the economic burden to the provider and increase the risk to the patient.

The judge also commented on the specifics of one case where a physician required more time than was permitted by the managed care criteria to adequately and appropriately treat a patient who had been admitted following a suicide attempt. The judge noted that patients require time to adjust to their medication and that after medicines are prescribed in appropriate dosages, additional time may be needed to determine whether these drugs are effective. The judge considered the fact that adequate time was necessary for many psychiatric medications to achieve therapeutic blood levels and for the patients to respond to them.

These rulings are important. They emphasize that the physician is ultimately responsible for his/her decisions, not some managed care guideline. The physician must do the right thing by their patient in the emergency room. It is the doctor who must render medical judgment. The physician can and must override the procedures that a managed care or professional review organization requires providers to follow, if it is medically necessary for his or her patient.<sup>40</sup>

The test that a physician should use to determine whether admission is necessary is that medically necessary services cannot be safely furnished on an outpatient or partial hospital basis and that they are consistent with the appropriate level of medical care for this particular patient. That is, in the judgment of the physician, "there is no other equally effective, more conservative, or substantially less costly course of treatment available or suitable for the recipient. In another recent Florida case, the court held that "medical necessity requires a finding that no other equally effective course of treatment is <u>available</u> and <u>suitable</u>."<sup>41</sup> [*Emphasis added*.]

#### Conclusion

This study of 100 severe suicide attempts in a major metropolitan area suggests that some of the managed care criteria used for predicting suicide, specifically the requirement that a patient have a specific suicide plan, be ruminating about suicide, experience command hallucinations to commit suicide or had previously attempted suicide, were not valid predictors of a future imminent suicide attempt. The best predictors of attempted suicide in these cases were the presence of a mood disorder with relentless anxiety, anhedonia, recent conflict or loss, emerging global or partial insomnia, and alcohol abuse. This study suggests that it is the clinician who sees the patient on the ward or in the emergency room who must evaluate for and insist upon the institution of suicidal precautions, and that clinicians cannot have their judgment clouded, confused or obfuscated by managed care protocols that may have little relevance to the patient's situation when seen.

In a recent federal court ruling, the judge admonished that it is the physician who is responsible for the management of the patient and that his judgment cannot be usurped by a protocol developed without regard for the needs of the patient.  $^{\rm 40}$ 

#### REFERENCES

Hall RCW: Social and legal implications of managed care in psychiatry. Psychosomatics 1994;
35(2):50-158

Hall RCW: Legal precedents effecting managed care: the physician's responsibility to patients.
Psychosomatics 1994; 32(2):105-117

Hall RCW: Ethical and Legal Implications of Managed Care. Gen Hosp Psychiatry 1997; 19:200 208

4.Levenson DB: Toward full disclosure of referral restrictions and financial incentives by pre-paid health plans. N Engl J Med 1987; 317:1720-1721

5. Grumet GW: Health care rationing through inconvenience: The third-party secret weapon. N Engl J Med 1989; 321:607-611.

6. Cuttler R: Sick joke: The failings of "managed" care. The New Republic, Dec. 2, 1991; 20-22.

<sup>7.</sup> Relman AJ: What market values are doing to medicine. Atlantic Monthly; March 1992, 99-106.

Stinsbury P: The epidemiology of suicide, in Suicide. Edited by Roy A., Baltimore, Maryland,
Williams and Wilkins, 1986, pp 17-40

 Stevenson JM: Suicide, in The American Psychiatric Press Textbook of Psychiatry. Edited by Talbot JA, Hales RE, Yudofsky SC. Washington, DC, American Psychiatric Press, 1988, pp. 1021-1035.

Robins, LN, Kulbok, PA: Epidemiological Studies in Suicide. Psychiatric Annals 1988:
18:619,622-627

11.Weissman M: The epidemiology of suicide attempts. Arch General Psychiatry 1974; 30:737-746.

12. Paykel ES, Myers JK, Lindenthal JJ, Tanner J: Suicidal feelings in the general population: A prevalence study. Br J Psychiatry 1974; 124:460-469

13. Hirschfeld RMA, Davidson L: Risk factors for suicide. Review of Psychiatry 1988; 7:307-333.

14. Petronis KR, Samuels JF, Moseicki EK, Anthony JC: An epidemiologic investigation of potential risk factors for suicide attempts. Soc Psychiatry Psychiatr Epidemiol 1990; 25:193-199

15. Fawcett J, Clark DC, Busch KA: Assessing and treating the patient at risk of suicide. Psychiatric

Annals 1993; 28:244-255

16.Rich CL, Runeson BS: Similarities and diagnostic comorbidity between suicide among young people in Sweden and the United States. Acta Psychiatr Scand 1992; 86:335-339

17. MacKenzie TB, Popkin MK: Suicide in the medical patient. Int J Psychiatry Med 1987; 17:3-22

Marzuk PM, Tierney H, Tardiff K, et al: Increased risk of suicide in persons with AIDS. JAMA
1988; 259:1333-1337

19. Miles CP: Conditions predisposing to suicide: a review. J Nerv Ment Dis 1977; 164:231-246

20. Hirschfeld RMA, Russell JM: Assessment and treatment of suicidal patients. N Engl J Med 1997; 337(13):910-915

21. Zeck PM, Tierney H, Tardiff K, et al: Increased risk of suicide in persons with AIDS. JAMA 1988; 259:1333-1337

22. Beck AT, Resnik HLP: Lettier DJ: The prediction of suicide. Bowie, Maryland, The Charles Press Publishers, Inc., 1974.

23. Evenson R, Wood J, Nuttal E, et al: Suicide rates among public mental health patients. Acta Psychiatr Scand 1982; 66:244-254.

24.Hendin H: Suicide in America. New York, Norton, 1982.

25. Kreitman N: The epidemiology of suicide and parasuicide. Crisis 1981; 2:1-13.

26. Dublin LI: Suicide: A sociological and statistical study. New York, Ronald Press, 1963

27. Pokabny A: Suicide rates in various psychiatric disorders. J Nerv Ment Dis 19674; 139:499-506.

28. Minkoff K, Bergman E, Beck AT, et al: Hopelessness, depression, and attempted suicide. Am J Psychiatry 1973; 130:455-459.

29. Robins E, Murphy GE, Wilkinson RH: et al: Some clinical considerations in the prevention of suicide based on a study of 134 successful suicides. Am J Public Health 1959; 49:888-899

30. Braclough B, Bunch J, Nelson B, et al: A hundred cases of suicide: clinical aspects. Brit J Psychiatry 1974; 125:355-373

31. Goodwin FK, Jamison KR: Manic-Depressive Illness. New York, Oxford University Press, 1990

32. Winokur G, Tsuang M: The Iowa five hundred: Suicide in mania, depression, and schizophrenia.Am J Psychiatry 1975; 132:650-651

33. Russe SP, Glassman AH, Walsh BT, et al: Depression, delusions, and suicide. Am J Psychiatry1983; 140:1159-1162

34. Fawcett J, Scheftner WA, Fogg L, et al: Time-related predictors of suicide in major affective disorders. Am J Psychiatry 1990; 147:1189-1194

35. Weissman MM, Klerman GL, Markowitz JS, et al: Suicidal ideation and suicide attempts in panic disorder and attacks. N Engl J Med 1989; 321:1209-1214

36. Marzuk PM, Mann JJ: Suicide and substance abuse. Psychiatric Annals 1988; 18:639-645

37. Rich CL, Young D, Fowler RC: San Diego suicide study one: Young vs. old subjects. Arch Gen Psychiatry 1986; 43:577-582

38. Rich CL, Warsradt TM, Nimiroff RA, et al: Suicide, stressors and the life cycle. Am J Psychiatry 1991; 148:524-527

39. Roy A, Lamparski D, Dejong J, et al: Characteristics of alcoholics who attempt suicide. Am JPsychiatry 1990: 147:761-765

40. <u>Tallahassee Memorial Regional Medical Center, Inc. v Cook</u>, 109 F.3d 693 (11th Cir. 1997)

41.Orlando General Hospital v. Department of Health and Rehabilitative Services,

567So.2d962,965(Fla. 5th Dca 1990).