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TREATMENT EFFECTIVENESS IN LOS ANGELES COUNTY PSYCHIATRIC INPATIENT FACILITIES

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This paper focuses on outcome evaluation in Los Angeles County Inpatient facilities. The Client Episode Outcome Summary was collected on 919 clients. Results indicate that:

1. On an average of 13.8 hospital days, clients showed substantial improvement as reflected in global impairment scores, and
2. Age and diagnosis had a significant relationship to pre- and post-ratings.

There was a wide range of severity at initial and final contact for specific problems with marked improvement for some and little for others. It is important to note that the most frequently mentioned problems as well as the most common primary problems all had marked improvement.

A REPORT ON TREATMENT EFFECTIVENESS FOR TWO MONTHS IN INPATIENT FACILITIES IN LOS ANGELES COUNTY

INTRODUCTION

The necessity of evaluating the Short-Doyle Mental Health Services is very apparent to all professional and legislative persons involved in planning and delivering services and to the general public at large. The public and the Board of Supervisors need to be assured that the monies spent in the local Short-Doyle program are achieving the desired results.

One way of measuring results is to measure symptom reduction. The methodology of the present study used outcome measures comparing the severity of symptoms at the beginning and end of a treatment episode. The instrument chosen by the Mental Health Evaluation and Research Division to measure severity of symptoms was the Client Episode Outcome Summary (CEOS). This instrument was developed and tested by the California State Department of Health over a two and a half year period.[1] This includes its operational use for one year in five test counties throughout the State.

The final version of the CEOS was chosen because it has face validity. Most of its measurement items were developed by asking clinicians throughout the Short-Doyle program to list the most prevalent behaviors that they treated. Those behaviors that were listed were then synthesized into discrete groupings. Interestingly, almost all of the behavioral items developed by this method were very similar to those behaviors that were factor-analyzed by Spitzer from his Psychiatric Status Schedule.[2] Because of this similarity, the State Department of Health adopted a modified version of the factors from the Psychiatric Status Schedule.

Los Angeles County Mental Health Services chose this same instrument to measure treatment effectiveness because its use was to be mandated statewide in the near future. To develop and implement its own outcome instrument would put an undue burden on the facilities delivering the

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[1] Hansen, M.R., et al, "Five County Cost Effectiveness Study", State Department of Mental Health (Unpublished Manuscript), October, 1974.

[2] Spitzer and Endicott

mental health services in Los Angeles County.[3] One of the procedures of the State's study was the use of the CEOS to determine cost-effectiveness indices in California, and some aspects of this procedure were involved in this study. This paper specifically focuses on 1) improvement by patient characteristics; 2) improvement by facility; and 3) patients' severity and frequency of problem areas.

METHODOLOGY

Essentially, this study follows the five county design mentioned in the introduction. The original subject population for Los Angeles County's study was to be all patients from all Short-Doyle facilities which, therefore, included the three major treatment modalities of inpatient, outpatient and day treatment. However, this paper is concerned only with data from inpatient facilities. Excluded from this inpatient group were all clients who received only clinical evaluation services and patients in programs that were designated as 100% drug or alcohol. Thus, this report deals only with the treatment outcome in the mental health inpatient facilities.

In preparation for the project a CEOS training manual was developed and distributed to all Short-Doyle agencies. Training sessions were held for therapists from each of the providers, who in turn held sessions for the remaining therapists at their facility. The sessions covered explanation of the study, complete instructions for use of the CEOS including definitions of all items, and administrative details relating to the collecting and reporting of the data. A copy of the CEOS is included (see Appendix A).

The use of the CEOS was initiated in October 1974 in all the inpatient facilities, and the forms were completed on each client who met the criteria described above. The CEOS was filled out after the initial contact with the client and also at termination of treatment. The therapist rated the client on global impairment, a measure of overall functioning, on a scale from 1 to 7. The scale ranges from "1"--"no symptoms observable or reported", to "7" -- "symptoms are very severe and client fails to meet most or all role and performance requirements." The therapist also

[3] Similar instruments are being used in Connecticut, Massachusetts and New York.

rated the client's impairment on thirty specific problem categories on a scale of 1 to 5. On this scale, "1" means "No impairment" and "5" means "severe impairment - reported or observed failure in usual performance levels."

At discharge, a patient admission/discharge form (CL-12) was also completed on each patient. This form contains the demographic characteristics of the patient and services received. These were sent in to the Evaluation and Research Division along with the CEOS. The forms were checked for completeness and accuracy. If any procedures were misunderstood or information was missing, the forms were returned and clarifying feedback was given to the provider. By November the process of data collection was well underway, and the therapists were fully familiar with the form. As of January 13, 1975, the providers no longer had to attach the CL-12 form with the outcome form, so the demographic data was no longer available. In March, the study was discontinued.

The months of November-December were chosen as a data base for the present study because by then the control on quality was good, and demographic data were still attached. During these two months, CEOS and CL-12 information was collected on most of the patients from all but two of the 14 inpatient facilities. A total of 919 clients were rated. Analyses of different variables involves different numbers of patients, depending upon the information available for each patient. For instance, only those patients who had both pre- and post- ratings on global impairment were included in global improvement. Also, numbers of patients for specific problem categories varied as only selected categories applied to each patient.

FINDINGS

Patient Characteristics - Partial or complete outcome information from the Client Episode Outcome Summary and CL-12 form was collected on 919 clients from the 12 inpatient facilities. The demographic characteristics of these clients closely matched those of all of Los Angeles County's Short-Doyle inpatient population, which gives credence to the generalizability of the data findings. (See Table I.) The total number of clients discharged from inpatient facilities for November and December was 2,141. The sample size

of clients with pre- and post- global ratings was 782, approximately 36% of all discharged clients. The mean number of inpatient hospital days for the sample was 13.8 days compared to 15.2 for Los Angeles County inpatients. The sample only contained patients admitted and discharged within three months, whereas some lengths of stay for Los Angeles County inpatients are longer.

Global Impairment - Therapists rated their clients at the beginning and end of treatment on global impairment, an overall rating of total impairment in daily functioning and role requirements. The scale ranges from 1 with a definition of no symptoms observable to 7 with a definition of symptoms very severe. Seventy-six percent of the initial ratings were either 5, 6 or 7; 24% were 2, 3 or 4. This means that most clients began treatment with at least moderately severe symptoms and with impairment in functioning in one or two important roles. Those who started with the more severe ratings had a mean improvement of 2.54; those with the less initial severity had a mean improvement of 1.37. This indicates a greater change for those clients who began treatment more impaired and who had more possibility for change. The mean global impairment score at admission was 5.30; the post treatment score was 3.04. This shows an average improvement of 2.26 points or a client movement from moderately severe symptoms to mild symptoms. Thus, on an average of 13.8 days the clients showed substantial improvement as reflected in the global scores.

Improvement and Patient Characteristics - Repeated measures of analyses of variance of global scores were run separately for race, sex, marital status, legal status at admission, diagnosis, age and discharge status. Only three of these variables were related to pre- or post- global ratings: age, diagnosis and discharge status.

Age and diagnosis of clients had a significant relationship to pre- and post- global ratings. The general finding that the higher the rating at the beginning of treatment, the greater the amount of change holds true also by age and diagnosis groupings. In terms of age, the greatest change was for the age group of 25 to 34 years. The next greatest change was for the ages 35-45. The least amount of change was for adolescents. (See Table II.) For diagnoses, the greatest amount of change was in the "Other Psychoses" category, which is predominantly psychotic depression. Generally, those clients with the greatest amount of change were in the diagnostic categories of psychotic disorders. At the other extreme were personality disorders, organic brain syndromes and behavioral disorders of childhood and adolescence. In Table III, which displays the global impairment ratings by diagnoses, the categories are arranged in order of the largest to the smallest amount of change.

Discharge status was analyzed by those who completed services and those who apparently dropped out. Although the pre- global ratings of those who left treatment against medical advice were not different from those who completed treatment, there was a large difference on the post-global ratings: 2.80 to 4.12 (see Table IV). Thus, those clients who completed their therapy program showed substantial gains and moved almost three points on the scale to a "3" rating of mild symptoms and increased effort in carrying out daily activities and role requirements. It seems then that the pre- global impairment ratings are no indicator or potential predictor of whether a client will be a drop-out or a person who will complete treatment.

Improvement and Facilities - The data came from 12 inpatient facilities, with the number of discharged clients in each ranging from three to 226. Analyses of individual facilities indicated a fairly wide range of pre- and post- mean scores and a wide range of differences from pre- to post.

The highest mean pre-global rating by provider (n = 29) was 6.00 for Unit B (see Table V).[4] The lowest was 4.28 for Unit M. The facility with the highest final impairment mean (n = 36) was E with 3.78[5] and Provider J had the lowest final global mean at 2.48. Amount of improvement ranged from 1.0 points to 2.59 points with Provider C having the most amount of improvement.

Cost and Patient Improvement - The cost per unit of change was computed for each facility as a way of estimating a cost-change index. The cost-change formula was:

$$\frac{\text{Total costs for all patients}}{\text{Total units of change for all patients}}$$

The total costs for all patients is the number of days used times the unit provisional cost per day, which ranges from $80 to $167 by facility. The total units of change is the total amount of movement from pre--to post-ratings on the global scale. This formula yields a cost-change index which indicates the amount of dollars it takes an average patient to move a unit of change on the global impairment scale.

This cost-change index, originally used by the State in the Five County Study, is the first step towards a cost-change analysis. It is not an in-depth analysis of improvement by cost, as it does not take other relevant factors of cost into consideration. For instance, the unit cost includes training and special programs in some facilities and not in others. More meaningful figures can be obtained when the unit cost figures by facilities are based on identical services. Also, there is no simple consistant explanation for the wide range of values in this cost-change index. Differences in unit cost, average number of days or amount of global change by facilties showed no consistant relationship to the index. Facility differences on pre- and post-global rating means also showed no consistent relationship to the index. An individual explanation of cost, days and patient improvement involved for each facility might give the clearest picture of cost-change by facility.

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[4] One other facility (A) with an n of 3 had an initial mean of 6.00.

[5] Facility A with an n of 3 had a final mean of 5.00.

Following is a listing of the cost-change index based on November and December inpatient discharges from the adult facilities: these figures should be regarded cautiously, with no inferences or interpretations made of this data at this time. It is a beginning of a cost-change analysis which may be better understood through further studies.

Facility Random Letter	Facility Ranking	Cost-change Index
C	1	$ 439
J	2	490
G	3	525
B	4	569
E	5	650
D	6	677
F	7	845
K	8	978
A	9	1,013
L	10	1,033
I	11	1,199

Severity and Frequency of Specific Problems - Thirty areas of specific problems were rated for the degree of impairment (1 = no impairment to 5 = severe impairment) on initial and final contacts with the inpatients. An analysis of the means of these individual problem areas at each contact was made and the data revealed some interesting results (see Table X). The parenthetical numbers represent the means of these individual problem areas.

Those problems that were rated most severely at the beginning of treatment (4.1) were:

Suspicion-Persecution-Hallucinations
Grandiosity
Drug Abuse
Situational Crisis
Wage Earner Role
Mate Role-Marital Problems

Other categories high in initial severity at 4.0 were:

Denial of Illness
Alcohol Abuse
Depression
Inappropriate Affect, Appearance or Behavior

The areas of concern marked lowest in mean severity at initial contact were:

Antisocial or Illegal Acts (3.6)
Sexual Problems (3.6)
Housekeeper Role (3.6)
Motor Retardation-Lack of Emotion (3.7)
Somatic Concern-Physical Problem (3.7)
Disorientation-Memory Impairment (3.7)
Social Isolation (3.7)

At final contact the Maturational Problem category was rated as having the most amount of impairment (3.4). The other problems that were ranked as the most severe at the end of treatment are: Mate Role-Marital Problems (3.3), Wage Earner Role and Prolonged Exposure to Poor Environmental Conditions (3.2).

The lowest impairment rating at final contact was in the Suicide-Self-Mutilation category (1.9). The other problems that were rated as being low in final impairment were:

Danger to Others (2.1)
Agitation-Excitement (2.2)
Speech Disorders (2.3)
Reported Overt Anger (2.3)

There was improvement reported in all thirty problem categories. The greatest change for a category was 2.0 in the Suicide-Self-Mutilation problem area. The next greatest change was in Danger to Others (1.8). The following areas were next in amount of positive change:

Agitation-Excitement (1.7)
Suspicion-Persecution-Hallucinations (1.6)
Inappropriate Affect, Appearance or Behavior (1.6)
Disorientation-Memory Impairment (1.6)

Also making large gains were: Drug Abuse, Reported Overt Anger, Speech Disorders and Depression (1.5).

The smallest change was for Maturational problems (.5). Following closely were:

Sexual Problems (.6)
Prolonged Exposure to Poor Environmental Conditions (.6)
Student or Trainee Role (.7)
Parent Role (.7)

Also small in amount of change were the categories of Mate Role-Marital Problems, Social Isolation and Wage Earner Role at .9.

The problems rated most severely which improved the most were:

Suspicion-Persecution-Hallucinations (4.1 to 2.5)
Suicide-Self-Mutilation (3.9 to 1.9)
Agitation-Excitement (3.9 to 2.2)
Drug Abuse (4.1 to 2.6)
Situational Crisis (4.1 to 2.7)
Inappropriate Affect, Appearance or Behavior (4.0 to 2.4)
Alcohol Abuse (4.0 to 2.6)

Categories which retained initial low severity ratings at final contact (compared to the other categories) were:

Disorientation-Memory Impairment (2.1)
Motor Retardation-Lack of Emotion (2.4)
Somatic Concern-Physical Problem (2.4)

Out of 911 inpatients, the number who entered services with impairment (2 or greater) in a specific category ranged from 68 with the Student or Trainee Role problem to 529 with the Depression problem area. Fifty-seven and a half percent of the patients had Depression as a problem area; Fifty-five and four-tenths percent had Anxiety.

Most frequently mentioned categories were:

Depression (57.5%)
Anxiety (55.4%)
Inappropriate Affect, Appearance or Behavior (43.8%)
Impulse Control (39.7%)
Suspicion-Persecution-Hallucinations (38.5%)
Daily Routine-Leisure Time Impairment (38.2%)

The least common problem areas were:

Student or Trainee Role (7.5%)
Sexual Problems (8.9%)
Parent Role (10.6%)
Grandiosity (11.4%)
Housekeeper Role (12.4%)

It is interesting to note that the most common problems--Depression, Inappropriate Affect, Appearance or Behavior and Suspicion-Persecution-Hallucinations--were all listed among those with the greatest improvement. Of the least common problems, Student or Trainee Role, Parent Role and Housekeeper Role were among those with the least change. Speech Disorders and Disorientation-Memory Impairment, also some of the least mentioned items, were included among those that improved the most.

Therapists also indicated on the form which single problem area would be the primary focus of their effort. The three most common problems that were indicated as a primary focus of therapists' effort were Drug Abuse, Suspicion-Persecution-Hallucinations and Depression. All three of these categories were also high on the list of those that had the most severe ratings and improved the most. It is interesting to note that although the frequency of Drug Abuse was ranked as 19th, it was the number one focus of the therapist.

In sum, there was a wide range of severity at initial and final contact for the specific problems with marked improvement for some and little for others. It is heartening to note that the most frequently mentioned problems as well as the most common primary problems all had marked improvement.

Analyses of Specific Problems - The specific problem category scores of Alcohol Abuse, Drug Abuse and Suicide-Self-Mutilation were analyzed using initial and final ratings with respect to differences among race and sex.[6] Analyses of variance were completed and indicated pre- to post-ratings and sex to be significant interactions (significant at <.05 level). In the Alcohol Abuse classification (see Table VI) male patients were rated as having more severe impairment (4.10) than females (3.80) on initial contact of service with a difference of .30. Although male clients' scores were still more severe than females' at the final rating, the difference decreased to .19.

In the Drug Abuse problem category (see Table VII), female patients were rated as having more severe impairment (4.27) than males (4.02) at the initial contact of service. However, at final contact, these females had improved sufficiently to have approximately the same rating of impairment as the males, 2.57 and 2.58 respectively.

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[6] These problem areas were among those that had highest initial severity and most improvement.

In the Suicide-Self-Mutilation category, (see Table VIII) female clients began their hospitalization with a more severe impairment rating (3.91) than male clients (3.8). However, they were discharged with less severe impairment (1.88) ratings than the males (2.00).

Additionally, the Negativism-Obstinancy problem category scores were analyzed by Legal Status at Entry - whether the patient's admission was voluntary or involuntary The initial and final contact problem ratings of severity of impairment are significant at the .01 level. Involuntary admission clients began services with the more severe impairment of 3.95 and ended services with the less severe impairment of 2.39. Voluntary admission clients had initial and final impairment scores of 3.60 and 2.57 respectively. (See Table IX.)

SUMMARY

Inpatient discharges for November and December 1974 were analyzed for changes in global impairment rating and the incidence and severity for individual problem areas. The data were collected from the Client Episode Outcome Summary. The global impairment scale ranges from 1 (no impairment) to 7 (severe impairment). The mean global impairment score for all facilities on intake was 5.30 (N = 782) and was 3.04 on discharge. The mean overall change was 2.26. The range of before treatment means by individual facilities ranged from 6.00 to 4.28; the range of after-treatment means ranged from 5.00 to 2.64. There was a wide variation among facilities in before- and after- treatment impairment ratings and a wide range in their improvement. The mean number of days per client was 13.8.

Age and diagnosis of clients had a significant relationship to pre- and post-global ratings. The data also indicate that the pre-global impairment ratings are no indicator or potential predictor of whether a client will be a drop-out or a person who will complete treatment.

The cost-change index indicates, by facility, the amount of dollars necessary for the average client to move a unit of change on the global impairment scale. This ranged from $439 to $1199.

The greatest change occurred in those clients who entered treatment with the more severe impairment ratings of 7, 6 and 5; this change was 2.54 compared to a change of 1.37 for the less severely impaired clients. However, it should be noted that 76% of the clients had an initial rating of 5 or more.

Of the 30 problems, the four most frequent were:

1. Depression
2. Anxiety
3. Inappropriate Affect, Appearance or Behavior
4. Impulse Control

The problems listed as most severe at intake were:

1. Suspicion-Persecution-Hallucinations
2. Grandiosity
3. Situational Crisis
4. Wage Earner Role
5. Drug Abuse
6. Mate Role-Marital Problems

The problems that improved the most were:

1. Suicide-Self-Mutilation
2. Danger to Others

Interestingly, the problem that was reported as treated most often was Drug Abuse even though it was 19th on the list of problem frequency.

APPENDIX A

CLIENT EPISODE OUTCOME SUMMARY

REPORTING UNIT | NUMBER | DISCHARGE DATE (M M D D Y Y)

INSTRUCTIONS

At Initial Contact

PROB. CHECKLIST – Check all problems describing present impairment.

COL A – For every problem category listed below, enter the appropriate number from the Problem Rating Scale.

COL B – Check all problems you intend to serve. Circle the checkmark of the single problem which will be the primary focus of your effort (the primary problem).

At Final Contact

For every problem category listed below, enter the appropriate number from the Problem Rating Scale.

COMMON PROBLEM DEFINITIONS

	INITIAL CONTACT			Final Contact
	PROB. CHECK-LIST	COL.A	COL.B	COL.C
	All Impair-ment Probs.	Ind. Prob. Rating	All Probs. To Be Served	Ind. Prob. Rating
1 DEPRESSION – Reports of subjective feelings and concerns and psychosocial dysfunctions that may be associated with the depressive syndrome.		12	13	14
2 ANXIETY – Reports of subjective feelings and concerns, and psychophysiological dysfunctions that may be associated with the anxious, phobic, or obsessive-compulsive syndromes.		15	16	17
3 INAPPROPRIATE AFFECT, APPEARANCE, OR BEHAVIOR – Appearance, physical behavior, or acts which would be considered odd or inappropriate by most untrained persons.		18	19	20
4 NEGATIVISM-OBSTINANCY – Refusal to answer questions or cooperate; withholding information.		21	22	23
5 AGITATION-EXCITEMENT – Overt signs of agitation or excitement; (e.g., inability to sit still, pacing, handwringing, accelerated speech, hyperactivity).		24	25	26
6 MOTOR RETARDATION-LACK OF EMOTION – Visible signs of retardation in speech and movement, a tendency to ignore the surroundings and flattening of affect or general lack of emotional expression.		27	28	29
7 SPEECH DISORDERS – Impairment in the form or organization of speech (e.g., blocks, rambles, is incoherent, stutters, "babytalks").		30	31	32
8 SUSPICION-PERSECUTION-HALLUCINATIONS – Distrustfulness; feelings of having been mistreated, taken advantage of, tricked, or pushed around; ideas of reference; various paranoid delusions; auditory hallucinations which mock, threaten, or command.		33	34	35
9 GRANDIOSITY – Inflated appraisal of his worth, contacts, power, or knowledge; boasting; sensational plans; delusions of power, status, knowledge, or contact; and hallucinations with a grandiose connotation.		36	37	38
10 SUICIDE-SELF-MUTILATION – Suicidal thoughts; preoccupation, threats, gestures or attempts, and thoughts or acts of self-mutilation.		39	40	41
11 SOMATIC CONCERN-PHYSICAL PROBLEM – Real or imagined physical complaint or disability; conversion reaction; somatic delusion or hallucinations, hypochondriasis; or body image concern.		42	43	44
12 DAILY ROUTINE-LEISURE TIME IMPAIRMENT – The impact of psychopathology on daily routine, on carrying through self-appointed or expected tasks, and on usual leisure time or recreational activities (e.g., difficulty in arising in the morning, getting dressed, and traveling).		45	46	47
13 REPORTED OVERT ANGER – Reported or observed overt anger or belligerence; shouting, temper tantrums.		48	49	50
14 DISORIENTATION-MEMORY IMPAIRMENT – Visible signs of disorientation as to time, place, and persons, and impairment in recent or remote memory.		51	52	53
15 SOCIAL ISOLATION – Lack of friends, avoidance of contact or involvement with others, and feelings of isolation, rejection, or discomfort with people.		54	55	56
16 MATURATIONAL PROBLEMS – Failure to achieve age appropriate interpersonal or family relationships; and/or age appropriate adaptive behavior (e.g., work, school).		57	58	59
17 DENIAL OF ILLNESS – The extent to which the patient denies, despite the evidence, that his current symptoms have psychiatric significance, that he is ill or needs psychiatric help, or that he needs to change his attitude in some specific way.		60	61	62
18 ANTISOCIAL OR ILLEGAL ACTS – Lying; stealing; swindling; conning; commission of or involvement in minor or serious illegal or delinquent acts.		63	64	65
19 ALCOHOL ABUSE – The degree to which use of alcohol is excessive, compulsive, causes physical symptoms or alteration in mood or behavior, or interferes with performance of expected daily routine or duties.		66	67	68
20 DRUG ABUSE – Excessive self-medication and habituation or addiction to narcotics, barbituates, stimulants, or consciousness-altering substances.		69	70	71
21 DANGER TO OTHERS – Has made serious threats of violence or actual assaults against other persons (violence against property not included); child abuse.		72	73	74
22 IMPULSE CONTROL – Lacks self-discipline; responses to stimuli exceed limits of expected behavior; responses to stimuli are without regard to consequences; or impulses to commit delinquent or illegal acts.		75	76	77
23 SEXUAL PROBLEMS – Sex role confusion; engages in sexual behavior which is defined as unacceptable by self, family, or society.		78	79	80
24 PROLONGED EXPOSURE TO POOR ENVIRONMENTAL CONDITIONS – Such as long-term disturbed family relationships, chronic dysfunctioning or absence of a significant other; psychosocial deprivation.		81	82	83
25 SITUATIONAL CRISIS – A decrease in ability to cope with actual or threatened loss related to self-image, role mastery or relationship with a significant other.		84	85	86
26 HOUSEKEEPER ROLE – Admission of doing a poor job as a housekeeper, no pleasure or satisfaction in any aspect of household duties; marked discomfort or difficulty with, or refusal to carry out, one or more expected household tasks.		87	88	89
27 WAGE EARNER ROLE – No interest or satisfaction in one's job; dread of one's work; failure to meet work standards; need for constant supervision; psychopathology interferes with work; excessive job changes; or limiting oneself to part-time, temporary, or transient work because of psychopathology.		90	91	92
28 STUDENT OR TRAINEE ROLE – Poor motivation, avoidance of available extracurricular activities; missing classes; difficulty doing homework or assignments; poor grades; need for extensive help; or, conflict with teachers or administration.		93	94	95
29 MATE ROLE-MARITAL PROBLEMS – Affectionate feelings rarely experienced or expressed; many quarrels; little or no sexual activity; few shared friends or social activities.		96	97	98
30 PARENT ROLE – Inability to carry out important child-care tasks; requiring considerable help to manage child; morbid fears of child being injured or ill.		99	100	101

PROBLEM RATING SCALE DEFINITIONS

The following definitions are to be used at initial and final contact in the rating of each problem.

0 **Not Applicable**

1 **No Impairment**

2 **Minimal Impairment** – symptoms present but no difficulty reported or observed in maintaining usual performance levels.

3 **Mild Impairment** – reported or observed difficulty in maintaining usual performance levels.

4 **Moderate Impairment** – reported or observed decrease in usual performance levels.

5 **Severe Impairment** – reported or observed failure in usual performance levels.

GLOBAL IMPAIRMENT INSTRUCTIONS

A. At initial contact, determine the overall rating of total impairment in daily functioning and role requirements. Record the level number.

B. At final contact, rerate global impairment and record impairment level number.

GLOBAL IMPAIRMENT SCALE DEFINITIONS

Overall rating of total impairment in daily functioning and role requirements. . .

1 No symptoms observable or reported.

2 Symptoms are very mild and observable or reported but no impairment in carrying out daily activities or in meeting role requirements.

3 Symptoms are mild and increased effort is required to maintain unimpaired level of functioning in daily activities and role requirements.

4 Symptoms are moderate and there is an observable loss of efficiency/effectiveness in meeting daily activity and role requirements (e.g., done poorly or incompletely).

5 Symptoms are moderately severe and client fails to meet one or two important roles such as work, school, housework, spouse, parent, or in community, e.g., some activities not done at all.

6 Symptoms are severe and client fails to meet most role and performance requirements.

7 Symptoms are very severe and client fails to meet most or all role and performance requirements.

GLOBAL IMPAIRMENT

INITIAL RATING [ ]1 FINAL CONTACT [ ]2

1. Service Completed
2. Apparent Dropout [ ]3

INTENT OF SERVICE

1. Treatment
2. Maintenance
3. Evaluation Only [ ]4

OCCUPATION [ ][ ]5 Enter Code from Occupation Key

EDUCATION [ ][ ]7 Number of Years

IF INVOLUNTARY ADMISSION W & I 5150 [ ]9

1 = Gravely Disabled
2 = Danger to Self
4 = Danger to Others

Add applicable binary Codes and enter sum

ALL LEGAL CLASSES DURING EPISODE [ ][ ]10 Add applicable binary Codes and enter sum

01 = Voluntary
02 = 72 hr. Detention
04 = 1st 14 Day Certification
08 = Additional 14 Day Certification
16 = 90 Day Post Certification
32 = Conservatorship – Temporary or Permanent

TABLE I

COMPARISON OF DEMOGRAPHIC CHARACTERISTICS OF SHORT-DOYLE INPATIENTS RATED ON THE CLIENT EPISODE OUTCOME SUMMARY WITH THE TOTAL POPULATION OF SHORT-DOYLE INPATIENTS

	% in CEOS DATA (Nov-Dec, 1974)	% in LA COUNTY INPATIENT SVCS (July, 1973-June, 1974)
SEX:		
Males	49.7	49.7
Females	50.3	50.3
ETHNIC GROUP:		
White	68.3	66.7
Black	18.0	19.3
Spanish	11.4	11.9
Other	2.2	2.0
MARITAL STATUS:		
Never Married	42.1	40.9
Now Married	19.9	19.4
Widowed, Dissolved or separated	32.2	34.0
Unknown	5.8	5.7
AVERAGE LENGTH OF STAY:		
# of Days	13.8	15.2

TABLE II

TABLE OF MEANS

GLOBAL IMPAIRMENT RATINGS BY AGE CATEGORIES

CLIENT EPISODE OUTCOME SUMMARIES

Global rating:	Age of Clients in Years: 0-12 (N=7)	13-17 (N=27)	18-24 (N=171)	25-34 (N=233)	35-45 (N=174)	46-74 (N=156)
Initial Contact	4.71	4.37	5.30	5.38	5.39	5.15
Final Contact	2.85	3.22	3.04	2.99	3.09	3.07
Amount Improvement	1.86	1.15	2.26	2.39	2.30	2.08

TABLE III

GLOBAL IMPAIRMENT MEANS BY MOST COMMON DIAGNOSES

Diagnosis	Frequency			Global Impairment Rating		
	DSM II[1]	Number of cases (n=736)	Percent of total cases	Initial Contact	Final Contact	Amount Change
Other Psychoses	(298)	27	03.7	5.41	2.78	2.63
Drug Dependence	(304)	77	10.5	5.13	2.51	2.62
Affective Psychoses	(296)	34	04.6	5.32	2.76	2.56
Schizophrenia	(295)	274	37.2	5.66	3.40	2.26
Neuroses	(300)	133	18.1	5.21	2.97	2.24
Alcoholism	(303)	96	13.0	5.02	2.94	2.08
Transient Situational Disturbances	(307)	32	04.3	4.44	2.47	1.97
Personality Disorders	(301)	25	03.4	4.92	3.16	1.76
Organic Brain Syndromes	(309)	16	02.2	4.81	3.06	1.75
Behavioral Disorders of Childhood and Adolescence	(308)	22	03.0	4.45	3.41	1.04

[1]Diagnostic and Statistical Manual of Mental Disorders, American Psychiatric Assoc., Washington, D.C., 1968.

TABLE IV

Global Impairment Category

Global Rating:	Discharge Status: Service Completed (n=572)	Apparent Dropout (n=130)
Initial Contact	5.30	5.28
Final Contact	2.80	4.12

TABLE V

Client Episode Outcome Summary Results
Showing Before and After Global Impairment Scores of
Inpatients Discharged During November - December 1974

Inpatient Facility	Pre $\bar{M}$	Post $\bar{M}$	Average Change	Mean Hospital Days
M	4.28	3.00	1.28	22.2
I	5.07	2.84	2.23	17.2
H	5.25*	3.50	1.75	41.0
F	5.36	2.80	2.56	13.0
C	5.78	3.19	2.59	8.8
L	4.66	3.45	1.21	10.4
A	6.00*	5.00	1.00	12.7
J	5.04	2.48	2.56	15.7
B	6.00	3.65	2.35	16.4
G	5.35	3.71	1.64	7.5
K	5.00	3.29	1.71	10.6
E	5.36	3.78	1.58	14.6
D	5.63	3.58	2.05	13.4
County Total	5.30	3.04	2.26	13.8

*N is less than 5 in each of these facilities.

TABLE VI

Alcohol Abuse Problem Category

	Sex of Client:	
	Male	Female
Problem Rating:	(n=148)	(n=84)
Initial Contact	4.10	3.80
Final Contact	2.65	2.46

TABLE VII

Drug Abuse Problem Category

	Sex of Client:	
	Male	Female
Problem Rating:	(n=100)	(n=87)
Initial Contact	4.02	4.27
Final Contact	2.58	2.57

TABLE VIII

Suicide-Self-Mutilation Problem Category

Problem Rating:	Sex of Client: Male (n=81)	Female (n=169)
Initial Contact	3.83	3.91
Final Contact	2.00	1.88

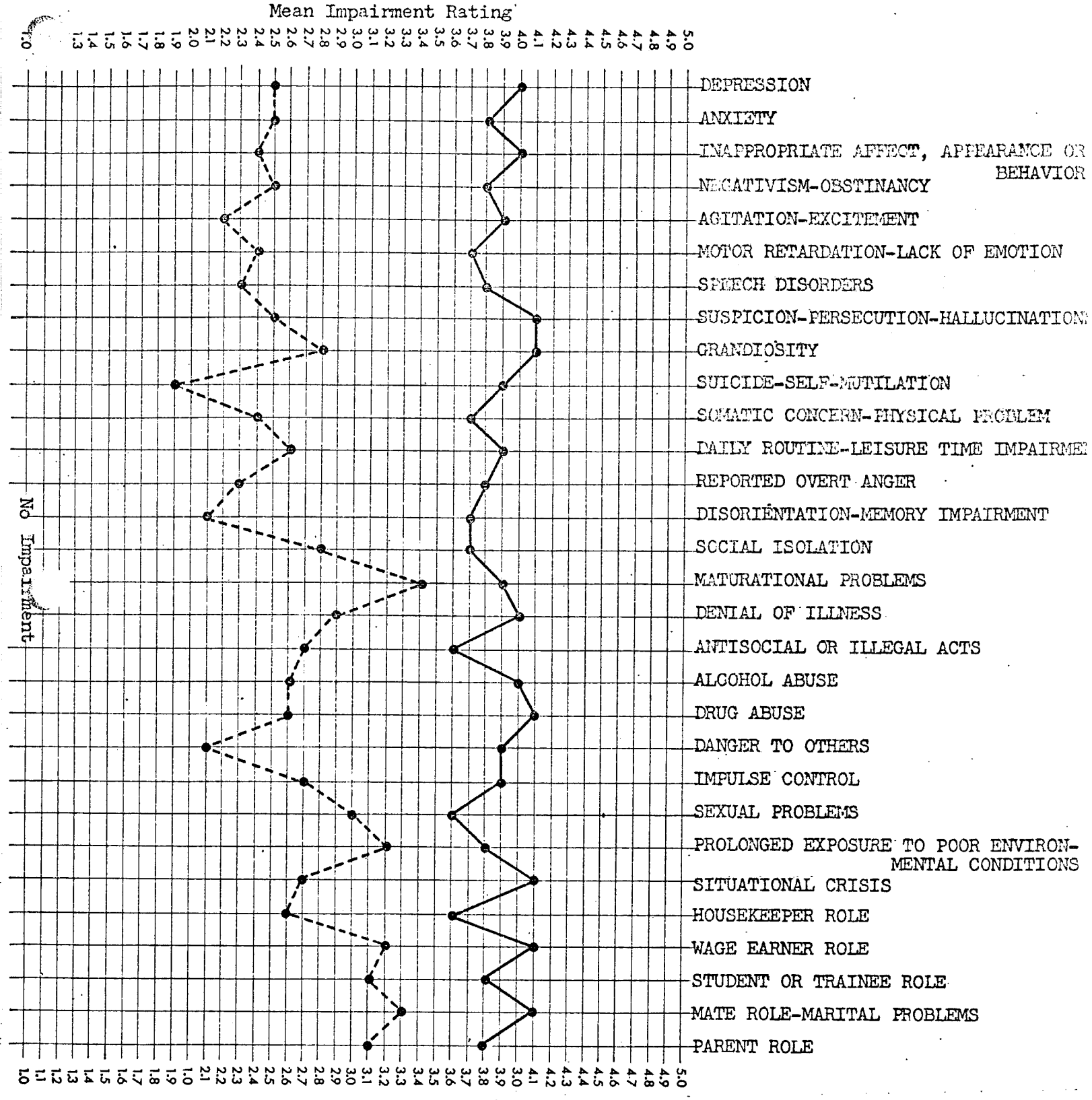
TABLE IX

Negativism-Obstinancy Problem Category

Problem Rating:	Legal Status Entry: Involuntary Admission (n=119)	Voluntary Admission (n=81)
Initial Contact	3.95	3.60
Final Contact	2.39	2.57

TABLE X

AMOUNT OF IMPAIRMENT ON PROBLEM CATEGORIES FOR INPATIENTS



INITIAL RATING ——————

FINAL CONTACT - - - - - -

PROBLEM RATING SCALE DEFINITIONS

1 No Impairment

2 Minimal Impairment - symptoms present but no difficulty reported or observed in maintaing usual performance levels

3 Mild Impairment - reported or observed difficulty in maintaining usual performance levels

4 Moderate Impairment - reported or observed decrease in usual performance levels

5 Severe Impairment - reported or observed failure in usual performance levels

TABLE XI

Problem Categories on Initial Contact for Patient Discharge:

Ranking Order	Problem Description	Frequency*	% of total inpatient
1.	Depression	529	57.5%
2.	Anxiety	505	55.4
3.	Inappropriate affect, Appearance or behavior	399	43.8
4.	Impulse Control	362	39.7
5.	Suspicion-Persecution-Hallucinations	351	38.5
6.	Daily Routine-Leisure Time Impairment	348	38.2
7.	Social Isolation	326	35.8
8.	Agitation-Excitement	294	32.3
9.	Maturational Problems	290	31.8
10.	Suicide-Self-Mutilation	277	30.4
11.	Situational Crisis	265	29.1
12.	Alcohol Abuse	259	28.4
13.	Motor Retardation-Lack of Emotion	245	26.7
14.	Negativism-obstinancy	240	26.3
15.	Reported Overt Anger	239	26.2
16.	Denial of Illness	239	26.2
17.	Prolonged Exposure to Poor Environmental conditions	237	26.0
18.	Wage Earner Role	229	25.1
19.	Drug Abuse	210	23.1
20.	Somatic Concern-Physical Problem	169	18.6
21.	Mate Role-Marital Problems	160	17.6
22.	Antisocial or Illegal Acts	141	15.5
23.	Disorientation-Memory Impairment	131	14.4
24.	Speech Disorders	128	14.1
25.	Danger to Others	122	13.4
26.	Housekeeper Role	113	12.4
27.	Grandiosity	104	11.4
28.	Parent Role	97	10.6
29.	Sexual Problems	81	8.9
30.	Student or Trainee Role	68	7.5

*Number of patients who had a rating of "2" or more on the problem rating scale.