Outcomes for Adult Clients

by

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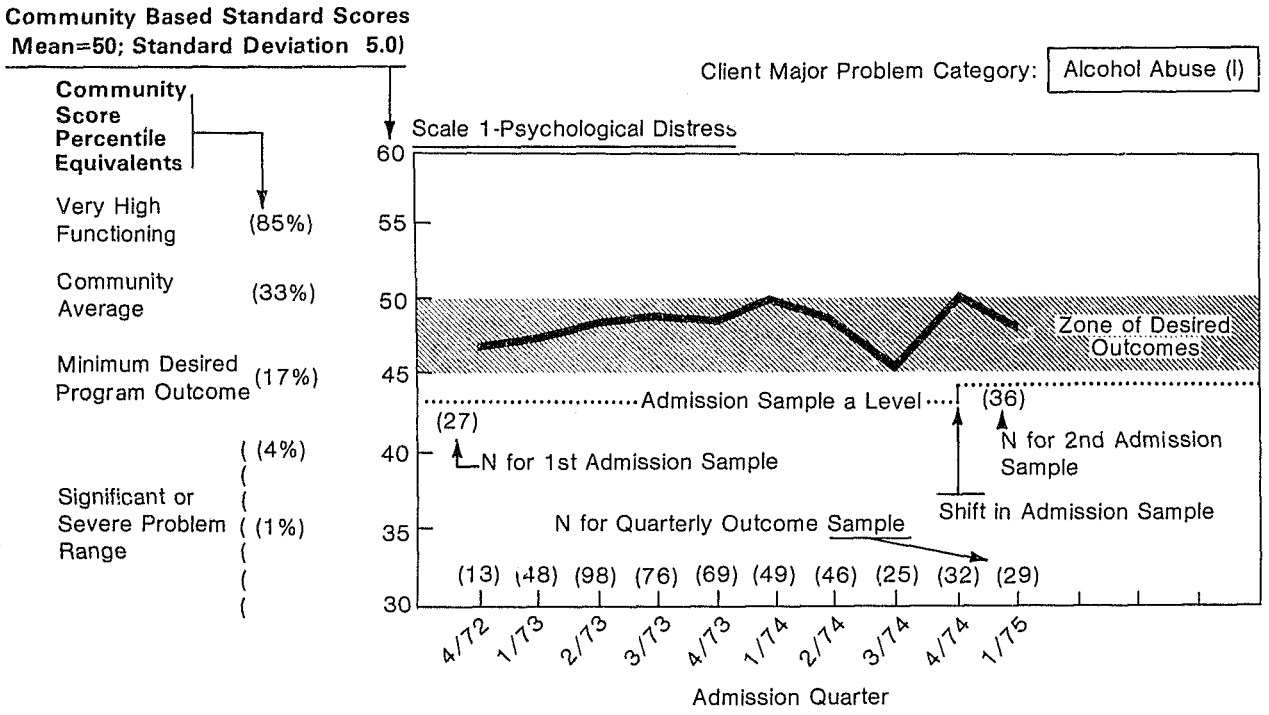
INTRODUCTION AND METHODOLOGY

This report represents a major updating of the series of quarterly outcome data plots for each of eight "Major Problem Categories" (MPC) of clients aged 18-65 admitted to the Northwest Denver Mental Health Center. The intent of the series is to (1) depict the average condition at 90-day follow-up of clients admitted to treatment in each quarter, and (2) to call attention to continuing low outcome levels and/or unfavorable changes in outcome levels over time. The focus of our remarks is primarily upon the entire series of quarterly outcome score means, and secondarily upon the levels and/or changes in score levels for the second and third quarters of 1975.

Figure 1 illustrates the standard format used in plotting and interpreting these scores. Several features deserve special comment, especially for the reader who has not seen our earlier reports. The vertical axis indicates the average score of a client group on the *Denver Community Mental Health Questionnaire (DCMHQ)* scale under consideration (in this example, "Psychological Distress"). Higher scores indicate better functioning; lower scores indicate increasing difficulties and impairment. The horizontal axis indicates quarters of each year in which the clients were admitted to treatment. The "50" level is the mean score obtained by a random sample of the Denver population in 1972 (a repeat survey of the community in 1974 showed no significant changes in scores). All client group scores are "community-standardized scores," thus enabling direct comparisons of clients with

FIGURE 1

Quarterly Outcome Score Format Explanation



typical community residents who are not undergoing treatment for psychological difficulties. The percentile equivalents for selected scores (45, 50, 55, etc.) are also shown to indicate what proportion of the Denver community sample scored at or below that particular level. The dotted lines indicate the score levels obtained for one or two samples of similar clients who were administered the *DCMHQ* immediately after their intake interview. These score levels establish a reference against which the follow-up or outcome scores may be compared, thus providing a graphic indication of how much change (if any) seems to be occurring between admission and 90-day follow-up. Both the admission sample levels and the regular quarterly follow-up levels are also directly comparable to the community score distribution, indicating how these clients are functioning relative to the normal community. Finally, as shown on the figure, we have established a level of one standard deviation below the community average as the level we wish to set as our "minimum desired program outcome" to be obtained (on the average) by clients we attempt to treat. That is, if we could help our clients attain a functioning level within one standard deviation of the community average, they would be functioning better than the lowest one-sixth of the community, or within the upper five-sixths (assuming a normal distribution of scores.) This level is realistically low enough to be reachable by many clients with adequate treatment, but is also high enough to provide a real challenge to our treatment programs for severely disturbed clients. This goal level can, of course, be changed either explicitly by our Center or implicitly by any program manager who decides to use a higher or lower target level as he reviews and interprets the data.

All follow-up scores shown in this paper are obtained in personal interviews using the *DCMHQ,* approximately 90 days following admission to our Center, and usually held in the client's residence.

The results for each Major Problem Category are discussed sequentially in the sections below.

RESULTS AND DISCUSSION

MPC I—Alcohol Abuse

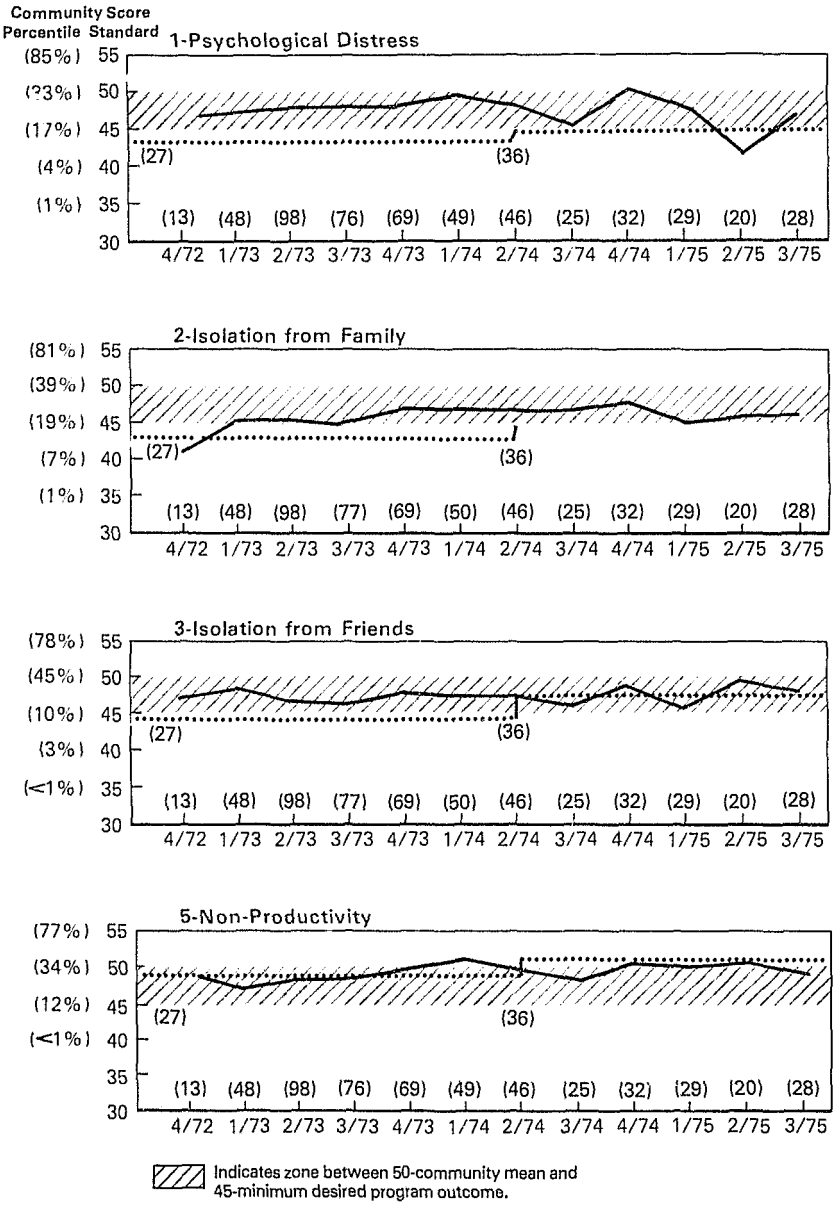
This group contains clients seen in the Alcohol Emergency Room (AER), Alcohol Education Program (AEP), Alcohol Treatment Center (ATC), and the hospital-based Detoxification inpatient unit (Detox). In general, outcomes appear favorable, particularly in comparison with admission levels. Scales 1—Psychological Distress and 8—Alcohol Abuse depict outcome scores considerably higher than admission levels (which are quite low and indicating considerable discomfort and substantial problems with alcohol). Client Satisfaction is also quite high, indicating positive feelings about the services provided. There is, of course, no admission level; it is assessed at follow-up only, and these scores are standardized against the first 100 clients of all types followed up in 1973. Thus it is useful primarily as an indication of *relative* satisfaction with treatment, both over time and in comparison to different client groups at the same point in time.

The Non-productivity scale (5) is favorably high at both admission and

Quarterly Program Outcome Scale Scores

(From Denver Community Mental Health Questionnaire[1] Follow-Ups)

Client Major Problem Category: Alcohol Abuse (I)

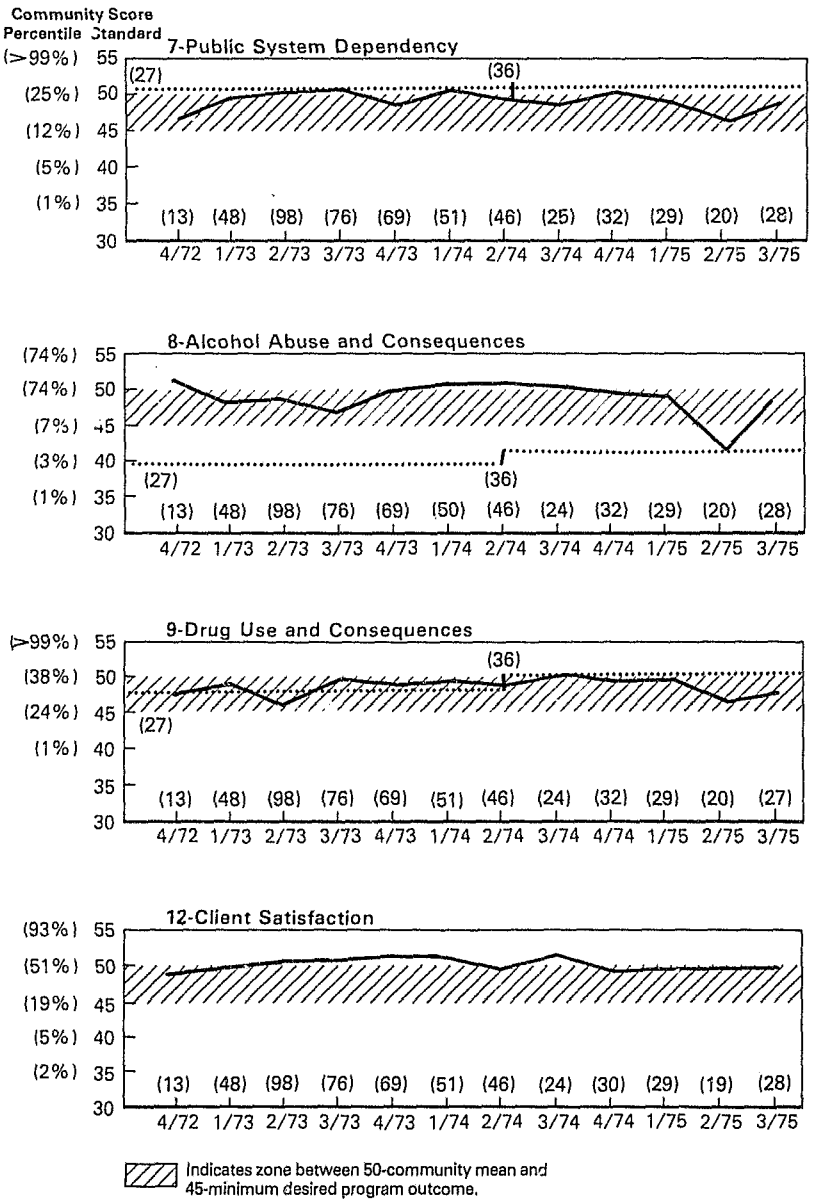


1 Scores standardized on random Denver community; sample (mean = 50; S.D. = 5)

Quarterly Program Outcome Scale Scores

(From Denver Community Mental Health Questionnaire[1] Follow-Ups)

Client Major Problem Category: **Alcohol Abuse (1)**



1 Scores standardized on random Denver community; sample (mean = 50; S.D. = 5)

follow-up, indicating considerable employment, job-training activities, and/or volunteer work among this group's members (an exception is the Detox subgroup who are predominantly unemployed at admission, but this is not apparent in the combined data shown). Similarly, Scale 7 shows the clients are not substantial users of public resources such as welfare, and they do not use drugs to a substantial degree (see Scale 9).

On the negative side, however, they tend to be quite isolated from both family and friends (Scales 2 and 3), and, although some slight improvement after 90 days is seen, this change is not substantial. There is considerable room for attempting to improve these scale scores through special program alterations on changes in techniques. It is possible that greater use of family therapy might exert a favorable influence here.

There also are signs of worsening outcome in the first half of 1975 on Scales 1, 2, 7, 8, and 9, followed by a partial recovery toward the more favorable earlier levels. Our internal analysis of scale scores shows this is *not* a shift in scoring by follow-up interviewers or a change in client "mix"; nor does the identical shift occur in other MPC groups, thus ruling out a community- or Center-wide explanatory factor. We have no hypotheses at this time to account for the shift, but we believe it is noteworthy enough to be considered by program managers and watched carefully as an indicator of possible erosion of program impact and need for program improvement efforts.

MPC II—Drug Abuse

This group consists of about equal proportions of narcotics ("hard-drug") abusers and multiple-drug (primarily "soft" drug) abusers. Most of the former receive considerable treatment, while the latter (since closing of the Poly-drug inpatient unit) receive fairly brief treatment and/or referral out to another program. These clients are more difficult to follow up in the community and the variable numbers in the quarterly samples lead to more variation in group score averages than we would like. Some general interpretations of the results are, however, still warranted.

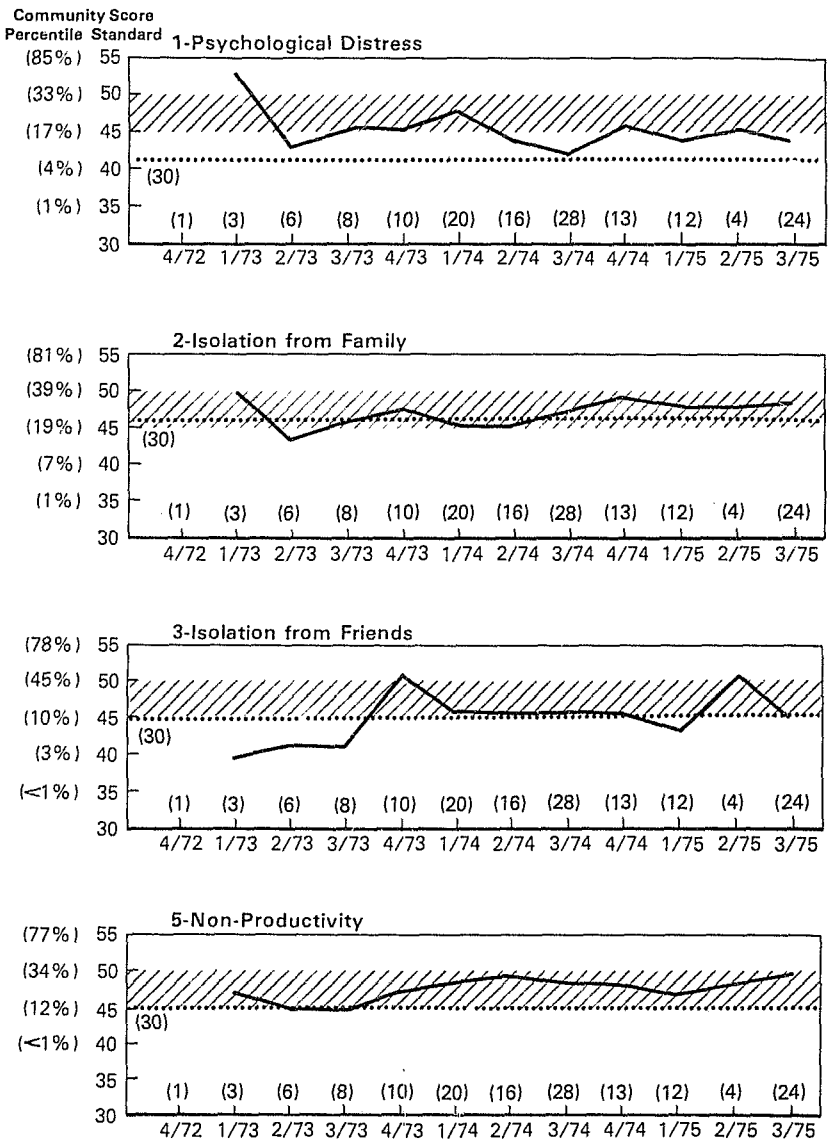
The mean scores for our single admission sample depict serious Psychological Distress (Scale 1) and Drug Use (Scale 9), plus moderate Isolation from Family (Scale 2) and Friends (Scale 3), Non-Productivity (Scale 5), and Alcohol Abuse (Scale 8). At follow-up, these clients appear to be somewhat improved on Psychological Distress, Drug Use, and Non-Productivity, all of which are major goals of the Narcotics Addiction Treatment Program (NATP). The program does seem to be helping to get these clients back to jobs or vocational training/education, and to be alleviating physical and psychological complaints of distress to some extent. Also quite encouraging is the reduction in drug use and the negative personal and social consequences which stem from it.

On the negative side, however, two of these functioning areas are still below the zone of desired outcome in most quarterly periods; there is substantial room for program alteration to try to do better in these areas, as well as in the sphere of interpersonal relations with friends and abuse of alcohol.

Quarterly Program Outcome Scale Scores

(From Denver Community Mental Health Questionnaire[1] Follow-Ups)

Client Major Problem Category: **Drug Abuse (II)**



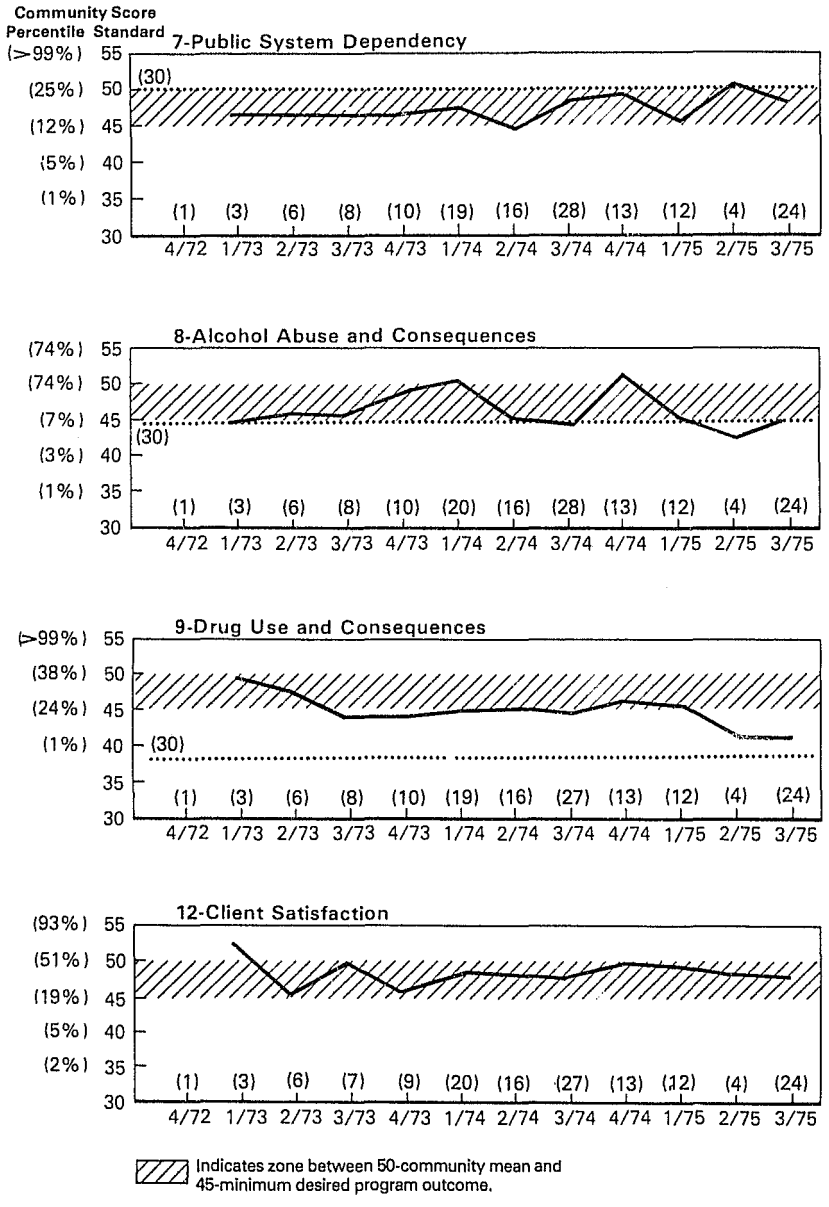
Indicates zone between 50-community mean and 45-minimum desired program outcome.

1 Scores standardized on random Denver community; sample (mean = 50; S.D. = 5)

Quarterly Program Outcome Scale Scores

(From Denver Community Mental Health Questionnaire[1] Follow-Ups)

Client Major Problem Category: **Drug Abuse (II)**



Indicates zone between 50-community mean and 45-minimum desired program outcome.

1 Scores standardized on random Denver community; sample (mean = 50; S.D. = 5)

Perhaps most disturbing in these MPC-II graphs is the downward (or score deterioration) trend apparent in Scale 9—Drug Use. After obtaining very positive results in early 1973, this group showed lower but stable results through the first quarter of 1975; then the last two quarters indicate another sharp decline in results and nearly no difference from the admission score level. We urge that the NATP and the soft-drug service staff (primarily the Psychiatric Emergency Service and Outpatient Teams) review their programs since mid-1975 to search for any possibly negative changes that may have occurred (such as closing of the Poly-drug ward), and to take whatever steps may be feasible to reverse this highly unfavorable outcome trend. Our data, however, are indicating that we are doing better at locating clients from this group in our follow-up efforts; hence it is possible that we are now seeing a somewhat more problematic client, reflected in lower scores. Unfortunately, this interpretation may account for the apparent outcome drop, but in that event, the overall program outcome would also be substantially worse than was initially apparent.

MPC III—Antisocial Behavior

The quarterly *Ns* in this series of graphs are so small as to generate great variability, to the point where a single quarter's data cannot be assumed to be representative of this group's true outcome. We also have been unable to assemble enough admission cases to warrant inclusion of this group's mean admission scores on the graphs.

However, some comments derived from the general "picture" on some graphs may be worthwhile. On the average, this group does not manifest substantial Psychological Distress (Scale 1) at follow-up, and the same is true for Non-Productivity (Scale 5), Alcohol Abuse (Scale 8), and Drug Use (Scale 9). Only Isolation from Family (Scale 2) and from Friends (Scale 3) show a trend toward low scores. Finally, Client Satisfaction for this group appears to be averaging slightly above 45, a relatively low score which indicates considerable dissatisfaction with treatment. Some clinicians believe this to be attributable to being coerced into treatment by various authorities as a result of their anti-social acts. However, we have not examined these clients' treatment histories to determine the likelihood of this being an important factor.

Our data is too sketchy to warrant any program suggestions at this time.

MPC IV—Somatic Complaints

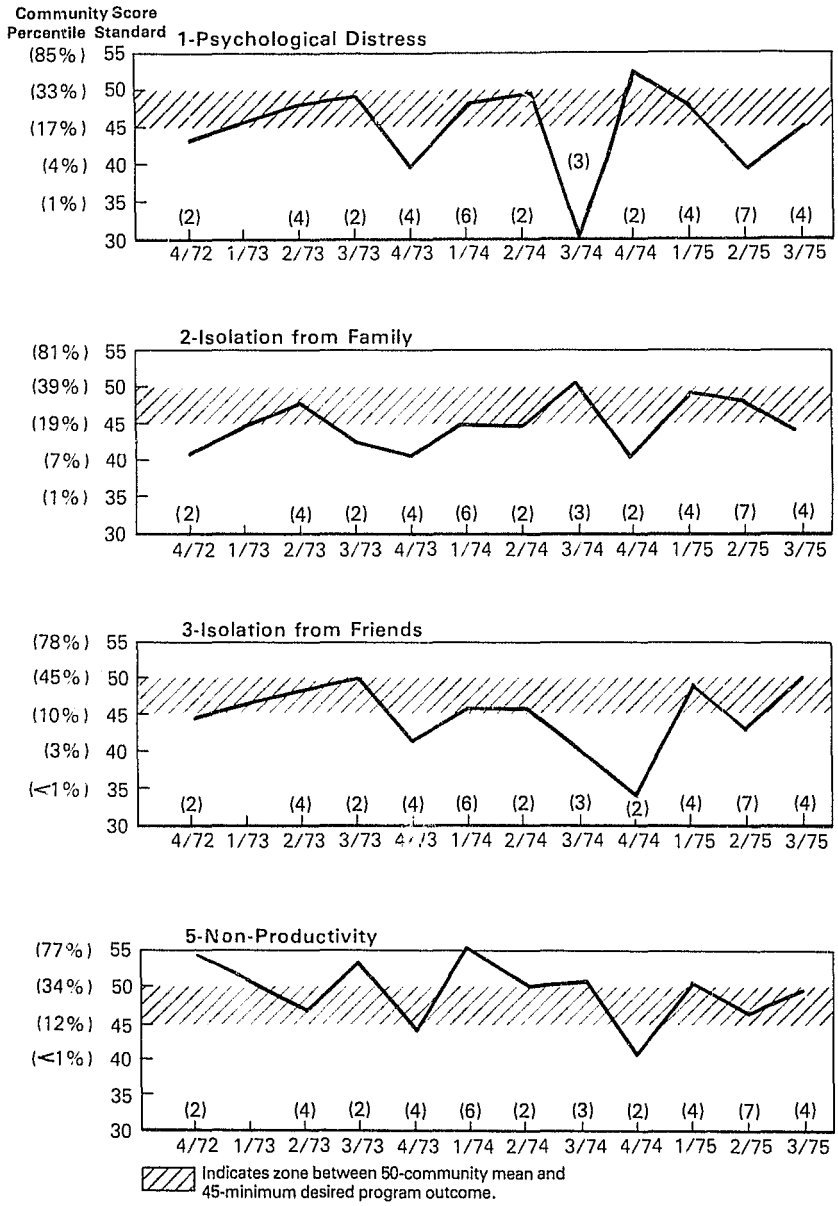
This group of clients includes persons with primarily somatic complaints which presumably have no apparent medical basis. Data on such clients at admission indicates a high degree of Psychological Distress (Scale 1); moderate Isolation from Friends (Scale 3); Non-Productivity (Scale 5); and Public System Dependency (Scale 7); and even *less* abuse of alcohol than is seen in the normal Denver community. There is also moderately high drug use and experiencing of negative consequences of such use.

The most remarkable feature of this MPC's graph series is the *absence* of any improvement at follow-up on most scales, with the exception of Psychological Distress—and even here the usual value barely reaches or is below the zone of desired outcome.

Quarterly Program Outcome Scale Scores

(From Denver Community Mental Health Questionnaire[1] Follow-Ups)

Client Major Problem Category: **Anti-Social Behavior (III)**

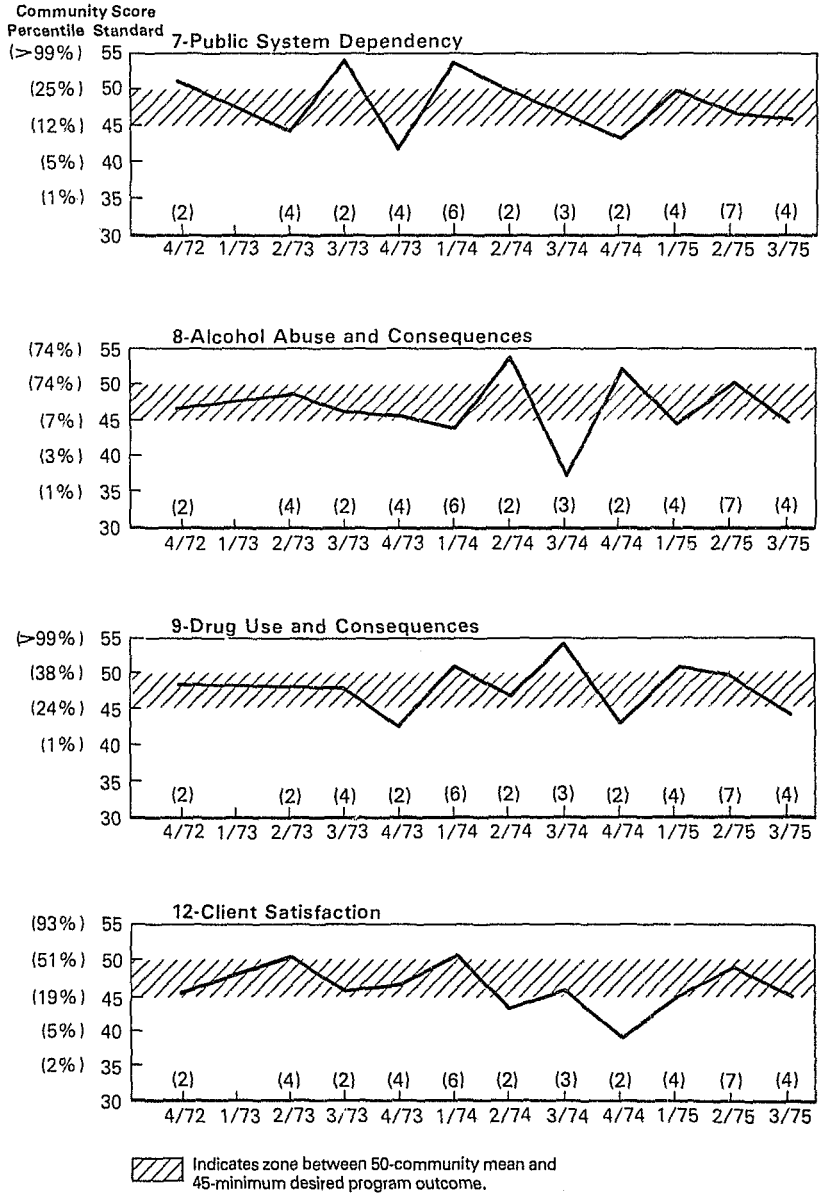


1 Scores standardized on random Denver community; sample (mean = 50; S.D. = 5)

Quarterly Program Outcome Scale Scores

(From Denver Community Mental Health Questionnaire[1] Follow-Ups)

Client Major Problem Category: **Anti-Social Behavior (III)**



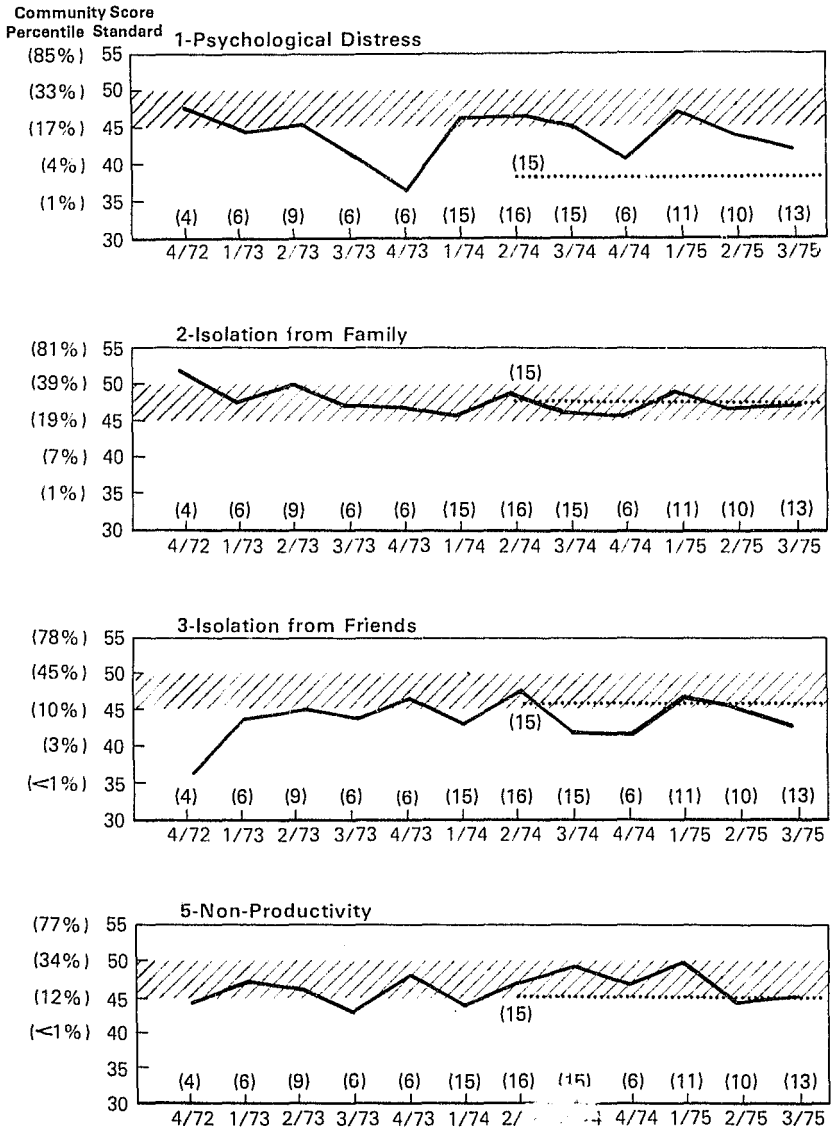
Indicates zone between 50-community mean and 45-minimum desired program outcome.

1 Scores standardized on random Denver community; sample (mean = 50; S.D. = 5)

Quarterly Program Outcome Scale Scores

(From Denver Community Mental Health Questionnaire[1] Follow-Ups)

Client Major Problem Category: **Somatic Complaints (IV)**

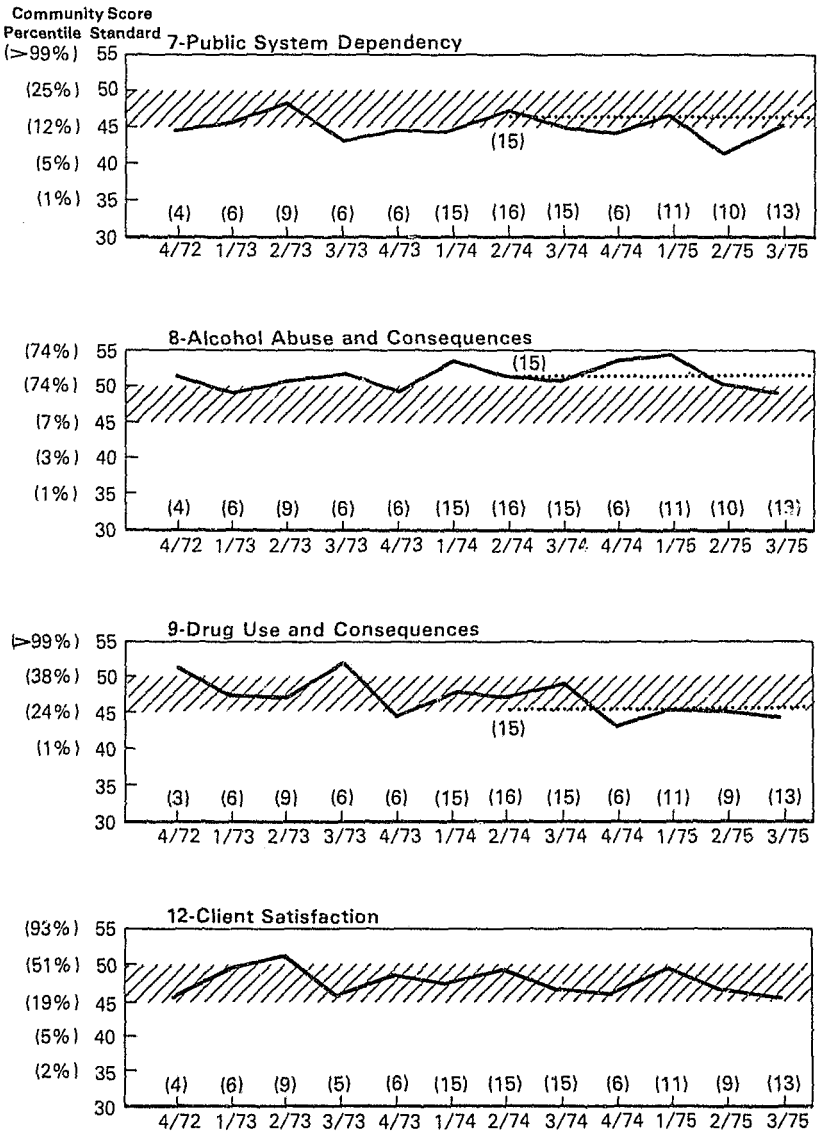


1 Scores standardized on random Denver community; sample (mean = 50; S.D. = 5)

Quarterly Program Outcome Scale Scores

(From Denver Community Mental Health Questionnaire[1] Follow-Ups)

Client Major Problem Category: **Somatic Complaints (IV)**



Indicates zone between 50-community mean and 45-minimum desired program outcome.

1 Scores standardized on random Denver community; sample (mean = 50; S.D. = 5)

To us this remarkable pattern of scores indicates that our services are not really adequate for such clients, who are reputed to be very "difficult" ones, with long standing complaints for which medical treatments have often been tried with no apparent success. A rethinking of services specifically aimed toward this group (possibly development of reliable referral mechanisms to psychosomatically oriented clinicians or development of a special program effort) seems to be indicated. Such a program change should be brought to the Research and Evaluation Section's attention if it is undertaken; this will allow formal testing of the effects of such a program change upon this group's outcome levels.

MPC V—Disorganized Behavior/Thinking

This large group comprises the Center's most severely impaired clients, usually in a fairly acute phase of disturbance. A few are hospitalized, but most are handled on an outpatient basis by the four "generic" neighborhood teams and/or the Psychiatric Emergency Room (ER). Substantial impairment of functioning is apparent on several key scales—Psychological Distress (Scale 1), Isolation from Family (Scale 2), Isolation from Friends (Scale 3), Non-Productivity (Scale 5), and Public System Dependency (Scale 7); moderate impairment is suggested on the others.

Outcomes for the group appear mixed. There is substantial improvement on Psychological Distress, and some improvement on Isolation from Family and on Alcohol Abuse (after follow-up, these clients appear to abuse alcohol *less* than the typical Denver resident). But little progress is usually made on interpersonal relationships with friends, job placement or training, and reducing drug use or the use of public support resources. The drug issue is clouded slightly by the fact that prescribed tranquilizers can lower a person's score to some degree, possibly enough to account for the lower score at follow-up. We will soon have additional drug abuse scales available to examine this issue more closely.

What may be more worrisome, however, is the downward trend of this group's scores since about mid-1974, notably on Scales 2, 3, 5, 7, and 9. The pervasiveness of the downtrend convinces us of its reality for this group. Hence, not only is there room for improvement in terms of the basic program to improve these clients' scores in the low areas, but there is also reason to examine our services to this group in the past year and try to reverse any possibly negative changes that might have occured in the service pattern. Since the ER, the generic outpatient teams, specialized intensive programs (such as Transitional Living and Vocational Services), and the inpatient ward are all involved with this group, a joint review of services and client handling, from intake to follow-up, might be productive. Again, any definite program changes made should be relayed to this Section to allow monitoring of the effects of the changes.

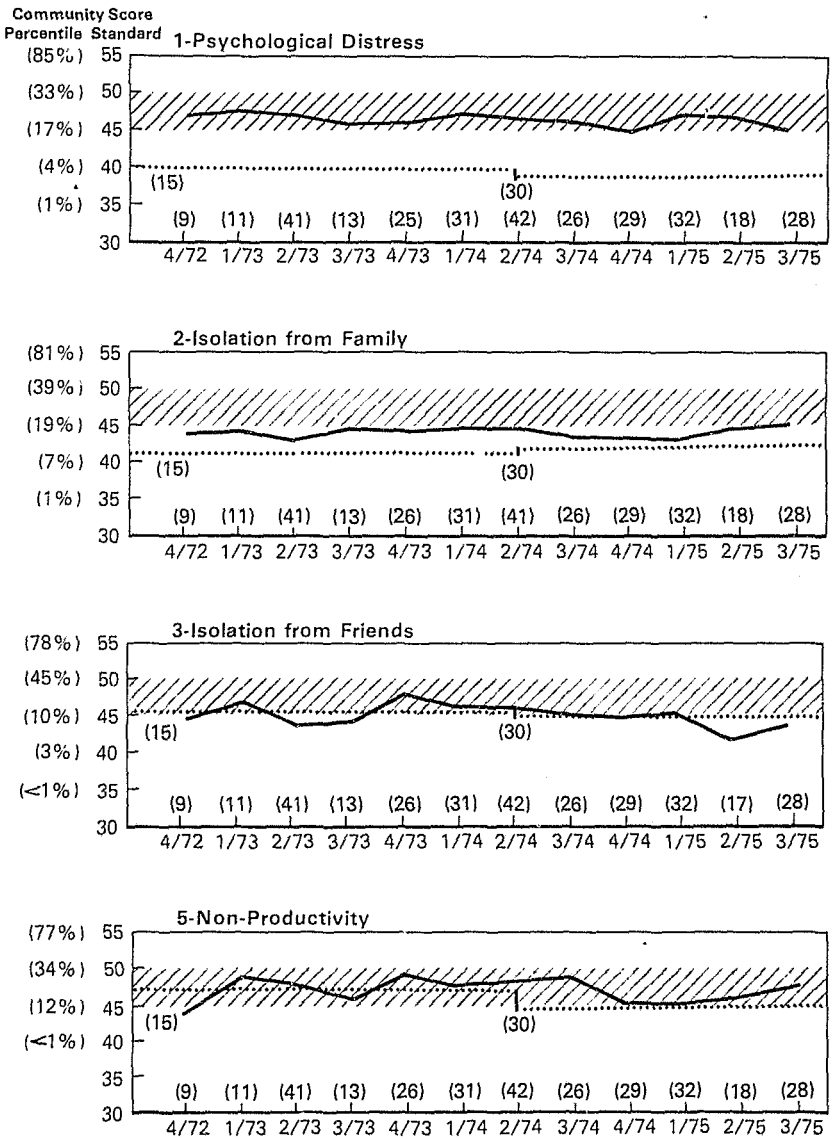
MPC VI—Emotional Distress

This is the largest client group served by this Center. While a small number are hospitalized (especially if suicidal), the majority are handled by

Quarterly Program Outcome Scale Scores

(From Denver Community Mental Health Questionnaire[1] Follow-Ups)

Client Major Problem Category: **Disorganized Thinking/ Behavior (V)**



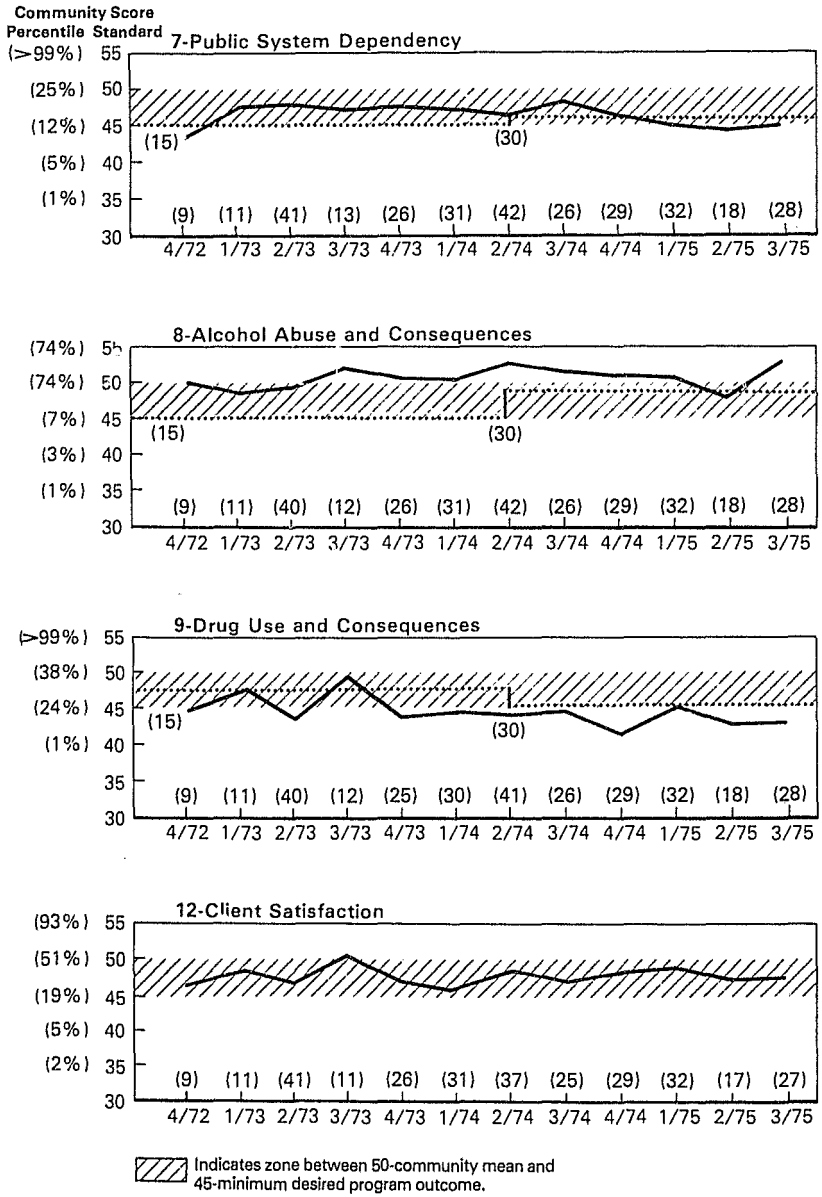
Indicates zone between 50-community mean and 45-minimum desired program outcome.

1 Scores standardized on random Denver community; sample (mean = 50; S.D. = 5)

Quarterly Program Outcome Scale Scores

(From Denver Community Mental Health Questionnaire[1] Follow-Ups)

Client Major Problem Category: **Disorganized Thinking/ Behavior (V)**

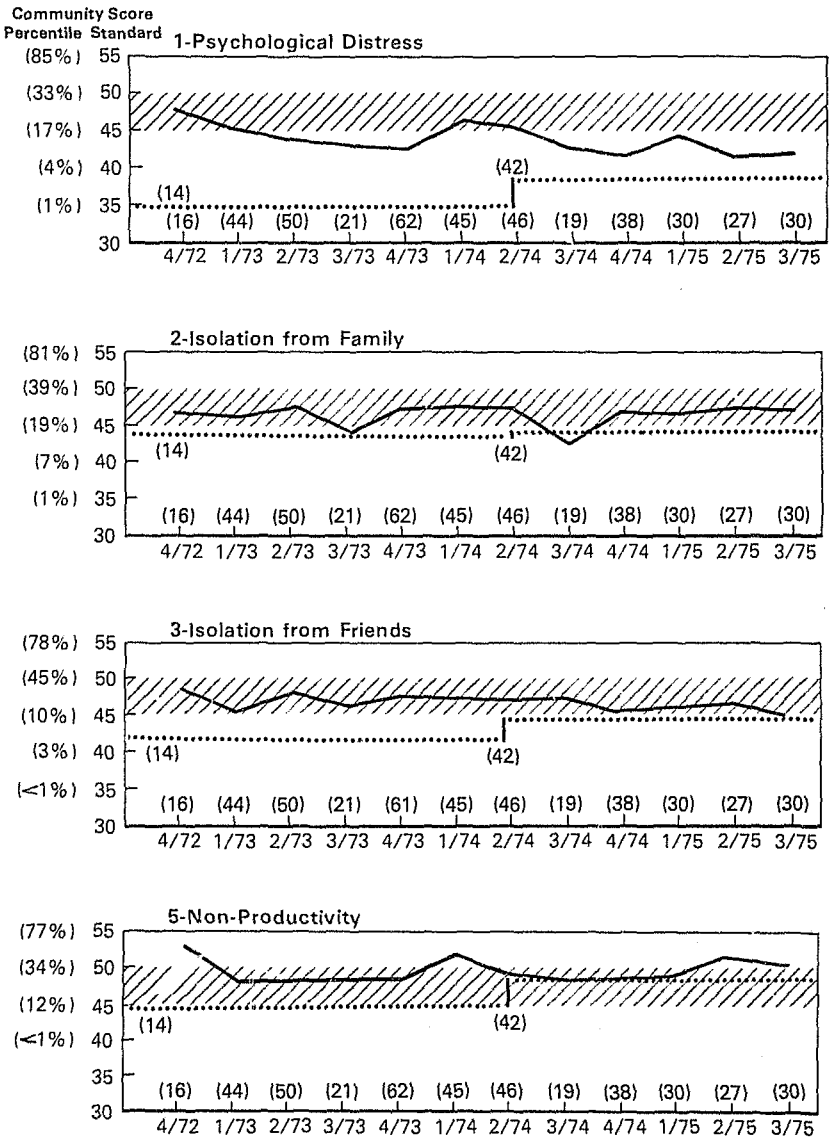


1 Scores standardized on random Denver community; sample (mean = 50; S.D. = 5)

Quarterly Program Outcome Scale Scores

(From Denver Community Mental Health Questionnaire[1] Follow-Ups)

Client Major Problem Category: **Emotional Distress (VI)**



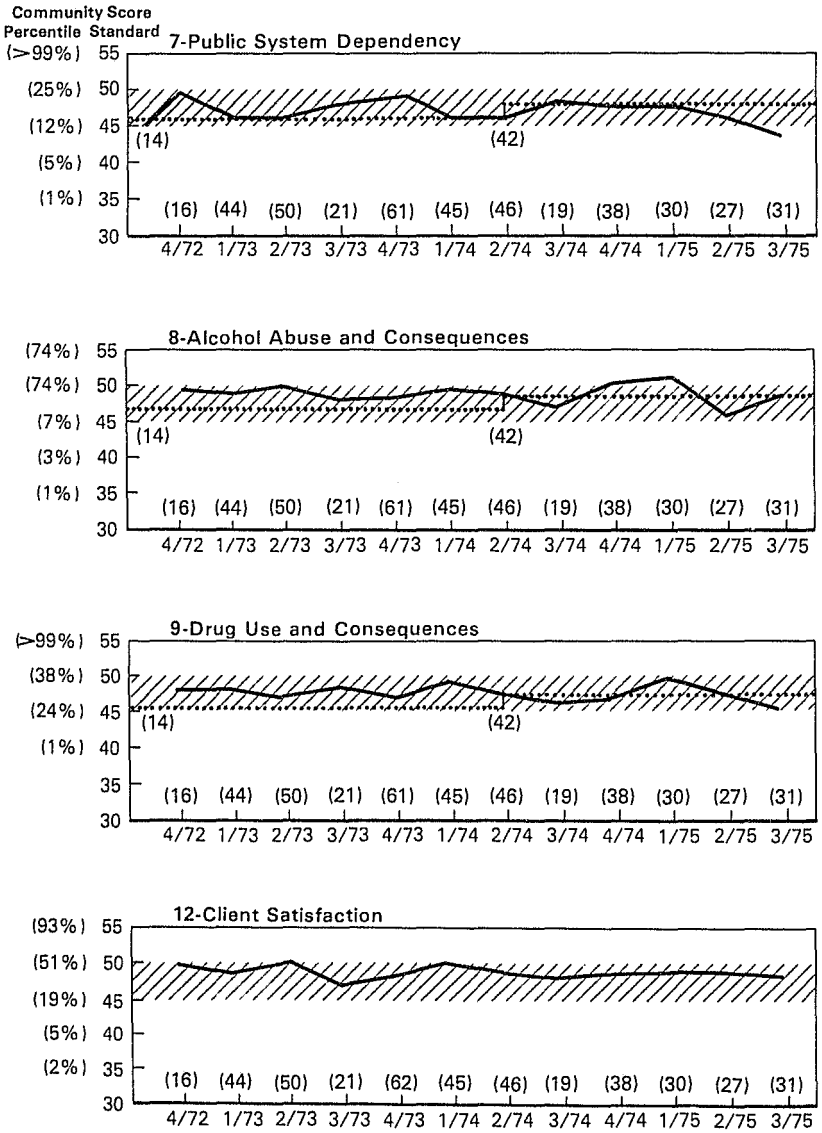
Indicates zone between 50-community mean and 45-minimum desired program outcome.

1 Scores standardized on random Denver community; sample (mean = 50; S.D. = 5)

Quarterly Program Outcome Scale Scores

(From Denver Community Mental Health Questionnaire[1] Follow-Ups)

Client Major Problem Category: **Emotional Distress (VI)**



Indicates zone between 50-community mean and 45-minimum desired program outcome.

1 Scores standardized on random Denver community; sample (mean = 50; S.D. = 5)

the ER and generic teams on an outpatient basis. The score pattern at admission reflects the most severe Psychological Distress (Scale 1) of any client group, plus substantial Interpersonal Isolation (Scales 2 and 3) and moderate to slight impairment on other scales. At follow-up, very substantial improvement has been the rule in the Psychological Distress area, plus good improvement in Isolation from Family. Moderate improvement on Scales 3, 4, 8, and 9 are also seen for a number of different quarters. In general, the score pattern appears to reflect considerable improvement in this group, which is quite possibly due to the treatments offered. Furthermore, Client Satisfaction scores are generally quite high for this group.

Nonetheless, the area of Psychological Distress is still problematical; the follow-up scores usually run below the zone of desired outcome, and there seems to exist a fairly steady deterioration in outcome since mid-1974. Isolation from Friends (Scale 3) is close to being outside the minimum desired outcome range. Scales 7, 8, and 9 also indicate occurrence of a downtrend in the last two quarters on these outcome dimensions. Again, this section believes that program alterations aimed at further alleviation of the distress of these clients are worth groping for and trying out on at least a limited basis. In this regard, it should be noted that in recent analyses of 1973 and 1974 outcome data, our researchers found no differences in Psychological Distress at outcome attributable to variations in length of treatment, type of treatment (individual or group), or use of anti-anxiety or anti-depressant drugs. These treatment factors may not therefore be the most productive in terms of potential program changes.

If any alterations should be decided upon, this Section will monitor the effects of their implementation to determine the impact on Psychological Distress and other scores.

MPC VII—Maladaptive Behavior

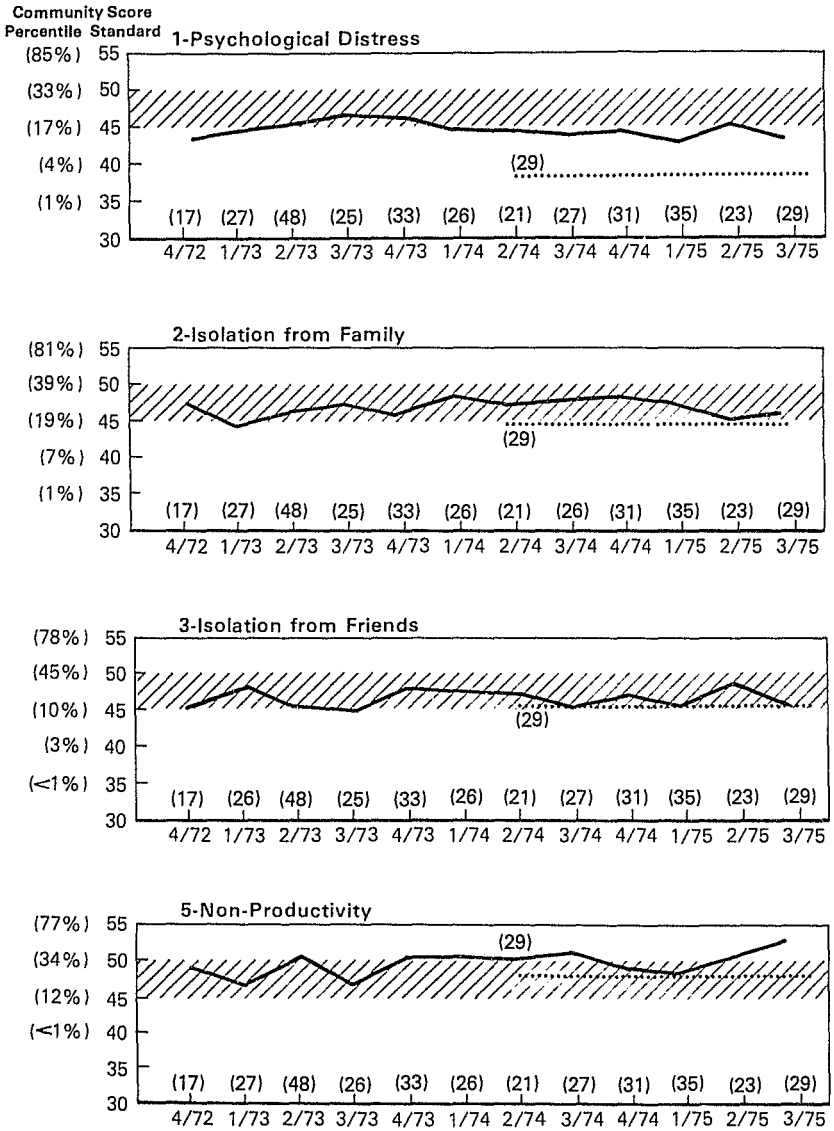
This group is much like MPC VI in terms of its score patterns, but it is intended to include primarily those clients whose problems tend to manifest themselves in poor interpersonal relations, poor job performance, and self-defeating behaviors, in contrast to the more affective or emotional disturbances seen in MPC VI. Since clinicians assign the client's MPC, however, this difference is only as sound as our clinicians' abilities to make and follow through upon this distinction, which may have declined somewhat since introduction of the MPC concept in late 1973. We base this possibility on an apparently high similarity in score patterns between the two groups.

Again, the Admission Score pattern reflects a high degree of Psychological Distress (Scale 1), moderate Isolation from Family (Scale 2) and Friends (Scale 3), and a lesser degree of Non-Productivity (Scale 5), Alcohol Abuse (Scale 8), and Drug Use (Scale 9). Follow-up scores for this group show substantial improvement in experienced distress and modest change for the better in interpersonal isolation, productivity, and alcohol abuse. A slight downtrend seems apparent in several scales beginning in late 1974, but we believe it is less definitive than the trends noted in other MPC graphs. We will continue to monitor these data for possible confirmation of the downtrend at a later point.

Quarterly Program Outcome Scale Scores

(From Denver Community Mental Health Questionnaire[1] Follow-Ups)

Client Major Problem Category: **Maladaptive Behavior (VII)**



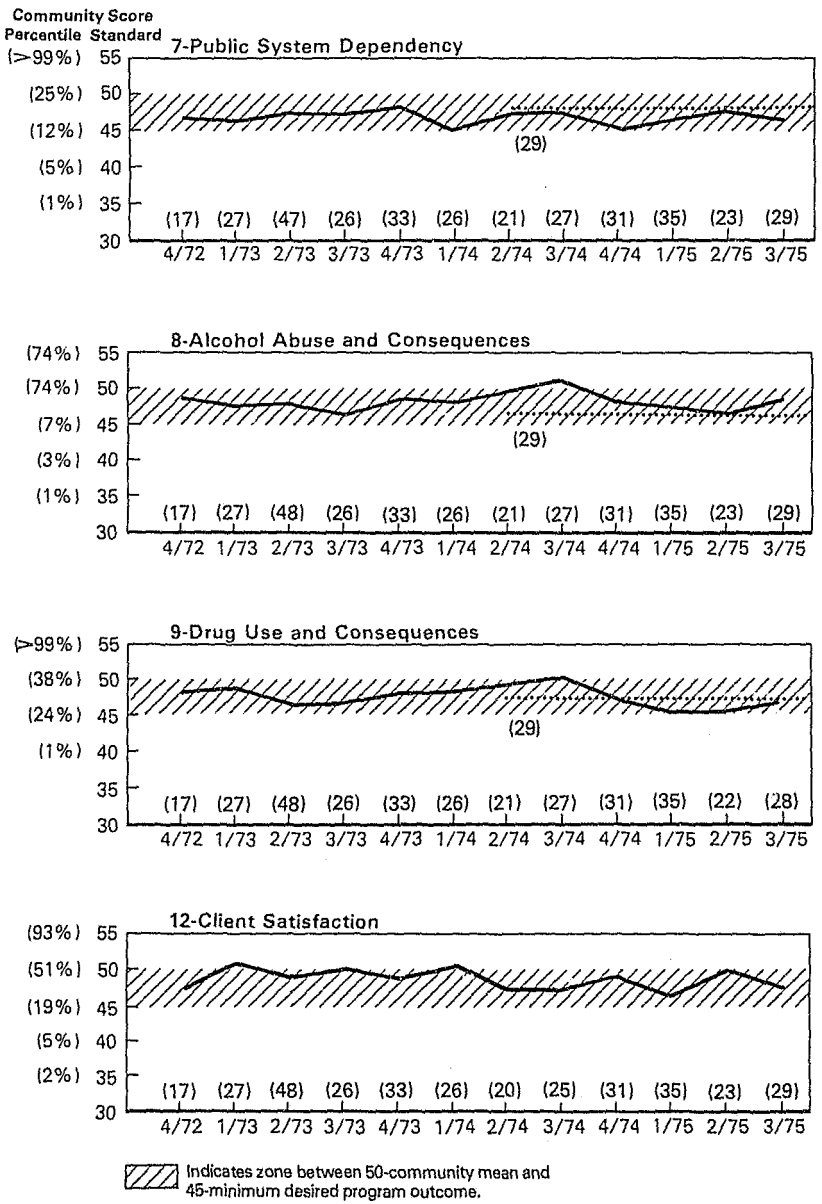
Indicates zone between 50-community mean and 45-minimum desired program outcome.

1 Scores standardized on random Denver community sample (mean = 50; S.D. = 5)

Quarterly Program Outcome Scale Scores

(From Denver Community Mental Health Questionnaire[1] Follow-Ups)

Client Major Problem Category: **Maladaptive Behavior (VII)**



1 Scores standardized on random Denver community; sample (mean = 50; S.D. = 5)

MPC VIII—Personal and Social Handicap

Though not sizable, this category was established by senior Center clinicians to group those persons whose psychological difficulties seemed to stem principally from realistic personal or environmental situations over which they had little control (medical disease, ex-convict status, death in the family, etc.). While Center clinicians use the category sufficiently often to warrant its importance, they have not referred enough of these clients to us at time of intake to allow establishment of admission "baselines" against which to make follow-up comparisons. Our comments are therefore restricted to the follow-up data.

In general, the follow-up picture is quite favorable. While we have not fully alleviated the Psychological Distress (Scale 1) felt by these people, most recent scores are just inside the zone of desired outcome. Family relationships (Scale 2) seem adequate, Productivity (Scale 5) is high, and there seem to be few problems with Alcohol Abuse (Scale 8) or Drug Use (Scale 9). Client Satisfaction (Scale 12) is quite high, although lower than the very high values in 1973. Only Public System Dependency (Scale 7) seems to indicate a low outcome, and this scale may reflect realistic dependence on external resources because of the handicaps involved.

Our section will attempt to develop admission data for this group in 1976, as well as presenting additional information on the types of cases being included by clinicians in this category.

CONCLUDING REMARKS

While the data shown in this report cannot definitely prove that the treatment services delivered to these client groups were at least partially responsible for the scores obtained at follow-up, it is not unreasonable to proceed on that assumption, as it provides the basis for the next crucial step—namely, to try to *improve* client outcome scores by any and all treatment program changes which seem potentially useful. The causal relation of treatment to outcome *can* be established by such changes if they cause a significant shift in the score pattern. If they do not, however, the program should then revert to the least costly and most humane treatment patterns which do not result in deterioration of current outcome levels, particularly if they seem reasonable in relation to the scores of the community at large.

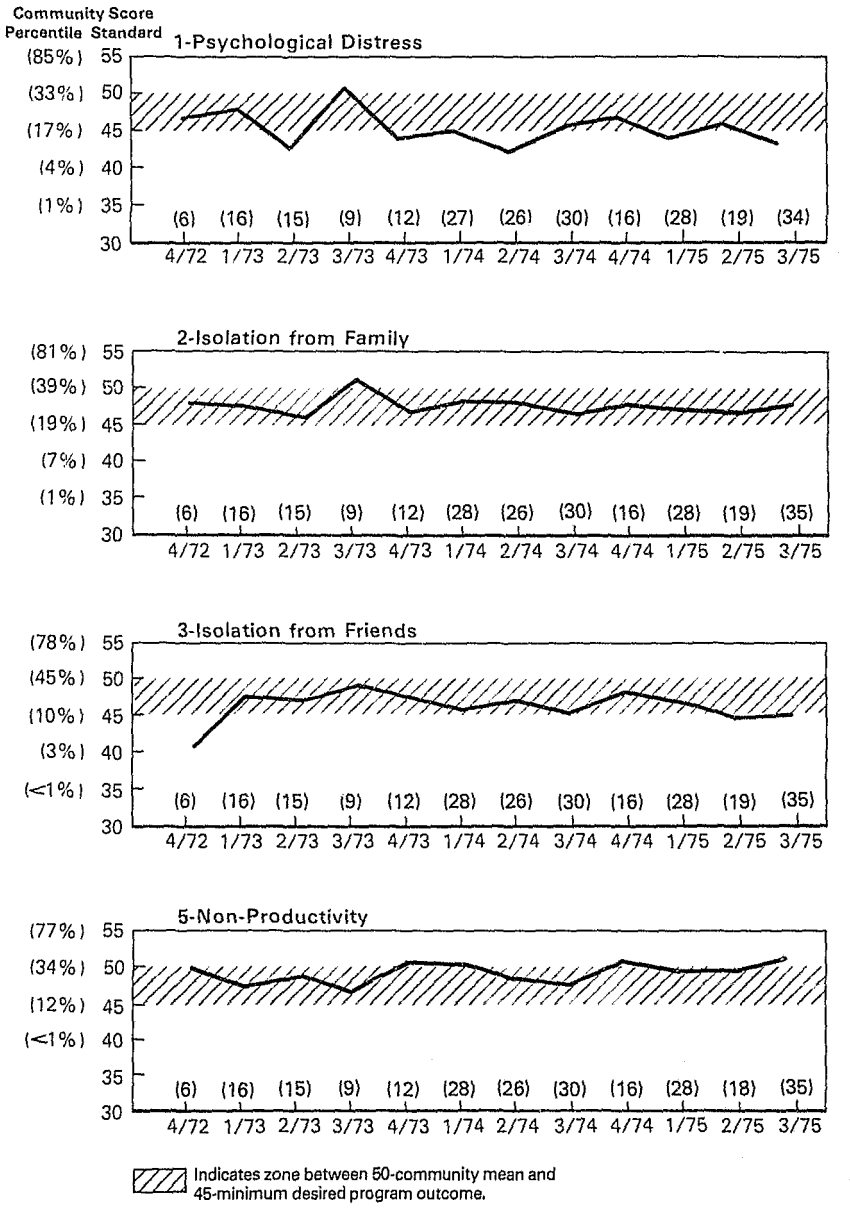
Our Section's research analysts feel that, with some exceptions, the data reviewed in this report tend to reflect favorably upon Center programs for adults. Major exceptions are the results for MPC II—Drug Abuse and MPC IV—Somatic Complaints. For these groups, we strongly recommend a serious program review designed to develop program improvement strategies. For MPC V—Disorganized Behavior/Thinking and MPC VI—Emotional Distress, we recommend a more limited review aimed at particular aspects of personal and social functioning as noted in the text.

We reiterate that this section will collaborate with such program reviews in order to provide supplementary data as requested and to systematically test the impact of any program alterations resulting from these reviews.

Quarterly Program Outcome Scale Scores

(From Denver Community Mental Health Questionnaire[1] Follow-Ups)

Client Major Problem Category: **Personal/Social Handicap (VIII)**

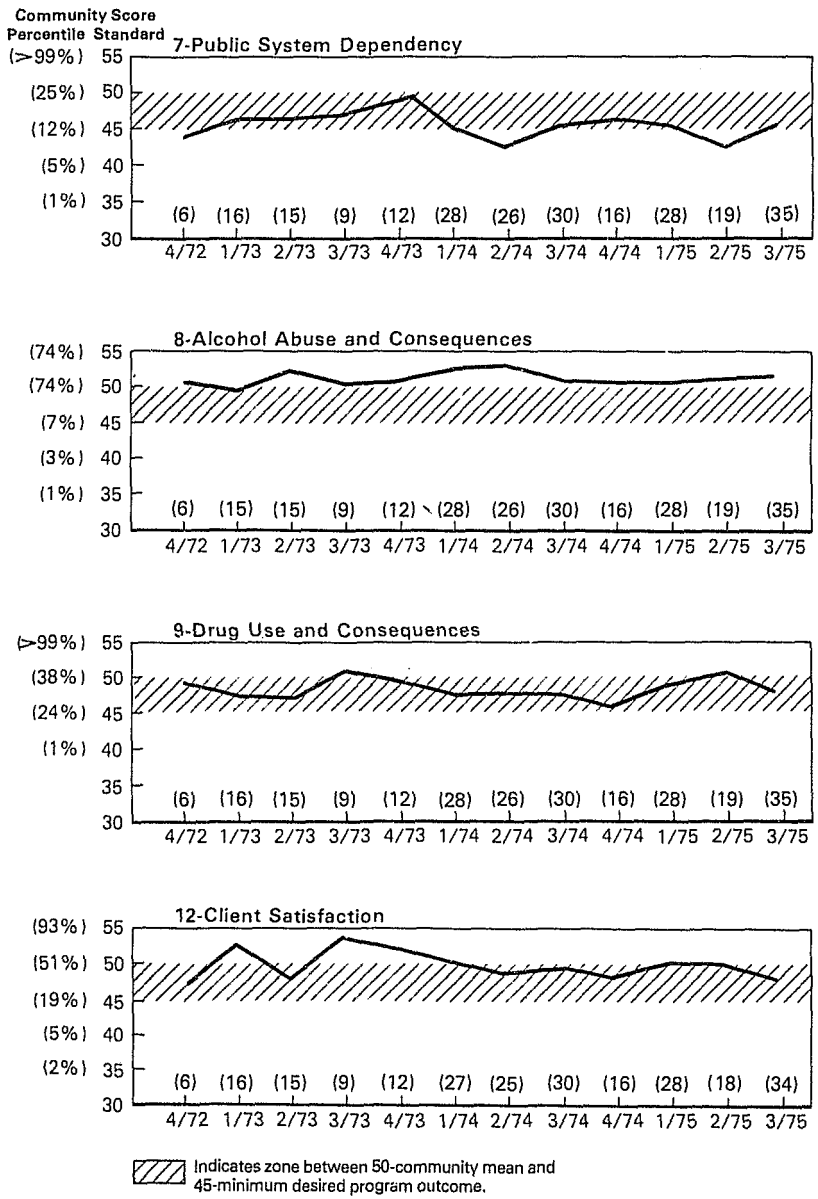


1 Scores standardized on random Denver community; sample (mean = 50; S.D. = 5)

Quarterly Program Outcome Scale Scores

(From Denver Community Mental Health Questionnaire[1] Follow-Ups)

Client Major Problem Category: **Personal/Social Handicap (VIII)**



Indicates zone between 50-community mean and 45-minimum desired program outcome.

1 Scores standardized on random Denver community; sample (mean = 50; S.D. = 5)

END