

Toward a Redefinition of Psychiatric Emergency

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Objective. To compare three methods for rating legitimate use of psychiatric emergency services (PES) in order to develop criteria that can differentiate appropriate from inappropriate PES service requests.

Method. Ratings of PES visits by treating physicians and ratings of the same visits made during review of medical records.

Study Design. Two previously used methods of identifying justified PES service use were compared with the treating physician's rating of the same: (1) hospitalization as visit outcome and (2) retrospective chart ratings of visit characteristics using traditional medico-surgical criteria for "emergent" illness episodes.

Data Extraction Methods. Data were extracted through use of a physician questionnaire, and medical and administrative record review.

Principal Findings. Agreement between the methods ranged from 47.1 percent to 74.1 percent. A total of 21.7 percent of visits were rated as true health "emergencies" by the traditional definition, while 70.4 percent of visits were rated as "necessary" by treating physicians, and 21.0 percent resulted in hospitalization. Acuteness of behavioral dyscontrol and imminent dangerousness at the time of the visit were common characteristics of appropriate use by most combinations of the three methods of rating visits.

Conclusions. The rating systems employed in similar recent studies produce widely varying percentages of visits so classified. However, it does appear likely that a minimum of 25–30 percent of visits are nonemergent and could be triaged to other, less costly treatment providers. Proposed criteria by which to identify "legitimate" psychiatric emergency room treatment requests includes only patient presentations with (a) acute behavioral dyscontrol or (b) imminent dangerousness to self or others.

Key Words. Health care utilization, mental disorders, psychiatric emergency room, emergency services clinician judgment

The 1963 Community Mental Health Act mandated emergency psychiatric care as one of "five essential services" in all federally funded community mental health service systems (Gerson and Bassuk 1980). Such a service was

believed to be critical “to prevent unnecessary [re]hospitalizations that might, in turn, foster chronicity and dependence on institutional care” (Solomon and Gordon 1986). The popularity of emergency mental health services, however, was a surprise to system architects, who originally conceptualized the service as rather unattractive because of long waiting lines and the minimal continuity of care (White-Means and Thornton 1989). Despite these limitations, research indicates that the number of visits made to psychiatric emergency services (PES) has increased dramatically over three and a half decades (Hughes 1993). The service’s role in many public outpatient mental health treatment systems has consequently become increasingly more central and complex.

The service delivery model for providing hospital-based psychiatric emergency services (PES) appears to vary widely by site. Some hospital emergency rooms (ERs) in large urban areas have designated separate areas for handling psychiatric patients. Others utilize referral to an on-call mental health specialist as needed, but maintain the patient in the general ER population. Regardless of the service delivery model used, research indicates that hospital-based PES facilities face a broad array of service requests, many of which appear to be non-emergent (Kooiman, Van de Wetering, and Van der Mast 1989; Vigiser et al. 1984; Oyewumi, Odejide, and Kazarian 1992; Vaslamatzis, Kontaxakis, and Katsouyanni 1987). Some researchers depict urban PES facilities as providers taxed to their limits by the number, complexity, and diversity of presenting problems (Solomon and Beck 1989). In addition, it has been suggested that inappropriate use of this high-priced service consumes a disproportionate quantity of available public resources (Rissmiller, Steer, Ranieri, et al. 1994; Woogh 1986).

Despite these reservations, no clear, widely accepted definition of appropriate PES use has emerged. In 1979, Bassuk and Gerson suggested that the PES’s role was to “reconcile the complex needs of the local population

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with the traditional organizational structure of [local treatment options],” suggesting that definitions of appropriate use of such services should include a broad array of treatments. A competing, classic medico-surgical viewpoint is that these costly services ought to be reserved for those who legitimately cannot “wait until Monday.” This traditional perspective would suggest that a narrow definition of “emergency” conditions is more appropriately applied to justified help-seeking in the PES, which might include only illness episodes “characterized by surprise, time constraints, high stakes, and pressure for action” (Murdach 1987). This latter definition is supported in part by a 1988 review of psychiatric decision making in the emergency room (Marson, McGovern, and Pomp), which concluded that acuteness of symptoms and inherent dangerousness were the most important variables in the decision to hospitalize. A third, more recent approach has been to use visits that result in the disposition of hospitalization as the *sine qua non* of legitimate PES help-seeking. The rationale for this approach is derived from a widely held belief that the “focal question” that must be answered about each PES visit is whether or not to admit the patient for inpatient care (Segal et al. 1995).

In recent studies, Kooiman, Van de Wetering, and Van der Mast (1989) linked a disposition of hospitalization to appropriate public service use in the Netherlands, and noted increased use of emergency services for non-trauma-related reasons. In contrast, Oyewumi, Odejide, and Kazarian (1992) categorized patient reasons for seeking PES treatment retrospectively and concluded that fully 75 percent of all such visits in Saskatoon, Saskatchewan were a misuse of services from a traditional medico-surgical viewpoint—visits described as largely prompted by a desire for “quick service.” In Israel, Vigiser et al. (1984) also used a rating system founded on the classic definition. Based on semi-structured interviews, only 29 percent of presenting complaints were rated as both “relevant” (e.g., demonstrating manifest psychiatric problems requiring intervention) and “urgent.” In a cohort of Scottish patients, only 36.4 percent of all patients, and only 10 percent of voluntary, self-referred patients were actually considered by the researchers to be in an “emergent” illness condition that required immediate psychiatric assessment (MacKenzie and Mackie 1993). Finally, using a broader definition of appropriate use, Mohan’s 1988 New Delhi review of PES cases concluded that “no misuse of services” occurred despite the fact that 20 percent of study patients required no medical intervention during the visit. No study to date, however, has compared its assumptions about justified help-seeking or its method of rating visits to other rating systems currently in use. In addition, little research in this areas has

systematically studied PES treating clinicians' view of visit appropriateness, despite the fact that their face-to-face contact with PES patients affords them the best available information about each visit's characteristics.

Based on previous work, this study hypothesized a high correlation between three methods for rating appropriate use of PES services: (1) the traditional medico-surgical definition of "emergency" illness episode (based on retrospective ratings of medical records), (2) the treating physician's judgment of visit "necessity" (based on post-visit survey), and (3) hospitalization as the outcome of the visit. A second hypothesis was that, given a high correlation between different methods of rating appropriate use of services, traditional medico-surgical criteria could be adapted for use at the time of triage to predict appropriate service use because these criteria would predict positive ratings by other visit validation methods as well.

METHODS

The study took place in Parkland Hospital, an inner-city public hospital in Dallas, Texas. During the study period, approximately 825 patients per month presented to the psychiatric emergency room, and approximately 23 percent of these patients were typically hospitalized. Maximum length of stay in the PES was generally 24 hours after which the patient was discharged, usually to some other inpatient or outpatient treatment provider.

The sample consisted of all adult patients (18 or older) presenting for treatment between May 15, 1995 and August 7, 1995 ($n = 2,134$). At the completion of each visit, treating physicians answered the question, "In your opinion, was this visit to a psychiatric emergency room necessary?" No criteria were offered to physicians as the question was designed to pull responses from their existing understanding of the role of the PES in treating illness episodes. Patient treatment was otherwise routine: the treating clinician assessed patients' clinical history and current mental status. Multiple visits by the same patient were counted as separate events for the purposes of analyses (the number of repeat visits in the total sample was 526 or 24.7 percent), because it was felt that each visit potentially represented an example of a unique service utilization pattern. There were three periods of 18–36 hours each during this study period when all available local inpatient facilities were closed to new admissions because they were full, and this likely affected the disposition decisions somewhat.

Hospital records were reviewed retrospectively to gather demographic (e.g., age, gender, and ethnicity) and visit information (e.g., admit status, presence or absence of current suicidality and substance use, DSM-IV diagnosis, and disposition). Admit status was defined as voluntary or as presentation via a police warrant¹ or via transfer from another medical emergency service. Information about current suicidality and substance use was taken from records and characterized as present or absent.

A variety of diagnostic groupings were tried for purposes of analysis. The groupings chosen represent four relatively discrete and typical local PES treatment and discharge protocols: (1) substance use and substance-induced disorders; (2) depression with suicidality; (3) psychotic disorders, including schizophrenia spectrum disorders, bipolar spectrum disorders, and psychosis not otherwise specified (nos); and (4) other diagnostic categories including depression without suicidality, situational problems including abuse and neglect, and anxiety and adjustment spectrum disorders.

Using a medical record description of the visit, four basic features of the presentation for treatment were rated to establish if an illness episode was an "emergency" from a traditional medico-surgical perspective (Table 1). A visit was viewed as "justified" in a traditional sense if numerical ratings of (a) sudden onset or exacerbation of symptoms, (b) recent onset or exacerbation of symptoms, (c) acuteness of behavioral dyscontrol at presentation, and (d) dangerousness at presentation totaled four points or higher. For purposes of other analyses, the presence of acute behavioral dyscontrol was defined as intermittent or continuous dyscontrol per chart report (score of 2 or 3), and the presence of dangerousness was defined as verbal or behavioral demonstration of intent to harm within a week prior to the visit (score of 2 or 3).

"Level of care" is a local hospital code designating the intensity and duration of PES treatment. It was adapted for this study's purposes so that Level I indicated "urgent" and "serious" care in which the patient required either immediate life-saving intervention or seclusion, or after which patients were admitted to inpatient treatment. Level II indicated intermediate or minor care during which patients required medications or laboratory tests but were treated for less than eight hours total in the PER.

Through use of chi-square or *t*-tests for discrete or continuous variables, respectively, the rated sample was first compared to all visits made to this facility during the study period. All tests were two-tailed, and, because of the large sample size of this study, $p < .001$ was selected to indicate significance. Reliability of the three rating methods was reviewed using a split-half method,

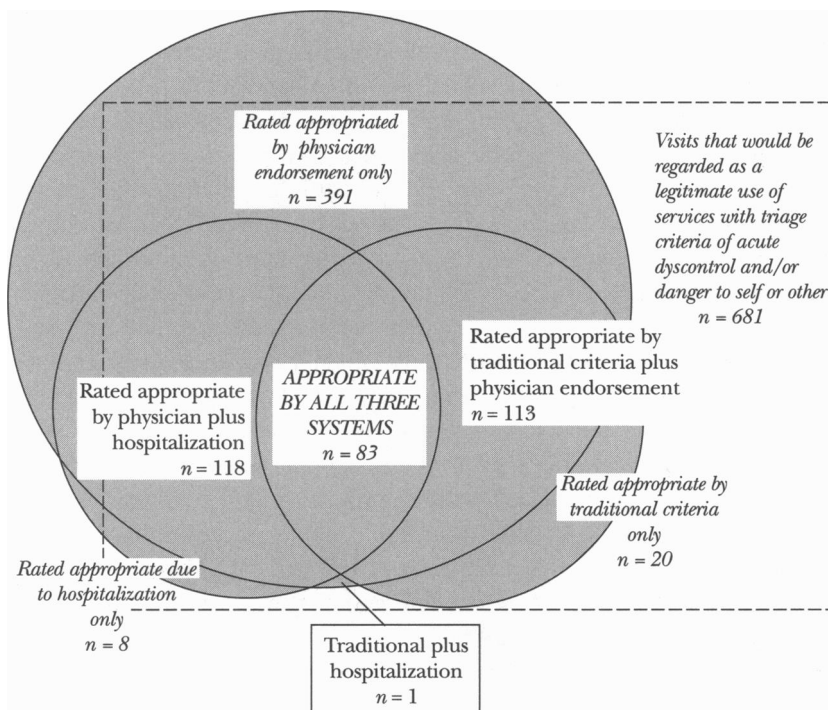
Table 1: Rating of Necessity of Visit by Traditional Criteria (Rated from Patient PES Record)

	1	0	99	
A. Onset or exacerbation of psychiatric symptoms was very sudden.	Yes	No	Unknown	
B. Onset or exacerbation of psychiatric symptoms was very recent.	1 Yes	0 No	99 Unknown	
C. Level of symptom exacerbation immediately prior to presentation in PES reached a stage that was acute and unmanageable.	3 Behavioral dyscontrol is observable in PES. Patient cannot modulate his/her own behavior and therefore requires medication/restraints/other assistance.	2 Behavioral dyscontrol is observable in PES. Patient is regarded as unreliably, possibly intermittently able to control, but recent dyscontrol is reported or observed.	1 Behavioral dyscontrol is not observable in PES; however, report of recent severe dyscontrol is received at the time of the visit from the patient or members of his/her social network.	0 No behavioral dyscontrol is observable in PES and no report of recent severe dyscontrol.
D. Symptoms indicate a clear and present danger to patient or others.	3 Patient actually physically harmed self or other within a week prior to PES visit.	2 Patient verbally and/or behaviorally indicated intent to physically harm within a week prior to PES visit.	1 Patient verbalized that he/she was experiencing impulses to harm within a week prior to PES visit.	0 No indication is made that the patient was likely to harm self or other within one week prior to PES visit.

where number of visits endorsed by each method during the first half of the study were compared by chi-square analysis with the number of visits so endorsed during the second half of the study. Agreement among the three methods for visit necessity was calculated using kappa statistics, and frequency counts were described visually in a Venn diagram (Figure 1). Because some earlier work has emphasized the components of the classic definition, individual parameters from the medico-surgical definition (e.g., sudden and recent onset of symptoms, acute behavioral dyscontrol and dangerousness) were examined with frequency counts within necessary visits by three, two, one, and no rating system endorsement. Finally, visits that were not endorsed by any rating system and visits endorsed only by the physician in the absence of acute symptoms or dangerousness were profiled.

For purposes of multiple logistic regression analysis (LR), the important

Figure 1: Venn Diagram of Overlap Among Three Methods of Rating Appropriate Use of Psychiatric Emergency Services



correlates of justified and unjustified service use were modeled from the following potential predictors: age (18–25, 25–44, 45+), gender, race (Caucasian, African American, Hispanic, other), previous psychiatric treatment history of substance abuse, admit status (voluntary versus warrant versus transfer), family or friend presence during visit (yes, no), diagnostic group (group 1 reference versus groups 2, 3, or 4), disposition (hospitalization or not), suddenness of symptom onset, recentness of symptom onset, acuteness of behavioral dyscontrol at presentation (present and at least intermittently observable versus not present), and dangerousness to self or other (verbalized or demonstrated behaviorally within a week prior to presentation for treatment versus not). The important predictors were selected according to the method described in Collett (1994), where variables were added or deleted from the model based on a change in the fit that was significant at $p < .10$. All regression models were checked for the presence of outliers (none were found), and several interaction terms were tried.

RESULTS

A total of 1,002 adult visits (46.9 percent of total visits) were used in this analysis, because sufficient demographic, clinical, and survey data were available to rate these visits by all three methods. Comparisons of this subsample to all visits made during the study period indicated that the rated sample was quite similar to the study site's population on all demographic and major clinical variables (Table 2). However, compared to study population rates, the subsample contained fewer patients with a history of prior psychiatric treatment, more accompanied patients, and fewer patients requiring more intense care in the PES. In addition, the analyzed sample tended to contain fewer patients presenting on a warrant than is reflective of the overall population. The differences between subsample and population characteristics noted here were anticipated to skew ratings of service use appropriateness slightly in different directions under different rating systems and on different analyses. However, the rated subsample overall is considered to be an adequate representation of visits during the study period for the purposes of this investigation.

Seventy-two treating physicians rated one or more patient visits for necessity. As a group, they rated a total of 705 of 1,002 (70.4 percent) visits as a legitimate use of psychiatric emergency room services. In contrast, retrospective chart review of all visits resulted in 217 (21.7 percent) visits scored as "justified." The hospitalization rate for the analyzed sample was 21.0 percent.

Table 2: Characteristics for Whole Sample and Rated Subset

	<i>Whole Sample</i> (n = 2134 visits)		<i>Rated Subset</i> (n = 1002 visits)		χ^2 (df)	p-Value
	N	%	N	%		
Age						
18–25	381	17.9	190	19.0	0.827 (2)	.661
26–45	1344	63.0	615	61.4		
> 45	409	19.2	197	19.7		
Male gender	1102	51.6	537	53.6	1.042 (1)	.307
Race						
White	1169	54.8	550	54.9	1.039 (3)	.792
African American	679	31.8	306	30.5		
Hispanic	250	11.7	128	12.8		
Other	36	1.7	18	1.8		
Treatment groups by diagnosis						
1. Substance abuse disorders	420	19.7	198	19.8	2.409 (3)	.492
2. Depression without suicidality; situational problems; anxiety and adjustment spectrum disorders	859	40.3	415	41.4		
3. Depression with suicidality	119	5.6	43	4.3		
4. Psychotic disorders: schizophrenia, bipolar, psychosis not otherwise specified	736	34.5	346	34.5		
Visit precipitated by suicide attempt	302	14.2	128	12.8	1.093 (1)	.296
History of substance abuse	725	34.0	356	35.5	0.730 (1)	.393
Prior psychiatric treatment	1173	55.0	611	61.0	10.045 (1)	.002
Presentation via police warrant	732	34.3	301	30.0	5.607 (1)	.018
Patient accompanied to psychiatric ER	1029	48.2	602	60.1	38.429 (1)	.001
Level of care						
I: Urgent care	656	30.7	240	24.0	15.396 (1)	.001
II: Minor care	1478	69.3	762	76.0		
Hospitalized	491	23.0	210	21.0	1.651 (1)	.199

Reliability of Rating Systems. Ratings of visits made during the last half of the study period were compared to ratings made during the first half of the study period in order to assess reliability across data collection. Physicians rated a total of 69.9 percent of visits during the first half of the study and 70.8 percent of visits during the second half of the study as justified ($\chi_2 = 0.113$)

(1), $p = .737$). Retrospective chart ratings using classic medico-surgical criteria endorsed 19.5 percent of first-half visits and 23.6 percent of second-half visits as necessary ($\chi^2 = 2.437$ (1), $p = .119$). Finally, the first-half hospitalization rate was 17.7 percent, in contrast to a 24.0 percent second-half rate ($\chi^2 = 6.03$ (1), $p = .014$). This variability, as stated earlier, was due partially to the lack of availability of inpatient beds three times during the study period. Adequate split-half reliability of ratings was thus demonstrated to proceed with analyses of the overlap between systems.

Overlap Between Rating Systems. Figure 1 describes the significant similarities and differences between these three systems visually. Eighty-three visits (8.3 percent) were rated by all three systems as appropriate and 268 visits (26.7 percent) were rated by all three as inappropriate. An additional 231 visits (23.1 percent) met criteria under two of the three rating systems. Analysis of the congruence between the individual rating by medico-surgical definition and physician rating (Table 3) yielded a low kappa (kappa (1) = 0.141), despite congruent ratings on 47.1 percent of visits. This was due in part to the fact that fully half of the remaining visits (509 of 1,002) were classified by physicians as necessary but by the chart rating system as unnecessary. In addition, ratings of visits resulting in a disposition of hospitalization correlated poorly with ratings by traditional emergency criteria (kappa (1) = 0.229), despite the fact that these two criteria sets classified 74.1 percent of all visits in the same way. Finally, the two physician-based measures (physician rating of visit and hospitalization) also demonstrated weak correlation by kappa (kappa (1) = 0.172), and only agreed on 48.8 percent of all visits.

Frequency Counts of Acute Behavior Dyscontrol and Dangerousness in Multiply Endorsed Visits. To explore the findings by Marson, McGovern, and Pomp (1988) about the role of acute symptom exacerbation and dangerousness, visits that were validated by more than one rating method were then correlated with these two visit features (Table 4). Patient presentations with high levels of behavioral dyscontrol or dangerousness were present in 100 percent of the visits endorsed by all three rating methods, as well as 100 percent of visits endorsed by the combination of classical definition and physician rating and 100 percent of those endorsed by the traditional emergency definition that also resulted in hospitalization. In addition, at least one of these factors was present in 85.6 percent of all visits that the physician viewed as appropriate and that resulted in hospitalization. Current behavioral dyscontrol alone was present in 69.5 percent ($n = 146$) of all hospitalized patients, and dangerousness alone was present in 51.4 percent ($n = 108$) of hospitalized patients. Either behavioral problems or dangerousness was present in 91.4 percent

Table 3: Agreement Among Three Ratings of Legitimate Use of the PES

	<i>"Unnecessary" visit per physician rating</i>		<i>"Necessary" visit per physician rating</i>		<i>kappa: 95% C.I.</i>
	n	(cell %)	n	(cell %)	
Medico-surgical criteria					
Inappropriate visit	276	(27.5)	509	(50.8)	0.141
Appropriate visit	21	(2.1)	196	(19.6)	0.108–0.173
Disposition					
Not hospitalized	288	(28.7)	504	(50.3)	0.172
Hospitalized	9	(0.9)	201	(20.1)	0.141–0.203

	<i>Disposition: Not Hospitalized</i>		<i>Disposition: Hospitalized</i>		<i>kappa: 95% C.I.</i>
	n	(cell %)	n	(cell %)	
Medico-surgical criteria					
Inappropriate visit	659	(65.8)	126	(12.6)	0.229
Appropriate visit	133	(13.3)	84	(8.4)	0.160–0.299

(n = 192) of hospitalized patients. Generally, the combination of these two factors proved to be a better predictor of multiply endorsed visits than either factor alone or than any single rating method.

When visits resulting from a police warrant or from a transfer from other emergency areas were examined in the absence of these two factors, only one transfer patient and only two patients presenting on warrant had visits endorsed by more than one rating method. Finally, when those visits that required a more intense level of care in the absence of acute behavioral problems or dangerousness were compared by rating system, 14 of 146 visits were validated by physician rating and resulted in hospitalization. No visit in this category was multiply endorsed by any other combination of rating systems.

Correlates of Other Visit Types. Physicians validated almost three times as many visits as either of the other two methods. Multiple logistic regression analysis of physician-endorsed visits in the absence of acute behavioral problems and/or dangerousness revealed that the presence of family (odds ratio [OR] = 2.54) and a history of psychiatric problems (OR = 1.70) increased the likelihood of valid use ratings. In addition, male gender decreased the likelihood of such ratings (OR = 0.62).

Table 4: Percent of Appropriate Visits in Which Classic Elements of an Emergency Illness Episode Were Present (n = 1,002)

	Where Neither Acute Dyscontrol nor Dangerousness Is Present:					More intense level of PES care (N = 146)
	Acute Behavioral Dyscontrol and/or Dangerous (N = 681)	Acute Behavioral Dyscontrol (N = 397)	Dangerous to Self or Other (N = 477)	Sudden symptom onset (N = 21/321)	Recent symptom onset (N = 53)	
+ Traditional + Physician + Hospitalized (n = 83)	100% (83)	89.2% (74)	84.5% (71)	0.0% (0)	0.0% (0)	0.0% (0)
+ Traditional + Physician - Hospitalized (n = 113)	100% (113)	63.7% (72)	87.6% (99)	0.0% (0)	0.0% (0)	0.0% (0)
- Traditional + Physician + Hospitalized (n = 118)	85.6% (101)	55.9% (66)	29.7% (35)	0.0% (0)	1.69% (2)	4.3% (2)
+ Traditional - Physician + Hospitalized (n = 1)	100% (1)	0% (0)	100% (1)	0.0% (0)	0.0% (0)	0.0% (0)

continued

Table 4: Continued

	Acute Behavioral Dyscontrol / or Dangerous (N = 681)	Acute Behavioral Dyscontrol (N = 397)	Dangerous to Self or Other (N = 417)	Where Neither Acute Dyscontrol nor Dangerousness Is Present:				More intense level of PES care (N = 146)
				Sudden symptom onset (N = 21/321)	Recent symptom onset (N = 53)	Present on warrant (N = 47)		
- Traditional - Physician + Hospitalized (n = 8)	87.5% (7)	75.0% (6)	21.5% (1)	0.0% (0)	12.5% (1)	2.1% (1)	0.7% (1)	
+ Traditional - Physician - Hospitalized (n = 20)	100% (20)	75.0% (15)	90% (18)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	
- Traditional + Physician - Hospitalized (n = 391)	67.0% (262)	31.7% (124)	35.3% (138)	3.32% (13)	6.90% (27)	46.8% (22)	40.4% (59)	
No + rating (n = 268)	35.1% (94)	14.9% (40)	20.2% (54)	2.98% (8)	8.58% (23)	46.8% (22)	49.3% (72)	

In addition, 268 visits were rated by all three methods as representing an unnecessary use of services. Correlates of these visits by multiple logistic regression analysis indicated that unaccompanied patients (OR of presence of family or friends = 0.49) who presented voluntarily (OR of presentation of a warrant = 0.45 or via transfer from another emergency service = 0.52) with a gradual onset of symptoms (OR of sudden symptom onset = 0.40) and no acute symptom exacerbation (OR = 0.16) or recent dangerousness (OR = 0.20) were most likely to be judged as inappropriate consumers of psychiatric emergency room services.

DISCUSSION

Contrary to study hypotheses, the present study's findings reveal a substantial discrepancy among various systems for rating the appropriateness of psychiatric emergency room visits. Physicians treating patients in the middle of the crisis are almost three times as likely to rate (endorse) a visit as a justified use of services as either of the two other rating methods. Thus, the consensus among researchers that there is gross overutilization of the PES (e.g., Kooiman, Van de Wetering, and Van der Mast 1989; Mohan 1986; Vigiser et al. 1984; Oyewumi, Odejide, and Kazarian 1992; Vaslamatzis, Kontaxakis, and Katsouyanni 1987; Gyllenhammar et al. 1988) seems somewhat serendipitous, considering the poor match among rating methods demonstrated here. Because they were not otherwise queried about the rationale for their ratings, it is not possible to provide a definitive explanation for the physicians' higher rate of endorsement. However, it is important to remember that these clinicians are trained in the practical realities of an under-resourced system, and such a perspective may well have affected their judgments. It is conceivable that they endorsed visits that they believed would not be adequately treated in other settings rather than only those truly requiring emergent care.

A variety of evidence types suggest that findings from this study can be generalized to other settings. First, to the extent that samples used in studies of PES utilization are described in the literature, all appear quite similar in their portrayal of PES patient populations as extremely diverse, varying widely by age and cultural group, diagnosis, and disposition. As such, results of the present analysis of appropriate service utilization in a widely varying patient population are expected to be relevant in PES settings where the practice is to extend treatment to any patient seeking care.

A second line of evidence suggesting that present study results may be generalizable involves the examination of findings of different studies when similar criteria are employed to identify legitimate service use. Few studies have used identical methods for evaluating legitimate help-seeking. However, classic medico-surgical criteria applied to visits in the present sample and a 1987 Canadian sample (Oyewumi, Odejide, and Kazarian 1992) yielded quite similar results. Twenty-five percent of the Saskatoon patients were deemed “appropriate” PES help-seekers, while this present analysis validated 21.7 percent of visits using the same criteria. The similarity supports assumptions about both a similar range of presenting problems and application of the rating method. Rates of hospitalization, employed as a second measure of legitimate service use here, ranged in previous studies from 17.0 percent to 32.0 percent (e.g., Vigiser et al. 1984; Kooiman, Van de Wetering, and Van der Mast 1989; Oyewumi, Odejide, and Kazarian 1992), and the current sample’s rate of 21 percent fell within this range. Evidence that the decision to hospitalize was based on similar criteria in all studies is not available. However, patients who were hospitalized in the present study generally did demonstrate either acute behavioral problems and/or dangerousness. These criteria were identified in the Marson, McGovern, and Pomp (1988) review as consistently significant across a number of earlier PES studies of dispositional decision making. Therefore, hospitalization as the visit outcome in this sample appears to have been utilized in a manner consistent with practice in a number of other PES facilities, and similar analyses based on these criteria could therefore be expected to be replicated elsewhere.

Finally, the potential generalizability of findings is supported by statistics showing good split-half reliability comparisons for ratings by both physicians and medico-surgical criteria. Both rating systems appear to have been used with consistency across time, and the physician rating system appears particularly strong across some 70-plus different raters working in the same site.

What criteria *should* be employed to judge appropriate help-seeking in the PES? Using only a disposition of hospitalization as such a marker seems problematic for a variety of reasons. The original intent of these services was to prevent hospitalization if possible, so a “legitimate” PES visit traditionally would be a visit in which hospitalization was prevented. Therefore, while most of those PES cases resulting in hospitalization may well represent true psychiatric emergencies when judged by many standards, some PES cases discharged to outpatient follow-up may also be “legitimate” psychiatric emergencies. Thus, hospitalization as a criterion by which to judge legitimate PES help-seeking may have high “specificity,” but particularly low

“sensitivity.” In addition, current access to hospital treatment is “managed” differently in diverse emergency care systems. Finally, the practical utility of hospitalization as such a standard is limited by the fact that it requires visits to have taken place before the appropriateness of service use can be judged. Although this is not a problem in retrospective or preliminary research, it will not serve well either in prospective research or as a PES clinical admission criterion utilized at the time of triage (e.g., “triage-based” criteria).

The traditional medico-surgical definition of emergency illness episodes also appears to have limited utility when applied to psychiatric illness episodes in that two of the four classic criteria—suddenness and recentness of symptom onset or exacerbation—are not validated by these results. But even though this classic description of medical conditions requiring urgent treatment invalidates presentation after delayed help-seeking, the results of these analyses may be interpreted to suggest that psychiatric emergencies may be qualitatively different from other kinds of health care crises. Based on this study’s results, fewer than 5 percent of all visits identified as an appropriate use of PES services were validated by any combination of criteria *in the absence of* either dangerousness or behavioral dyscontrol.

Taken as a whole, these analyses suggest that the emergent need that requires specialized treatment in psychiatry is for treatment of (a) acute loss of behavioral control and (b) imminent dangerousness. In fact, this study’s results extend Marson, McGovern, and Pomp’s (1988) conclusions by demonstrating that presentations involving acute behavioral dyscontrol and/or recent dangerousness may be not only the best predictors of hospitalization but the best match to the services offered by a psychiatric emergency service located in a hospital-based ER.

A major implication of these results is that costly psychiatric emergency services may be best suited for only a small number of presenting complaints. This view corroborates the conclusions of many other health services researchers who have pointed out that the psychiatric emergency room is not an optimal setting in which to provide customary outpatient treatment of most psychiatric disorders. As early as two decades ago, Bartolucci and Drayer (1973) pointed out that “even a skill as fundamental as educated listening . . . is difficult to preserve in the charged atmosphere of a room called ‘Emergency.’” Solomon and Gordon (1986) commented that “it is particularly difficult to deliver quality care to chronic patients in the highly charged and fast-paced emergency room setting,” when they labeled overuse of acute care psychiatric services a “crisis orientation towards mental health.” Way, Evans, and Banks (1992) observed that the time constraints

involved in emergency room triage make even appropriate disposition in this setting extremely difficult, and Lieberman and Becker (1985) demonstrated the unreliability of PES diagnoses. While the present study provides strong support for the role of PES in treating acute and dangerous manifestations of psychiatric illness, it also provides a rationale for the practice of triaging most other patient presentations to alternative, community-based treatment providers.

CONCLUSIONS

Padget and Brodsky (1992) point out that all ER services, and not just PER services, are probably overutilized. She notes that:

The convenience and accessibility of the urban hospital ER are powerful incentives to its use. The facility provides sophisticated diagnostic and treatment services 24 hours a day, every day of the year with no appointment or physician referral necessary. In contrast, health clinics are often experienced as inaccessible and/or unaffordable and the wait for an appointment might take days or weeks.

As such, PES overutilization can be viewed as part of a large and powerful trend in health service utilization patterns.

Like other ER populations, the current PES population presents as a diverse group of patients requesting a wide variety of services and treatment modalities. This heterogeneity, as Bachrach (1981) has suggested, may be at least partly attributable to the interplay between local demographics and policies affecting service delivery. In fact, the nature of service provision has traditionally been driven by people who show up for treatment rather than by those who can be competently treated in the setting providing care. However, the analyses presented in this article suggest that it is possible to determine at triage those psychiatric patients who are best treated in that facility and those who, despite requesting services in the PES, are best treated elsewhere. Further, when taken in the context of other research, study results suggest the advisability of developing new ways to direct patients to the service that best matches their treatment need by using, among other strategies, a careful triage procedure housed in the hospital emergency service. Such a "triage-based" PES referral function has recently been advocated by Ries (1997) working in conjunction with other community-based treatment providers.

In this study, the discrepancies among recent methods used to rate the appropriateness of PES visits provide evidence that all of them taken alone

have serious shortcomings. Acute behavioral problems and/or danger to self or others were found to be common factors in a high percentage of multiply endorsed visits. These two criteria singly or in combination are present in 681 (68.0 percent) of current study visits. This “definition” of appropriate PES use is less complex than the definition represented by the spectrum of visits currently validated by physician rating. However, these two presentations are perhaps best matched to the nature of care available in this environment. Although future research is needed, it seems advisable now—three-and-a-half decades after the design of PES services—to define clearly the patient population that can competently be served in the PES, as well as those patients who are more appropriately referred elsewhere for community-based care.

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NOTE

1. Although the number of patients brought to emergency room facilities by the police may vary widely across the United States, the mandate that a physician must be the final decision maker for involuntary psychiatric hospitalization has become standard practice in most locations. Any law enforcement officer can fill out a warrant in Texas called an APOWW—apprehension by a police officer without a warrant. This warrant orders an involuntary patient to be evaluated in a psychiatric emergency room for evidence of dangerousness to self or others. In addition, any citizen can present to a mental illness court judge an affidavit that describes behavior requiring a psychiatric evaluation. If the affidavit is filed, a mental illness warrant is issued and executed within two weeks.

However, in Texas no emergency room physician is obligated to hospitalize a patient brought to the psychiatric emergency room by APOWW or MIW apart

from following criteria for admission set by the Texas Mental Health code. Each PES patient who presents for treatment in this manner is evaluated independently and a disposition decision is made based on the results of this independent evaluation.

Few published data are available to compare with this study's peace officer-referred sample. Twenty-five percent of study sample patients brought to Parkland Hospital's PES by peace officer warrant (APOWW) were hospitalized ($n = 59/302$), compared to a hospitalization rate of almost 50 percent of police-referred patients in a 1991 Cincinnati sample (Sales 1991). In general, however, each of these two rates is consistent with the percentage of all patients presenting for PES treatment who are discharged from the PES to inpatient care.

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