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Criteria for psychiatric hospitalization: A checklist approach

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The decision to hospitalize a psychiatric patient is often a source of controversy. This fact is reflected in the Connecticut Mental Health Center's program of quality assessment. The center conducts individual, retrospective chart review using a 32-page checklist of normative criteria. The primary purpose of this portion of the chart review system is to highlight those cases in which a patient may have been hospitalized unnecessarily. We present and analyze the cumulative data from 300 cases for which the criteria-for-hospitalization scale was completed. We conclude that the scale is an efficient instrument and is convenient for justifying hospitalization. We suggest minor revisions in the scale and speculate upon its as-yet-untapped research potential.

Little attention has been paid to the delineation of rational criteria for psychiatric hospitalization (Maxmen & Tucker, 1973), despite the significant number of patients hospitalized each year.[1] Perhaps the lack of attention is due to the opinion, held by many mental health professionals, that hospitalization constitutes a last resort rather than a desirable alternative for the psychiatric patient (Massachusetts Mental Hospital Planning Project, Note 1). There are those who would limit both voluntary and involuntary hospitalization to individuals regarded as dangerous to themselves or to others. Conversely, some practitioners have defended hospitalization as the treatment of choice for many acute psychiatric disorders [Group for the Advancement of Psychiatry (GAP), 1969; Rabiner & Lurie, 1974].

Regardless of their opinions concerning the role of hospitalization in psychiatric care, most members of the psychiatric community would agree that professional judgment should remain the decisive factor in determining the most appropriate treatment modality for any given patient. Likewise, practitioners would oppose relinquishing the responsibility for justifying a hospitalization to administrators or third-party payers. The reason for this reluctance is the complexity of factors that must be considered in reaching what is primarily a clinical decision. As numerous studies have shown, the decision to hospitalize does not rest solely on a patient's symptoms, diagnosis, or degree of distress, but also involves a host of behavioral, familial, social, and situational variables (Mendel & Rapport, 1969; Mischler & Wexler, 1963; Tischler, 1966; Wood, Rakusin, & Morse, 1960). It is understood that the availability of alternative treatment sources will affect the choice of modality, but the ultimate decision to hospitalize rests on the clinical judgment of the referring professionals and the hospital's admitting clinicians.

INDICATIONS FOR PSYCHIATRIC HOSPITALIZATION

In view of the above, it is remarkable that so few psychiatric textbooks have concerned themselves with identifying the indications for psychiatric hospitalization. Of course, there are exceptions to the general oversight (Cammer, 1962; Detre & Jarecki, 1971), and there are also sets of criteria that have been proposed by others, but have not been included in textbooks. For example, Warner (1961, 1962) proposed a rating system for use by psychiatrists. The purpose of the system was to evaluate mentally ill patients in the community to determine if they required compulsory hospitalization. Warner suggested six criteria or categories for hospitalization, each of which were to be rated numerically in terms of intensity.

The six categories were present mental status, self-care ability, responsible parties available, patient's effect on environment, danger potential, and treatment prognosis. A maximum weight was assigned to each criterion as an expression of the criterion's relative importance in favor of hospitalization. In the study that was conducted using the rating system, all patients who were hospitalized compulsorily scored 10 points or more on the scale; all of the nonhospitalized patients scored less than 10 points. No single criterion was instrumental in making the decision to hospitalize.

Luborsky (1962) proposed a very different scale, the primary purpose of which was not to determine the advisability of hospitalization, but to estimate numerically the patient's mental health condition. The top of the scale was 100 points and measured "an ideal state of complete functioning integration." A score of 25 points was used as a reference point, with the patient who scored 25 or below "obviously unable to function auton-

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omously" and in need of hospitalization unless receiving support from a therapist. Luborsky's scale has been widely applied, but its criteria for hospitalization are very general (Luborsky & Bachrach, 1974).

Mendel and Green (1967) offered a set of criteria for hospitalization that were eventually reformulated by Mendel (1975) as "indications for crisis treatment." The criteria comprised 17 indications for crisis hospitalizations as well as five contraindications for hospitalization. Two examples of Mendel's positive indications are the patient's inability to maintain an outpatient therapeutic relationship and the need of therapeutic containment for management of the patient's anxiety. There was no scoring system, because any one of the indications was thought to be sufficient to justify hospitalization.

In 1969, the GAP produced a report, the intent of which was to emphasize "the vital role of the psychiatric hospital in a continuum of comprehensive psychiatric treatment" (p. 59). The concern of GAP was to oppose the attitude that psychiatric hospitalization should occur only after other resources had been exhausted. The report stressed that the diagnostic and therapeutic functions of the psychiatric hospital offered a unique concentration of skilled professionals competent to deal with the patient, the family, and the community. Indications for hospitalization were then delineated in a two-part list that separated hospitalization for diagnostic purposes from hospitalization for therapeutic purposes. There was no rating system or quantification of the indications.

Finally, Hanson and Babigian (1974) modified a list of indications for psychiatric hospitalization that Gruenberg (1970) had drafted some years previously. Gruenberg's work had specifically concerned hospitalization for schizophrenic patients. Hanson and Babigian wanted to make Gruenberg's indications more applicable to all psychiatric patients seen in the emergency service of a private teaching hospital. Their efforts resulted in a list of seven reasons for hospitalizing a psychiatric patient (e.g., to provide treatment or perform diagnostic studies that cannot be done on an outpatient basis).

THE WHITTINGTON SCALE

The criteria for hospitalization that are the subject of this study were based on a set of experimental criteria proposed by Whittington (1966). The intent of Whittington's scale is to provide assistance to relatively inexperienced workers at a mental health center in evaluating a patient's need for either hospitalization or consultation. The scale is in checklist form and comprises a number of questions about the patient's behavior, mental status, and physical condition, as well as the clinician's concern about the patient's well-being.

The mechanics of Whittington's (1966) checklist are similar to those of Warner's (1961) scale. Each criterion is assigned a weight of 1 to 4 points. The person completing the scale rates each criterion in terms of the intensity with which it was demonstrated: none = 0, slight = 1, moderate = 2, and extensive = 3. The score for each criterion is the product of its weight and the rating assigned by the person completing the scale. For example, if a criterion with a weight of 2 is thought to be moderately in evidence, the score for the criterion would be 2×2, or 4. The total score on the scale is the sum of the scores for each criterion.

MODIFICATION OF THE WHITTINGTON SCALE

The Whittington (1966) scale was modified for use in the Connecticut Mental Health Center's system of quality assessment. Central to the system is a routine process of individual, retrospective chart review. The instrument for the review was a 32-page checklist of normative criteria for psychiatric care. The review, or audit, was performed on one level by trained nonclinical personnel who evaluated the contents of the chart in terms of the checklist's criteria. If the chart diverged in some way from the criteria, the nonclinical reviewer sent the chart and the checklist to a senior clinician at the center, who acted as a consultant and evaluated the specific questions raised. The clinician also rated the audited treatment episode globally.

The center's modified version of Whittington's (1966) scale (see Table 1) was included in the 32-page chart review checklist. The first eight items in the center's version were identical to those proposed by Whittington. Item 9 in the modified version was changed from the original, which read, "Are there physical or neurological conditions which require the rehabilitation facilities of the psychiatric hospital?" For this item, the term "rehabilitation" was eliminated because the center's inpatient services focused mainly on short-term treatment for acute psychiatric conditions. A phrase was added so that the question read, "Are there physical or neurological conditions or a psychotic disorganized state which require(s) hospitalization to initiate the treatment process?"

A second modification concerned Whittington's (1966) Item 10, "Do pathological, social, or family situations exist that require isolation of the patient?" It was thought necessary to include a consideration of the patient's effect on his family and associates as well, and so the following was added: "Or does the patient's disordered state create such difficulties for family or associates that he has to be removed and hospitalized for their sake?"

Our major modification of Whittington's (1966) scale was the addition of Item 12. The inclusion of this item reflected the specific character of the Connecticut Mental Health Center, which occasionally hospitalizes patients for differential diagnostic evaluations. In addition, some patients are hospitalized specifically for detoxification from alcohol as a preventive measure, and others for detoxification from other drugs or for initiation of a treatment program involving a narcotic antag-

Table 1
Criteria for Hospitalization

Instructions to Reviewers

(1) Rate patient on each criterion as: none = 0, slight = 1, moderate = 2, extensive = 3. Multiply the rates by the weight shown and enter the score on each criterion. Then sum scores of each criterion for total score. (2) Ratings are to be based on the patient's condition in the 7 days preceding evaluation for hospitalization. (3) In applying the criteria, an item of reported behavior should be employed to arrive at a rating on the first criterion on the list to which it applies: *Do not use* the *same* item of behavior to score a criterion that falls later in the list (e.g., suicidal behavior should not be used in rating Criteria 4 and 5).

	W	S
1. Is there evidence of active suicidal preoccupation in fantasy or thoughts of patient?	2	___
2. Have there been suicidal attempts or active preparations to harm self (i.e., buying a gun, etc.)?	4	___
3. Has the patient threatened to hurt someone else physically? (Limit to *verbal* threats.)	2	___
4. Have aggressive outbursts occurred toward people.	4	___
5. Have aggressive outbursts occurred toward animals or objects?	2	___
6. Has antisocial behavior occurred?	1	___
7. Are there evidences of impairment of such functions as reality assessment, judgment, logical thinking, and planning?	1	___
8. Does the patient's condition seem to be deteriorating rapidly or failing to improve despite supportive measures?	1	___
9. Are there physical or neurological conditions *or* a psychotic, disorganized state which require(s) hospitalization to initiate the treatment process?	2	___
10. Does a pathological or noxious situation exist among patient's family or associates that makes initiation of treatment without hospitalization impossible? *Or* does the patient's disordered state create such difficulties for family or associates that he has to be removed and hospitalized for their sake?	1	___
11. Are emotional contacts of the patient so severely limited or the habitual patterns of behavior so pathologically ingrained that the "push" of a structured hospital program may be helpful? (This criterion should not be applied to acute patients, but only to those who are so limited as to be unable to establish and maintain emotional contacts.)	1	___
12. Does evaluation of the patient's condition require the 24-hour observation and special evaluation that a hospital provides (including stabilization or reevaluation of medication)? *Or* is patient referred for treatment of drug or alcohol dependency?	4	___
Total Score:		___

Note–*W = weight, S = score.*

onist. Also, the center admits patients whose diagnoses may be known, but who are in acute distress and need hospitalization to evaluate their current situations, and to stabilize their medication regimens.

The criteria-for-hospitalization scale was completed for every patient whose chart was reviewed if the patient had been treated on an inpatient service at the center or if the chart indicated that the patient seemed at least moderately suicidal. It was decided to adopt Whittington's (1966) suggestion that a score of 12 or more made hospitalization necessary. If a patient who was hospitalized scored less than 12 points on the scale, the chart was sent to a clinical consultant for review.

ANALYSIS OF THE DATA

Flynn and Henisz (1975) reported the results of a preliminary study whose purpose was to evaluate the usefulness of the Connecticut Mental Health Center's revised criteria for psychiatric hospitalization. Their data included a comparison of scores on the scale for 100 hospitalized patients and 50 nonhospitalized patients. The present study includes and expands upon the results of Flynn and Henisz' work.

A total of 300 criteria-for-hospitalization scores was available for this study. The 300 scores comprised 250 scores for hospitalized patients and 50 scores for nonhospitalized patients. Most, but not all, of the 300 scores were subjected to standard statistical and clinical analyses. Not all scores could be completely analyzed because not all scores were coded for inclusion in the center's automated data processing system. Specifically, with regard to the hospitalized patients, only 217 of the 250 cases were coded.

All 300 cases were included in a calculation of the range of scores and their means, with a differentiation between hospitalized and nonhospitalized groups. All 300 scores were included in a calculation of Guttman's coefficient of predictability, used to determine the degree of error that could be eliminated in predicting whether or not a patient was hospitalized if the patient's score on the hospitalization checklist was known. For the hospitalized group, the 217 coded scores were analyzed to identify those cases in which a single criterion justified the patient's hospitalization. Finally, the intercorrelations between the various items contributing to the total scores of the 217 coded and hospitalized cases were examined. Also, a multiple-regression analysis was applied to the data, with the hospitalization score as the dependent variable and the individual item ratings as the independent variables.

RESULTS OF THE AUDIT

The scores for the 250 hospitalized patients ranged from 1 to 53, with a median score of 20 and a mean score of 21.3. Scores for the 50 nonhospitalized patients ranged from 0 to 29, with a median score of 3 and a mean of 4.3. Only 5.6% of the scores for hospitalized patients fell below 12 points, compared with 94% of the scores for nonhospitalized patients. The difference between the two groups with regard to their scores was significant, as was the difference between their mean scores.

Similar results were reported in an independent study that sought to validate the same checklist. The study, which was done at the University of North Carolina School of Medicine, found that the sample of hospitalized patients scored significantly higher than the outpatient sample and concluded that their scores on the hospitalization checklist significantly differentiated the two groups (Newmark, Gentry, & Goodman, 1977).

Guttman's coefficient of predictability for the 300 cases in which a criteria-for-hospitalization scale was completed was .66. This means that the degree of error in predicting the decision to hospitalize or not could be reduced 66% if the patient's score on the scale were known.

The criteria-for-hospitalization checklist was constructed so that, under certain circumstances, a hospitalization could be justified by a single criterion in the absence of other documented pathology. Three criteria in the checklist were assigned the scale's maximum weight of 4. If a patient had demonstrated any one of the three criteria extensively, the reviewer would rate the criterion with a value of 3. The resulting score for the single criterion would then be 12 points, which would suffice to justify the hospitalization. The three criteria that carried a weight of 4 described (1) a patient who either had attempted suicide or had made active preparations to harm himself (such as buying a gun), (2) a patient who had made aggressive outbursts toward people, and (3) a patient whose condition required 24-h observation or who had been referred to the center for treatment of drug or alcohol dependence.

It is interesting to note that two of the above criteria were the items used most frequently in the 217 hospitalized cases that were coded for inclusion in the center's data base. The most frequently identified criterion was Item 12 on the checklist, concerning the need for 24-h observation. The item lacked specificity beyond its statement of the patient's need for observation or drug detoxification. This lack invites criticism, because the criterion could serve to justify hospitalization in cases with no other behavioral or medical indications for admission. However, an analysis of the data effectively refuted such criticism by revealing that only a small number of patients (3.2% of the coded group) were hospitalized solely on the basis of that criterion.

Of the total of 217 hospitalized and coded cases, there were 90 for which the reviewer assigned Item 12 an "extensive" rating of 3. For 79 of the 90 cases, the reviewer identified at least two additional criteria to contribute to the patient's total score. In four other cases, the reviewer identified only one additional criterion, which, for three of the cases, was the item noting "a rapid deterioration in the patient's condition."

Finally, the 7 remaining cases of the 90 were those for which Item 12 had been the sole determinant of hospitalization. The seven cases were reviewed by the authors, who discovered that four of the seven patients were hospitalized for drug or alcohol detoxification and the remaining three for stabilization or reevaluation of medication.

After Item 12 on the hospitalization checklist, the item most frequently identified for the 217 hospitalized and coded patients was Item 2: "Have there been suicidal attempts or active preparations to harm self?" This item was given an "extensive" rating on 25 occasions. However, although the item so rated would have been sufficient in itself to justify hospitalization, in no instance was it the sole criterion identified by the reviewer. In each of the 25 cases, the reviewer found at least two other indications for hospitalization and frequently found more than two. The same was true for the fourth item on the checklist, which was the last of the criteria with the maximum weight of 4: "Have aggressive outbursts occurred toward people?" This item was given an "extensive" rating on five occasions; but, again, such behavior never appeared in isolation from other indications identified by the reviewer and, so, was never the sole determinant of hospitalization.

Rarely, then, did the checklist scores for hospitalized patients result from a single criterion identified by the reviewer. The hospitalization checklist was constructed to reflect the multiple dimensions of disturbed behavior that could lead to a psychiatric hospitalization. A final score on the scale was a composite of factors present in varying degrees of intensity. Table 2 presents the intercorrelations between the different criteria for the 217 hospitalized-and-coded cases.

INTERCORRELATIONS BETWEEN ITEMS

Only a few items on the hospitalization checklist demonstrated an intercorrelation equal to or exceeding .16. The strongest correlation ($r = .57$) was found to exist between Item 1, describing suicidal preoccupation, and Item 2, describing suicidal attempts or preparations. The degree of correlation between the two items suggested the need to reverse their order. The instructions for completing the scale direct the reviewer to rate an item of reported behavior using the first criterion on the checklist that describes the behavior and to refrain from using the same behavior to rate a criterion appearing later on the scale. Not all patients with suicidal preoccupation commit suicidal acts, but it is reasonable to assume that all patients who attempt suicide or make preparations to harm themselves are preoccupied with suicide. Consequently, placing the item describing suicidal acts before the item describing suicidal thoughts eliminates the duplication that resulted in the high degree of correlation mentioned above.

A moderate intercorrelation ($r = .32$) was found between the verbal threats of violence described in Item 3 and the aggressive outbursts toward people described in Item 4. Verbal threats were also correlated ($r = .42$) with the aggressive outbursts toward animals or objects described in Item 5. Again, a reversal in their order would diminish the intercorrelation between items

Table 2
Intercorrelation Between the Various Items on the Hospitalization Checklist Completed for 217 Hospitalized Cases

Item Number	Item Number											
	1	2	3	4	5	6	7	8	9	10	11	12
1												
2	.57											
3	.05	.16										
4	.10	.06	.32									
5	.03	.06	.42	.26								
6	−.12	−.10	.05	.01	.06							
7	.00	−.12	−.05	−.09	−.05	.00						
8	.18	.06	.03	.04	−.01	−.12	.31					
9	−.12	−.11	−.08	−.02	−.06	−.04	.49	.41				
10	.04	.08	.04	.22	.17	−.06	.22	.16	.21			
11	.00	.06	.13	.01	.07	.27	−.09	.05	−.06	.09		
12	.01	.08	−.13	−.07	−.06	−.10	.11	.10	.24	−.16	−.06	

by excluding the less dangerous behavior from the rating. In this instance, placing Item 3 after Items 4 and 5 would serve the purpose.

Four other items, Items 7, 8, 9, and 10, tended to be rated concomitantly. These items describe psychotic behavior, rapid clinical deterioration, a psychotic state that requires hospitalization to initiate treatment, and difficulties for the patient's family and associates caused by the patient's disordered condition. Also of interest were the correlations between Item 6 and Item 11, which, respectively, describe antisocial behavior and emotional emptiness or pathologically ingrained patterns of behavior. By and large, however, the results of the analysis demonstrate that the various items on the checklist describe distinctive types of behavior that contribute to the decision to hospitalize.

MULTIPLE-REGRESSION ANALYSIS

A stepwise multiple-regression analysis was performed in order to determine the relative importance of the various items contributing to the decision to hospitalize in the 217 coded cases. For the analysis, the hospitalization score was defined as the dependent variable and the 12 items on the checklist were defined as the independent variables. Table 3 presents the results. The order of the various items in the table indicated their relative importance in the decision to hospitalize.

Table 3
Results of a Stepwise Multiple Regression Analysis With the Hospitalization Score Defined as the Dependent Variable for 217 Hospitalized Cases

Step Number	Item	R	R^2	Increase in R^2
1	2	.64	.41	.41
2	9	.78	.60	.19
3	4	.86	.74	.14
4	12	.91	.83	.09
5	1	.94	.88	.05
6	8	.95	.91	.03
7	5	.96	.93	.02
8	10	.97	.94	.01
9	3	.98	.95	.01

Over 95% of the common variance was explained by 9 of the 12 items on the hospitalization checklist. Item 2, describing the patient's suicidal attempts or preparations to harm himself, captured the largest percentage of variance, 40%. Item 9, which describes psychotic disorganization, captured 19% of the common variance. One may conclude from this that suicidal behavior and psychotic disorganization are factors most likely to influence the decision to hospitalize.

After these, the next most important indication for hospitalization was the patient's aggressive outbursts toward people, which is described in Item 4 and was responsible for 14% of the common variance. The fourth most important indication was the patient's need for 24-h observation or drug detoxification, described in Item 12 and explaining 9% of the common variance. Finally, it is interesting to note that 3 of the 12 items each captured less than 1% of the common variance. The three items described withdrawn behavior (Item 11), impaired reality testing (Item 7), and antisocial behavior (Item 6).

THE USE OF DIAGNOSTIC CRITERIA FOR HOSPITALIZATION

The results of the study also showed that 14 patients, or 5.6% of the total 250 who were hospitalized, were hospitalized with a checklist score below 12 points. As part of the routine review process, the 14 charts were sent to clinical consultants. In 10 of the 14 cases, the consultants thought that hospitalization had been appropriate; in the remaining 4 cases, the consultants disagreed with the decision to hospitalize. The question was not always amenable to unequivocal answers, with the consultants qualifying their judgments in several cases.

In the original study concerning the checklist, Flynn and Henisz (1975) used an additional set of criteria to evaluate the appropriateness of hospitalization for the

seven patients in their study who were hospitalized, but who scored less than 12 points on the checklist. The criteria they used were the model criteria sets developed by the American Psychiatric Association's (APA) Ad Hoc Committee on Professional Standards Review Organizations (1974). The APA's criteria were designed for use in conjunction with the patient's admission diagnosis.

The same application of APA criteria was tried for the 14 low-scoring hospitalized patients described in this study. [Flynn and Henisz' (1975) 7 low-scoring patients were included in the group of 14.] In practice, the APA model criteria sets could be applied to only 11 of the 14 cases, because 2 of the cases had diagnoses for which there were no APA criteria and the last of the 14 charts lacked an admission diagnosis. In terms of the APA criteria, the hospitalization of all 11 patients was justified. The 11 cases included 3 of the 4 cases that the consultants thought had been inappropriately hospitalized. The fourth hospitalization judged to be inappropriate by a consultant was one of the cases with a diagnosis not included in the APA criteria.

Weiner (1978) published a more extensive comparison of the hospitalization checklist with the APA's model criteria sets. Then, at greater length, he compared the checklist with the Diagnostic Criteria Set, which was based on the APA criteria but was more comprehensive and included all diagnostic categories present in the Diagnostic and Statistical Manual of Mental Disorders (DSM II), except for the category "condition without manifest psychiatric disorder."

Weiner (1978) concluded that there was merit in using a diagnostic approach to justify hospitalization. He recommended using the Diagnostic Criteria Set as the primary instrument in reviewing the appropriateness of hospitalizations and using the hospitalization checklist in those cases to which the Diagnostic Criteria Set could not be applied (i.e., for those cases without an admission diagnosis). In comparing the two instruments, Weiner conceded that the hospitalization checklist was "more consistent with the process that clinicians go through while making decisions about hospitalizing their patients–assessing their behavior, their level of functioning in major life areas, their coping ability, and the availability of support systems–in addition to making decisions for hospitalization based on the diagnosis of the patient" (1978, p. 160). However, Weiner thought that a difficulty in the checklist was its need, especially in the rating stage, for judgments more subjective than those required by the Diagnostic Criteria Set with its "explicit indications for admission" related to a specific diagnosis.

HIGH-SCORING NONHOSPITALIZED PATIENTS

Finally, with regard to the 50 outpatients for whom the hospitalization scale was completed, 3 scored 12 points or more. The review process did not ask that consultants consider the appropriateness of not hospitalizing such patients. However, in the assessment-for-suicide section of the chart review checklist, consultants were asked to assess the disposition of the patient in cases in which suicidal ideation was evident and the patient was not offered hospitalization. The three high-scoring patients fell naturally into this category. In one of the three cases, the consultant wrote that the patient should have been hospitalized. The patient had scored 29 points on the scale. In the remaining two cases, the consultants indicated that hospitalization was not necessary.

DISCUSSION

The decision to hospitalize a psychiatric patient is often a source of controversy. Formerly, the focus of debate was society's responsibility, as parens patriae, vs. the patient's right to freedom and the individual pursuit of happiness. The debate has not yet been resolved, but recent developments have introduced a new dimension to old arguments. The effectiveness of psychiatric hospitalization has become more of a concern in light of current preoccupation with the high costs of health care and the push toward full insurance coverage for psychiatric disorders. Practitioners and administrators of mental health care will agree that it is more important than ever to minimize the indiscriminate use of psychiatric beds.

Despite these concerns, the subject of clinical indications for psychiatric hospitalization has received only marginal attention in professional publications. Studies have shown that the decision to hospitalize in psychiatry results from a complex interaction among the patient, the course of his illness, the patient's immediate social environment, and society's agents, who carry the dual responsibility of protecting society and providing treatment. In most situations, there is no single factor that serves to justify a hospitalization; multiple cracks in the individual's social matrix must appear before clinicians will decide to hospitalize the patient.

In order to evaluate the appropriateness of the hospitalizations occurring there, the Connecticut Mental Health Center chose an instrument, originally developed by Whittington (1966), that was modified at the center to reflect the specific character of the facility. The instrument was a checklist of indications for psychiatric hospitalization that could be rated by trained nonclinical personnel, using the patient's chart. The chief advantage of the checklist lay in its comprehensive approach to the multiplicity of factors influencing the decision to hospitalize a psychiatric patient. However, the mechanics of the scoring system also allowed a hospitalization to be justified in those few cases in which only one of the indications for hospitalization, such as suicidal behavior, was evident in the extreme.

The hospitalization checklist represents clinical psychiatry at its most pragmatic. It eschews such difficult theoretical issues as "the right to die" and "murder as pathological behavior," as well as the prevention of abuses in the involuntary treatment of the mentally ill.

The checklist is convenient for the task of justifying hospitalizations, particularly because it requires no preestablished diagnosis to achieve its ends, in contrast to other approaches currently in use. This point is emphasized because many psychiatric hospitalizations occur expressly to arrive at a diagnosis or to refine the existing formulation of the patient's problems. The instrument most certainly can be used as a check against initial reimbursement claims for hospitalization. It should not be used to justify an extension of the patient's stay in the hospital. The checklist is not constructed to perform such a task and cannot be applied to test the reimbursement claims for a patient who remains in the hospital beyond the expected length of time.

Table 4
Proposed Revision of the Hospitalization Checklist Used at the Connecticut Mental Health Center Criteria for Hospitalization

Instructions to Reviewers

(1) Rate patient on each criterion as: none = 0, slight = 1, moderate = 2, extensive = 3. Multiply the rates by the weight shown and enter the score on each criterion. Then sum scores of each criterion for total score. (2) Ratings are to be based on the patient's condition in the 7 days preceding evaluation for hospitalization. (3) In applying the criteria, an item of reported behavior should be employed to arrive at a rating on the first criterion on the list to which it applies. *Do not use* the *same* item of behavior to score a criterion that falls later in the list (e.g., suicidal behavior should not be used in rating Criteria 4 and 5).

	W	S
1. Have there been suicidal attempts or active preparations to harm self (i.e., buying a gun, etc.)?	4	___
2. Is there evidence of active suicidal preoccupation in fantasy or thoughts of patient?	2	___
3. Have aggressive outbursts occurred toward people?	4	___
4. Have aggressive outbursts occurred toward animals or objects?	2	___
5. Has the patient threatened to hurt someone else physically? (Limit to *verbal* threats.)	2	___
6. Has antisocial behavior occurred?	1	___
7. Are there evidences of impairment of such functions as reality assessment, judgment, logical thinking, and planning?	1	___
8. Does the patient's condition seem to be deteriorating rapidly or failing to improve despite supportive measures?	1	___
9. Are there physical or neurological conditions *or* a psychotic, disorganized state which require(s) hospitalization to initiate the treatment process?	2	___
10. Does a pathological or noxious situation exist among patient's family or associates that makes initiation of treatment without hospitalization impossible? *Or* does the patient's disordered state create such difficulties for family or associates that he has to be removed and hospitalized for their sake?	1	___
11. Are emotional contacts of the patient so severely limited or the habitual patterns of behavior so pathologically ingrained that the "push" of a structured hospital program may be helpful? (This criterion should not be applied to acute patients, but only to those who are so limited as to be unable to establish and maintain contacts.)	1	___
12. Does evaluation of the patient's condition require the 24-hour observation and special evaluation that a hospital provides (including stabilization or reevaluation of medication)? *Or* is patient referred for treatment of drug or alcohol dependence?	4	___
Total Score:		___

Note— *W = weight, S = score.*

The analysis of the data highlights the need to reorder several of the items in the checklist, so that redundancy in the scoring system can be avoided. The proposed revised checklist is presented in Table 4. No other revisions seem necessary, although it might prove beneficial in the future to add one item concerning the assessment of alternative approaches to hospitalization. As currently designed, the checklist does not provide enough emphasis in this area. The checklist cannot be used efficiently to screen those cases in which the patient scored more than 11 points on the scale but was not hospitalized.

The most efficient use of the checklist is the review of the appropriateness of hospitalization for patients who demonstrate few indications for hospitalization and who consequently score 11 points or less on the scale. Most of these cases raise serious questions in the minds of the clinical consultants concerning the justification for admission. The screening accomplished by the checklist serves to bring these cases to the attention of the consultants and make efficient use of their valuable time.

Finally, it may be concluded that the hospitalization checklist has been serviceable in the therapeutic environment of the Connecticut Mental Health Center. Since different facilities develop different patterns of care, it is recommended that the checklist be tried in other institutions before dissemination to other settings. Such trials would probably reveal the instrument's untapped research potential, insofar as it is able to compare various treatment settings. A wide application of the checklist would naturally generate a profile of the treatment services using the instrument. Newly admitted patients seem to exert a significant impact on the treatment environment. The admission profile provided by the checklist would serve to define better what has been an influential but hitherto unmonitored variable affecting the nature of the treatment setting.

REFERENCE NOTE

1. Massachusetts Mental Hospital Planning Project. ***Community Mental Health and the Mental Hospital: Final Report of the Massachusetts Mental Hospital Planning Project.*** Boston, United Community Planning Corporation, 1974.

REFERENCES

Ad Hoc Committee on Professional Standards Review Organizations. *Model criteria sets.* Washington, D.C: American Psychiatric Association, 1974.

CAMMER, L. *Outline of psychiatry.* New York: McGraw-Hill, 1962.

DETRE, T. P., & JARECKI, H. G. *Modern psychiatric treatment.* Philadelphia: Lippincott, 1971.

FLYNN, H. R., & HENISZ, J. E. Criteria for psychiatric hospitalization: Experience with a checklist for chart review. *American Journal of Psychiatry,* 1975, **132,** 847-850.

GROUP FOR THE ADVANCEMENT OF PSYCHIATRY. *The crisis in psychiatric hospitalization, Report 72.* New York: Group for the Advancement of Psychiatry, 1969.

GRUENBERG, E. M. Hospital treatment in schizophrenia: The indication for and the value of hospitalization. In R. Cancro (Ed.), *Schizophrenic reaction.* New York: Brunner/Mazel, 1970.

HANSON, G. D., & BABIGIAN, H. M. Reasons for hospitalization from a psychiatric emergency service. *Psychiatric Quarterly,* 1974, **3,** 336-351.

LUBORSKY, L. Clinicians' judgments of mental health: A proposed scale. *Archives of General Psychiatry,* 1962, **7,** 407-417.

LUBORSKY, L., & BACHRACH, H. Factors influencing clinicians' judgments of mental health. *Archives of General Psychiatry,* 1974, **31,** 292-299.

MAXMEN, J. S., & TUCKER, G. J. The admission process. *Journal of Nervous and Mental Disease,* 1973, **156,** 327-329.

MENDEL, W. M. Prescribing crisis treatment. In Werner M. Mendel (Ed.), *Supportive care: Theory and technique.* Los Angeles/San Francisco: Mara Books, 1975.

MENDEL, W. M., & GREEN, G. A. *The therapeutic management of psychological illness.* New York: Basic Books, 1967.

MENDEL, W. M., & RAPPORT, S. Determinants of the decision for psychiatric hospitalization. *Archives of General Psychiatry,* 1969, **20,** 321-328.

MISCHLER, E. G., & WEXLER, N. E. Decision processes in psychiatric hospitalization. *American Sociological Review,* 1963, **28,** 576-587.

NEWMARK, C. S., GENTRY, L., & GOODMAN, M. Validation of criteria for psychiatric hospitalization checklist. *Journal of Clinical Psychology,* 1977, **33,** 156-159.

RABINER, C. J., & LURIE, A. The case for psychiatric hospitalization. *American Journal of Psychiatry,* 1974, **131,** 761-764.

REGIER, D. A., GOLDBERG, I. D., TAUBE, C. A. The de facto U.S. mental health service system. *Archives of General Psychiatry,* 1978, **35,** 685-693.

TISCHLER, G. Decision-making process in the emergency room. *Archives of General Psychiatry,* 1966, **14,** 69-78.

WARNER, S. L. Criteria for involuntary hospitalization of psychiatric patients in a public hospital. *Mental Hygiene,* 1961, **45,** 122-128.

WARNER, S. L., FLEMMING. B., & BULLOCK, S. The Philadelphia program for home psychiatric evaluations, precare, and involuntary hospitalization. *American Journal of Public Health,* 1962, **52,** 29-38.

WEINER, O. D., CARONE, P. F., ZIL, J. S., URBIN, M. A., & GINATH, Y. Justifying inpatient admissions at a community mental health center. *Journal of Nervous and Mental Disease,* 1978, **166,** 153-164.

WHITTINGTON, H. G. *Psychiatry in the American community.* New York: International Universities Press, 1966.

WOOD, E. C., RAKUSIN, J. M., & MORSE, E. Interpersonal aspects of psychiatric hospitalization: I. The admission. *Archives of General Psychiatry,* 1960, **3,** 632-641.

NOTE

1. In the United States in 1975, public, private, and community hospitals together reported more than 2 million psychiatric hospitalizations (Regier, Goldberg, & Taube, 1978).