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PROGRAM CLOSURE AND SUBSEQUENT UTILIZATION OF MENTAL HEALTH SERVICES

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Abstract

A mental health center offering outpatient services was closed for budgetary reasons. Its active caseload was examined following its closure to determine how many clients were subsequently admitted to mental health services. Of the 367 clients who were active at the time of the closure and who had received referrals, 189 or 52 per cent did not appear anywhere in the Short-Doyle system in the next six months. For one third of the active clients, the first admission during the six-month follow-up period was to a regular outpatient program, indicating that the center's referral procedures were partially effective. Thirteen per cent were first admitted to emergency rooms and 2 per cent were admitted to hospitals.

Relative to those clients who did not complete their referrals, clients who completed their outpatient referrals at their first subsequent admission were characterized more by their higher units of service while at the center than by the severity of their diagnoses. Clients whose first subsequent admissions were to emergency rooms and hospitals received the lowest amount of treatment at the center, exhibited the highest level of illness severity as measured by diagnosis, and histories of recent multiple admissions in all mental health treatment modalities. This group was subsequently involved in repeated short-term encounters with the mental health system, particularly with emergency rooms, during the follow-up period. Clients not appearing anywhere in the Short-Doyle System exhibited the least severe illneses at the time of the closure indicating that their need for continued service was not as great as other clients who experienced the closure.

The evidence shows an overall decrease in inpatient admissions between the six months before admission and the six months after discharge from the center. This decrease was accompanied by an increase in outpatient admissions and virtually no average change in emergency room admissions. Resumption of out-patient treatment after the closure of a clinic seems to be strongly related to having already established a relatively long-term therapeutic relationship at the closed clinic.

The findings of this study suggest that, in the event of a future similar program closure, a greater effort should be devoted to planning the referrals of clients with relatively low units of service, severe illnesses and recent histories of inpatient and/or emergency room admissions.

INTRODUCTION

The closing of any mental health facility can be expected to impact the entire system of mental health delivery as well as the well-being of its clients. In the current era of decreasing funding, the potential impact of a program's closure on the scarce resources of the system's entire range of services should be considered. Furthermore, making appropriate referrals to alternative programs and facilitating the completion of such referrals are tasks that require careful planning and adequate time to carry out. That many clients may not complete their referrals, but instead may become displaced into some other part of the mental health system must also be considered. As a closure necessarily creates disruptions in the care of its active clients, consideration should also be given to the possibility that some clients will be lost from the mental health system: that many who need its services will be adversely affected by the closure because they lack the ability, motivation or means to complete their referrals.

South Central Mental Health Services was an outpatient clinic in the Los Angeles County Short-Doyle Mental Health System that formally closed its operation on October 5, 1979 because of budgetary cutbacks. The clinic provided services to a seriously ill clientele, 66.5 per cent of whom were diagnosed as psychotic. An additional 19 per cent were diagnosed as neurotic, 6.3 per cent as having character disorders and 7.6 per cent as having other illnesses. The types of services provided were individual therapy, conjoint therapy, family psychotherapy, medication therapy, crisis intervention, mental health consultation, education to the community, and an inhouse and mobile psychiatric emergency team.

According to two former South Central counselors, the referral-out-process routinely followed prior to the closure entailed discussing the referral with the client, making an appointment on the client's behalf (if the client was perceived to need such assistance) with a counselor at the facility to which the client was referred, informing the client of the appointment, and a follow-up interview with the client after the appointment to assess the suitability of the referral. When South Central closed, its referral process broke down. Although knowledge of the closure was well established before its occurrence, the counselors said they could not inform their clients of the closure or make referrals until a closing date was official. The official order to close was not received until two weeks before it was to take place and consequently there was not sufficient time to follow the established referral-out process.

The typical referral procedure during this rushed, two-week period was as follows: Attempts were made to contact the most current clients (i.e., those who kept their last appointment) in order to explain the closure to them, to discuss possible referrals, and to help them make appointments. These current clients were also told that their counselors were being transferred and were given the option of continuing treatment with them. All clients (including those who could not be reached and those not considered active) were sent a letter explaining the closure, specifying the date of closure, and listing appropriate alternative facilities in the Central Regio...

The objective of this study is to explore what happens to active clients after the closure of an outpatient facility. Focusing on the closure of South Central, the following questions were asked: With what frequency do active clients from an outpatient facility which closes its operation complete their referrals for further outpatient treatment? With what frequency are they admitted to emergency or inpatient programs? What factors are associated with the completion or non-completion of outpatient referrals? What seems to be the overall impact of closing an outpatient facility?

The sample for this study was selected according to the following steps:

1. The names of all clients discharged because of the closure during September or October of 1979 were compiled (N = 572).

2. All clients so discharged in September and October who had received services at least once within two months prior to discharge, except clients who were seen only once[1/], were considered active cases and comprised the sample under study (N=367).

3. The active clients were then tracked through the Department of Mental Health's data system through March 31, 1980 in order to determine if they were readmitted to a mental health service during the six months following South Central's closure. It should be noted that the type of referral given individual clients (through personal discussion or letter) could not be identified by this study.

RESULTS

Types of Admissions. Of the 367 clients who were active at the time of South Central's closure, 189 or 51.5 per cent did not complete their referrals and were not admitted to any program (outpatient, emergency or inpatient) in the County Mental Health system within six months after the program closure. Those who were admitted to a program typically resumed services with an outpatient program. In all, 33.3 per cent of the active clients were admitted to an outpatient program as their first admission subsequent to the closure. At the same time, a sizeable number of active clients were first admitted to non-outpatient programs: 48 (13.1 per cent) were subsequently admitted to hospital emergency rooms, and 8 (2.2 per cent) to inpatient facilities.

Throughout this report, active clients who were admitted to outpatient programs at their first subsequent admission are considered to have completed the referrals they received from South Central. While this seems likely to be the case, it is not necessarily true in all instances as it is also possible that some clients were admitted to clinics other than those to which they were referred by South Central.

1/ In order to represent clients with established therapeutic relationships at South Central, clients seen only once were excluded, even if they were seen shortly before the closure.

Active clients who were admitted to emergency rooms or hospitals at their first admission after South Central's closure are considered not to have completed the referrals they received from South Central. While several of these clients were eventually admitted to outpatient programs (a topic to be discussed later in this report), and while such admissions might have been a result of South Central's referrals, they might also have resulted from referrals made by emergency rooms or hospitals.

Information on whether or not specific referrals were completed was not collected by this study. Nevertheless, a decision was made to base subsequent analyses on a threefold classification of South Central's active clients:

1) those who are assumed to have completed their outpatient referrals at their first admission subsequent to South Central's closure; 2) those whose first admissions after the closure were to emergency rooms or hospitals; and 3) those who were not admitted anywhere in the Short-Doyle Mental Health System during the six month follow-up.

An additional methodological issue has to do with the possibility that some of the clients first admitted as outpatients were done so on an emergency basis. It would not be valid to count this type of occurrence as a completed referral. Unfortunately this issue could not be assessed directly because the Department's data files during this time period did not indicate whether or not a given outpatient admission concurrently involved an emergency intervention. However, the possibility of emergency interventions were examined indirectly in two ways. First, the "referral in" source of each outpatient admission was examined for the involvement of law enforcement or suicide prevention. Both referral sources indicate a possible emergency, but no instances of either type of referral were found. Second, if a first admission to an outpatient clinic was immediately followed by an inpatient or emergency room admission, an emergency intervention could be inferred. The minimum obtained length of time between the two types of admissions when they occured together was seven weeks. These figures suggest that admission to outpatient facilities had a minimal emergency component.

Table 1, which shows the total number of inpatient, emergency room and outpatient admissions within the six month follow-up period for clients first admitted as outpatients, indicates that seven of the 122 clients who completed an outpatient referral as their first admission after the closure subsequently exhibited at least one emergency room admission and that three clients exhibited inpatient admissions. Thus, 8.2 per cent of all clients who completed their outpatient referrals as their first subsequent admissions also eventually required emergency room or inpatient intervention within six months. This figure is considerably lower than the 15.3 per cent whose first subsequent admissions were to emergency rooms or hospitals, and suggests that the clients who first connected with outpatient treatment are less crisis-prone as a group or that their outpatient treatment delayed their crises.

Table 2 shows that 35.8 per cent of the clients who were first admitted to emergency rooms or as inpatients were eventually admitted one or more times as outpatients during the six month follow-up period. However, as can be seen in Figure 1, this is a highly recidivistic group (especially those whose first subsequent admissions were to emergency rooms) and outpatient admissions are interspersed with many emergency room or inpatient admissions. Over one-third of this group showed two or more emergency room admissions during the follow-up period. This may indicate the existence of an emergency or crisis-prone group of clients that relies heavily and repeatedly on the immediate attention provided by emergency rooms in addition to the services provided by outpatient programs. More will be said of this later.

Time to admission. Of the 122 active clients whose first subsequent admission was to an outpatient facility, nearly two-thirds (65.6 per cent) were admitted within one month of their discharge from South Central (Table 3), with an average time to first subsequent admission of 35.8 days. Of the 56 clients subsequently first admitted as inpatients or to emergency rooms the majority (53.6 percent) were so admitted one month after their discharges from South Central, with an average of 57.6 days to admission. That those clients who completed their outpatient referrals at their first admission tended to return to therapy within a shorter period of time suggests that they experienced a greater immediate need to continue their treatment or that they had a greater regard for therapy since they had been in therapy longer. Concurrently, it suggests that those who do no complete their referrals might -- due to their lack of immediate recommended services -- consequently require emergency intervention. This will receive further attention later in this paper.

Units of Service at South Central and Subsequent Admissions. The possibility that completion or non-completion of outpatient referrals as a first subsequent admission might be related to the amount of service received at South Central is examined in Table 4. It might be expected, for example, that individuals who received relatively small amounts of service would be more likely to complete their referrals than those who received large amounts because, having not completed their outpatient treatment, they might have a greater felt need for continued treatment. The average units of service for all three admissions categories, however, suggests the opposite. The highest mean, 49.5, was exhibited by those who were first admitted as outpatients while the lowest mean, 26.9, was shown by those who were first admitted to emergency rooms or inpatient services. Those clients not admitted to any Short-Doyle services during the six month follow-up exhibited a mean of 36.5. Table 5 shows that 38 per cent of those first admitted to emergency rooms or inpatient services had ten or fewer units of service while the figure for those first admitted as outpatients was less than one half of this amount, at 16 per cent. Thus, there was a clear-cut tendency for persons who completed their outpatient referrals at their first admission to have received more units of service while at South Central. This suggests a general hypothesis that clients who have established relatively long-term therapeutic relationships with an outpatient clinic are more dependent upon

such relationships and/or more motivated or capable of resuming a similar relationship elsewhere after that clinic's closure. It could also indicate that clients who had individual long-term relationships with their therapists were more likely to have continued relationships with the same therapists in new outpatient settings. The large numbers of clients who completed referrals at the two clinics to which several of South Central's clinical staff had been transferred, suggest that this might have been the case.

That the clients subsequently first admitted to emergency rooms or hospitals exhibited the lowest consumption of South Central's outpatient services suggests two different hypotheses. A first hypothesis is that persons who received fewer units of service, because of their relatively untreated illnesses, had a greater tendency to be adversely affected by the closure with the consequence that they experienced problems requiring emergency room intervention or hospitalization. Although all active clients received referrals, this subgroup may have been less inclined to complete them due to one or more of a constellation of adverse factors including its relatively short-term relationships (and possible less familiarity) with South Central's therapists, feelings of trauma or desertion due to the abruptness of the closure, or an inability to travel to alternative outpatient facilities. This hypothesis is not meant to imply that those clients who completed their referrals were not also adversely affected by the closure, only that those who had received less treatment might have been more vulnerable to the above factors. Had they received more services their chances of dealing with closure trauma and eventually completing their referrals might have been greater. A second hypothesis suggested by data on types of admissions after the closure (Table 2 and Figure 1) is that persons who who did not complete their referrals but were admitted to emergency rooms or hospitals are an emergency or crisis-prone subgroup. They may represent a group for which repeated short-term encounters with the mental health system (be they outpatient, inpatient or emergency room) characterize the nature of their involvement. In particular, this group seems to seek the immediate attention provided by emergency rooms in addition to services provided by inpatient and outpatient facilities.

Diagnosis and Types of Admissions. The possibility that the completion of referrals might be associated with the diagnosis received at South Central is explored in Table 5. While the final diagnosis of most of the 367 active clients was as psychotic (66.5 per cent), the inpatient/emergency room group (78.6 per cent) and the outpatient group (71.3 per cent) showed a higher percentage of this diagnosis than the not-admitted group (59.8 per cent). Concurrently, the not-admitted group exhibited a higher percentage of neurotics (23.8 per cent) while the figures for the outpatient and emergency room/inpatient groups were 18.0 per cent and 8.9 per cent, respectively.

Thus, the category of active clients who were not admitted to any program within six months after the closure exhibited the lowest level of illness severity in addition to a lower average units of service. Most clients in this group may not have needed further intervention from the mental health system, thus accounting for their non-pursuit of further outpatient treatment. By contrast, clients in the emergency room/inpatient group, because of their

high percentage of psychotics and their lower units of service, may represent a relatively untreated and seriously ill group for which a greater-than-average effort in the referral process is warranted. Such a special effort was probably not made at South Central due to time limits inherent in the abruptness of the closure. The illness severity of the outpatient group, as measured by diagnosis, fell between the other two groups both on the percentage of neurotics and of psychotics. This group seems to be less seriously ill than those who were first admitted by emergency rooms or hospitals and more seriously ill than those not admitted anywhere. Their middle position on this gradient of illness severity combined with the fact that their average units of service (49.5) was higher than the other two groups suggests that they appropriately sought (and later continued) outpatient treatment for what (as a group) was a relatively moderate level of illness severity.

Prior History - The admissions histories of the three active client categories were examined to provide a general assessment of the relationship between prior admissions and subsequent referral completion and to shed some light on why the three categories exhibited differences on subsequent admissions. Under one hypothesis, it will be recalled, the post-discharge admissions patterns of the emergency room/inpatient group are due to adverse effects brought about by the closure. If this hypothesis were true, there would be no major differences among the prior admissions histories of the three client categories as differences in subsequent admission histories would be a consequence of the closure itself. Under a second, alternative hypothesis, subsequent patterns of admissions are viewed as a continuation of past patterns. In this case clients first admitted to emergency rooms or hospitals after the closure would be expected to exhibit a higher incidence of prior admissions to all treatment modalities.

Table 6 shows the number of inpatient admissions exhibited by each of the three groups within a six month period prior to their admission to South Central. The average prior inpatient admissions for the inpatient/emergency room group ($\bar{X}$ = .48) was considerably higher than the averages for the outpatient admission group ($\bar{X}$ = .18) or the group with no subsequent admissions ($\bar{X}$ = .11).2/ The difference between the outpatient and no admission group was relatively small. Thus, comparisons on the average number of prior inpatient admissions lend support to the hypothesis that post-discharge differences are a continuation of prior admission patterns, instead of negative effects brought on by the closure.

Figures on the number of prior emergency room admissions provide even stronger support for the "continuation hypothesis". As can be seen in Table 7, the average number of prior emergency room admissions for the emergency room/inpatient group ($\bar{X}$ = .69) was considerably higher than the means for the outpatient group ($\bar{X}$ = .18) or the no admission group ($\bar{X}$ = .21) again, the difference between the outpatient and no admission groups was relatively small.

The three groups exhibited much less difference on prior outpatient admissions (see Table 8). The means for the three groups were: inpatient/emergency room group, .50; outpatient group, .35; and no subsequent admissions group,

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2/ An Appendix showing a statistical assessment of differences among the means of this measure and of other measures used in this paper is available upon request.

.31. Thus, while the inpatient/emergency room group exhibited a higher incidence of prior outpatient admissions than the other two groups, such differences were not as large as those exhibited on the measures of prior inpatient and emergency room admissions. Nevertheless, the inpatient/emergency room group exhibited a markedly higher incidence of prior admissions across all treatment modalities. If the agency had not been closed and if this recidivistic subgroup had remained in outpatient treatment, their pattern of subsequent involvement in emergency rooms and hospitals might have been reduced.

The sequential pattern of prior admissions for the inpatient/emergency room group is graphically displayed in Figure 2. The patterns for the outpatient and no admission groups are displayed in Figures 3 and 4. Taken together, the figures provide further delineation of the patterns displayed in Tables 6, 7 and 8 and strongly suggest that clients who did not complete their referrals after the closure, but who instead were admitted to emergency rooms or hospitals, were continuing a pattern of chronicity that had been established prior to their admissions to South Central.

General Effects of The Closure - A remaining issue has to do with the general impact of South Central's closure on all of the active clients who were discharged. Did the truncated outpatient intervention provided by this program generally increase or decrease the admissions of its clients in the Short-Doyle system? To answer this question, change scores were created for each of the 367 clients including differences on the number of inpatient, emergency room and outpatient admissions within six months before their admission and six months after their discharge from South Central. As can be seen in Table 9, the highest amount of average change (-.14) involved a decrease in inpatient admissions. This was followed in absolute magnitude by an average increase in outpatient admissions of .11. There was virtually no net change in the number of emergency room admissions. Thus, the analysis of change scores suggests that the outpatient services provided by South Central may have decreased inpatient admissions and increased the outpatient admissions of its 367 active clients, without having an effect on net changes in emergency room admissions.

As a group South Central's clients appear to have benefitted from its program in spite of the abrupt termination of their treatment. The significant post-closure increase in outpatient admissions is probably due, in large part, to South Central's referral procedures. Successfully completed outpatient referrals, in turn, were likely related to the decrease in inpatient admissions: That one third of the total sample completed their outpatient referrals would be expected to decrease the likelihood of hospitalizations. Also, it should not be overlooked that the treatment received at South Central, albeit truncated due to the closure, may have effectively diminished illnesses previously requiring hospitalization. Many persons who did not complete their referrals may have benefitted from the treatment they received and may not have needed further treatment.

However conclusive the figures in Table 9 may seem, an experimental design using a control group of comparable clients who completed their treatment at an outpatient program that had not been closed would be required to assess the overall impact of the closure. For example, it is difficult to tell whether or not the decrease in inpatient admissions is due to treatment received at South Central or the general trend towards curtailment of mental health services in Los Angeles County. During fiscal year 1980 there were 18,399 Short-Doyle inpatient admissions, a reduction of 10 per cent compared to FY 1979 and a 22 per cent reduction compared to FY's 1978 and 1977.3/ Thus, the 14 per cent reduction in inpatient admissions for the South Central sample probably reflects this trend, but to an unknown degree. A control group of outpatients would have allowed an exploration of whether the decrease in inpatient admissions is larger if outpatient treatment is completed.

SUMMARY

The closing of South Central Mental Health Services necessarily resulted in the disruption of the treatment of its 367 active outpatients. Although attempts were made to refer active clients to outpatient programs, a little over one half of these clients did not complete their referrals and were not admitted anywhere in the Los Angeles County Short-Doyle System within the next six months. An additional 13.1 per cent were subsequently first admitted to emergency rooms and 2.2 per cent were hospitalized. That 33.3 per cent of the active clients were first admitted to outpatient programs during the six month period indicates that South Central's referral procedures were partially effective, but that the majority (66.7 per cent) did not complete at their first subsequent admissions raises a number of questions. What factors distinguish clients who complete their referrals from those who do not? What steps can be taken to facilitate the completion of referrals in the event of future closures? What is the potential impact of a future program's closure on the mental health system?

The high percentage of South Central's active clients who were not admitted anywhere in the system dramatically points out one potential impact of closing a facility. This group of clients seems to have been lost by the mental health system and one can only speculate on the personal, familial and societal consequences resulting from the non-treatment of its illnesses. This group, however, did not show the serious levels of illness exhibited by those who were subsequently admitted as outpatients or to emergency rooms or hospitals, nor did it exhibit the highest average units of service, suggesting that its need for continuing treatment was not as great. Over one-half of this group (52 per cent) did not have any prior admissions. Many of the clients in this group might have dropped their treatment regardless of the closure, may not have needed outpatient treatment in the first place, or may not have needed any more treatment.

3/ Source of information: County of Los Angeles, Department of Mental Health Fact Sheet, Fiscal Year 1980-81. Billable State Hospital admissions and local hospital admissions were combined to produce these figures.

Relative to clients who did not complete their referrals, those clients who were subsequently first admitted as outpatients were characterized more by their higher average units of service while at South Central than by their illness severity (as measured by diagnosis). This suggests that clients with relatively long term therapeutic relationships at an outpatient clinic are more motivated or capable of or have more need for resuming similar relationships elsewhere after a clinic's closure, or are more dependent upon such relationships.

The group of clients who did not complete their outpatient referrals at first admission after the closure, but instead were admitted to emergency rooms or hospitals, was characterized by a comparatively lower average units of service at South Central and relatively higher levels of illness severity. Furthermore, an assessment of all admissions six months subsequent to the closure shows this group to be highly recidivistic, relying repeatedly on the services of emergency rooms in addition to outpatient and inpatient services. Two alternative hypotheses were suggested to account for the pattern exhibited by this group. The first was that -- due to the severity of its illnesses and its shorter time in treatment -- this group was adversely affected by South Central's abrupt closure. The second hypothesis was that it represents a group of clients for whom repeated short-term encounters with the mental health system (be they outpatient, inpatient or emergency room) characterize their involvement.

An assessment of the alternative hypotheses supported the conclusion that clients who did not complete their referrals after the closure and were admitted to emergency rooms or hospitals were continuing a pattern of chronicity that had been established prior to their admissions to South Central. While this group may have experienced some trauma over the closure, it also exhibited markedly higher averages on number of prior inpatient and emergency room admissions when compared to the outpatient and not-admitted groups. These findings suggest that clients with recent histories of multiple admissions may require a special effort if the referral process is to achieve optimal success.

The impact of South Central's closure on other outpatient programs (i.e., whether or not their existing caseloads were unduly strained by completed referrals) was not measured by this study. However, an investigation of differences in the number of outpatient admissions within six months before admission to and within six months after discharge from South Central for the total sample showed an increase in outpatient admissions. Although we did not measure the impact of this increase, it is our assumption that the referral process involved communications with other outpatient programs and that the utilization of their resources by South Central's active clients was anticipated. In fact, some programs received more resources through the transfer of South Central's staff. The percentage of clients who did not complete their referrals at first admission but were hospitalized (2.2 per cent) may reflect a base rate for outpatients in general and probably did not impact the inpatient system in a significant way. Indeed, our "before and after" investigation of outpatient services at South Central showed a sizable <u>decrease</u> in admissions to hospitals for the total sample of active clients.

After their discharge, sixteen per cent of the 367 active clients were admitted to emergency rooms at least once, and 6 per cent were admitted two or more times during the six month follow-up. While we do not know whether these percentages are higher than might be expected, our assessment of before and after differences showed virtually no average change in the number of emergency room admissions. Thus, the closure probably did not place an undue burden on the mental health system's emergency room services. If, however, the budget reductions were more severe (e.g. all counselors at the agency were laid off instead of transferred) there would not have been the resources to serve the patients.

That 33.3 per cent of South Central's clients were admitted to outpatient programs within six months after its closure indicated that its referral procedures were partially effective, but the high overall percentage that was not admitted to outpatient programs suggests either that many did not need outpatient services or that a greater effort should be devoted to referral planning in the event of a future, similar program closure. Specifically, our recommendations are as follows:

1. Two weeks was not an adequate period of time to plan individualized referrals for the 367 clients. Nor was it sufficient time for the clients to prepare for and assimilate the possible impact of the closure. If future closures occur, they should be planned (if possible) in terms of months--not weeks.

2. Special referral planning efforts should be devoted to clients with severe levels of illness and relatively low units of service and recent histories of multiple admissions. This subgroup would be expected to show exacerbated symptoms after a program closure. Furthermore, it is this relatively untreated but seriously ill subgroup that seems to have the highest likelihood of exhibiting repeated admissions through all treatment modalities and possibly placing an undue strain on scarce mental health system resources.

3. Closing any established mental health facility would seem to unavoidably create some degree of stress and uncertainty for its clients and staff. More knowledge is needed on how to plan and manage referrals under this unusual condition in a way that enhances their completion and that also takes into account the well-being of clients and staff members.

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TABLE 1: FREQUENCY AND TYPE OF SUBSEQUENT ADMISSIONS DURING THE SIX MONTH FOLLOW-UP FOR CLIENTS WHOSE FIRST ADMISSIONS WERE AS OUTPATIENTS. (N=122)

Total Number of Admissions During Follow-up.	Type of Admission					
	Inpatient		Emergency Room		Outpatient	
	f	%	f	%	f	%
None	119	97.5%	115	94.2%	0	--
1	3	2.5	5	4.1	106	86.9
2	0	--	0	--	15	12.3
3	0	--	2	1.6	0	--
4	0	--	0	--	1	.8
TOTAL	122	100.0%	122	100.0%	122	100.0%

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TABLE 2: FREQUENCY AND TYPE OF SUBSEQUENT ADMISSIONS DURING THE SIX MONTH FOLLLOW-UP FOR CLIENTS WHOSE FIRST ADMISSIONS WERE AS INPATIENTS OR TO EMERGENCY ROOMS (N=56)

Total Number of Admissions During Follow-up	Type of Admission					
	Inpatient		Emergency Room		Outpatient	
None	41	73.2%	6	10.7%	36	64.3%
1	13	23.2	31	55.4	17	30.4
2	2	3.6	12	21.4	2	3.6
3	0	--	3	5.4	0	--
4	0	--	1	1.8	1	1.8
5	0	--	2	3.6	0	--
6	0	--	1	1.8	0	--
TOTAL	56	100.0%	56	100.0%	56	100.1%

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TABLE 3: TIME FROM DISCHARGE AT SOUTH CENTRAL TO FIRST ADMISSION BY TYPE OF FIRST SUBSEQUENT ADMISSION

Time to First Admission	First Subsequent Admission: Outpatient		First Subsequent Admission: Emergency Room or Inpatient	
	f	%	f	%
Within two Weeks (0 to 14 Days)	28	23.0%	15	26.8%
Two Weeks To One Month (15 to 30 Days)	52	42.6	11	19.6
One Month To Two Months (31 to 61 Days)	21	17.2	8	14.3
Two Months To Six Months (62 to 179 Days)	21	17.2	22	39.3
TOTAL	122	100.0%	56	100.0%
AVERAGE DAYS TO FIRST ADMISSION	35.8		59.9	

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TABLE 4: TOTAL UNITS OF SERVICES RECEIVED AT SOUTH CENTRAL BY ADMISSION CATEGORY

UNITS OF SERVICE RECEIVED AT SOUTH CENTRAL* BY THE STUDY SAMPLE	SUBSEQUENT FIRST ADMISSION OUTPATIENT		SUBSEQUENT FIRST ADMISSION: EMERGENCY ROOM OR INPATIENT		NOT ADMITTED		TOTAL	
	f	%	f	%	f	%	f	%
10 or Less	19	16%	21	38%	65	34%	105	29%
11-20	25	20	13	23	33	17	71	19
21-30	17	14	2	4	25	13	44	12
31-40	14	11	8	14	19	10	41	11
41-50	8	7	4	7	10	5	22	6
51-60	3	2	1	2	7	4	11	3
61-70	9	7	2	4	5	3	16	4
71-80	6	5	3	5	4	2	13	4
81-90	2	2	0	--	2	1	4	1
91-100	4	3	1	2	1	1	6	2
101 Or More	15	12	1	2	18	10	34	9
TOTAL	122	99%	56	100%	189	101%	367	
MEAN	49.5		27.1		37.4		39.9	

* The Average units of service for all discharges from South Central during fiscal year 1978-79 was 11.12.

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TABLE 5: DIAGNOSIS BY TYPE OF FIRST SUBSEQUENT ADMISSION

DIAGNOSTIC CATEGORY	FIRST SUBSEQUENT ADMISSION: OUTPATIENT		FIRST SUBSEQUENT ADMISSION: EMERGENCY ROOM OR INPATIENT		NOT ADMITTED		TOTAL	
	f	%	f	%	f	%	f	%
NEUROTIC	22	18.0%	5	8.9%	45	23.8%	72	19.6%
PSYCHOTIC	87	71.3	44	78.6	113	59.8	244	66.5
CHARACTER DIS.	6	4.9	7	12.5	10	5.3	23	6.3
OTHER	7	5.7	0	--	21	11.1	28	7.6
TOTAL	122	100.0%	56	99.9%	189	100.0 %	367	100.0%

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TABLE 6: NUMBERS OF INPATIENT ADMISSIONS WITHIN 6 MONTHS PRIOR TO ADMISSION TO SOUTH CENTRAL MENTAL HEALTH SERVICES

Number of Inpatient Admissions Prior to Admission to South Central MHS	First Admission Subsequent to Discharge From South Central					
	Inpatient/ Emergency Room		Outpatient		No Subsequent Admissions	
	freq.	%	freq.	%	freq.	%
None	42	75.0%	105	86.07%	171	90.48%
1	8	14.29	15	12.30	15	7.94
2	3	5.36	1	.82	3	1.59
3	0	--	0	--	0	--
4	2	3.57	0	--	0	--
5	1	1.79	1	.82	0	--
TOTAL	56	100.0%	122	100.0%	189	100.0%
MEAN	.48		.18		.11	

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TABLE 7: NUMBER OF EMERGENCY ROOM ADMISSIONS WITHIN 6 MONTHS PRIOR TO ADMISSION TO SOUTH CENTRAL MENTAL HEALTH SERVICES

Number of Emergency Room Admissions Prior to Admission to South Central MHS	First Admission Subsequent to Discharge From South Central					
	Inpatient/ Emergency Room		Outpatient		No Subsequent Admissions	
	freq.	%	freq.	%	freq.	%
None	30	53.57%	101	82.79%	159	84.13%
1	17	30.36	20	16.39	23	12.17
2	6	10.71	1	.82	5	2.65
3	2	3.57	0	--	1	.53
4	1	1.79	0	--	0	--
5	0	--	0	--	1	.53
TOTAL	56	99.99%	122	100.00%	189	100.00%
MEAN	.69		.18		.21	

SL:shg

TABLE 8: NUMBER OF OUTPATIENT ADMISSIONS WITHIN 6 MONTHS PRIOR TO ADMISSION TO SOUTH CENTRAL MENTAL HEALTH SERVICES

Number of Outpatient Admissions Prior to Admission to South Central MHS	First Admission Subsequent to Discharge From South Central					
	Inpatient/ Emergency Room		Outpatient		No Subsequent Admissions	
	freq.	%	freq.	%	freq.	%
None	36	64.29%	87	71.31%	139	73.55%
1	13	23.21	31	25.41	42	22.22
2	6	10.71	3	2.46	7	3.70
3	1	1.79	0	--	1	.53
4	0	--	0	--	0	--
5	0	--	0	--	0	--
6	0		1	.82	0	--
TOTAL	56	100.00%	122	100.00%	189	100.00%
MEAN	.50		.35		.31	

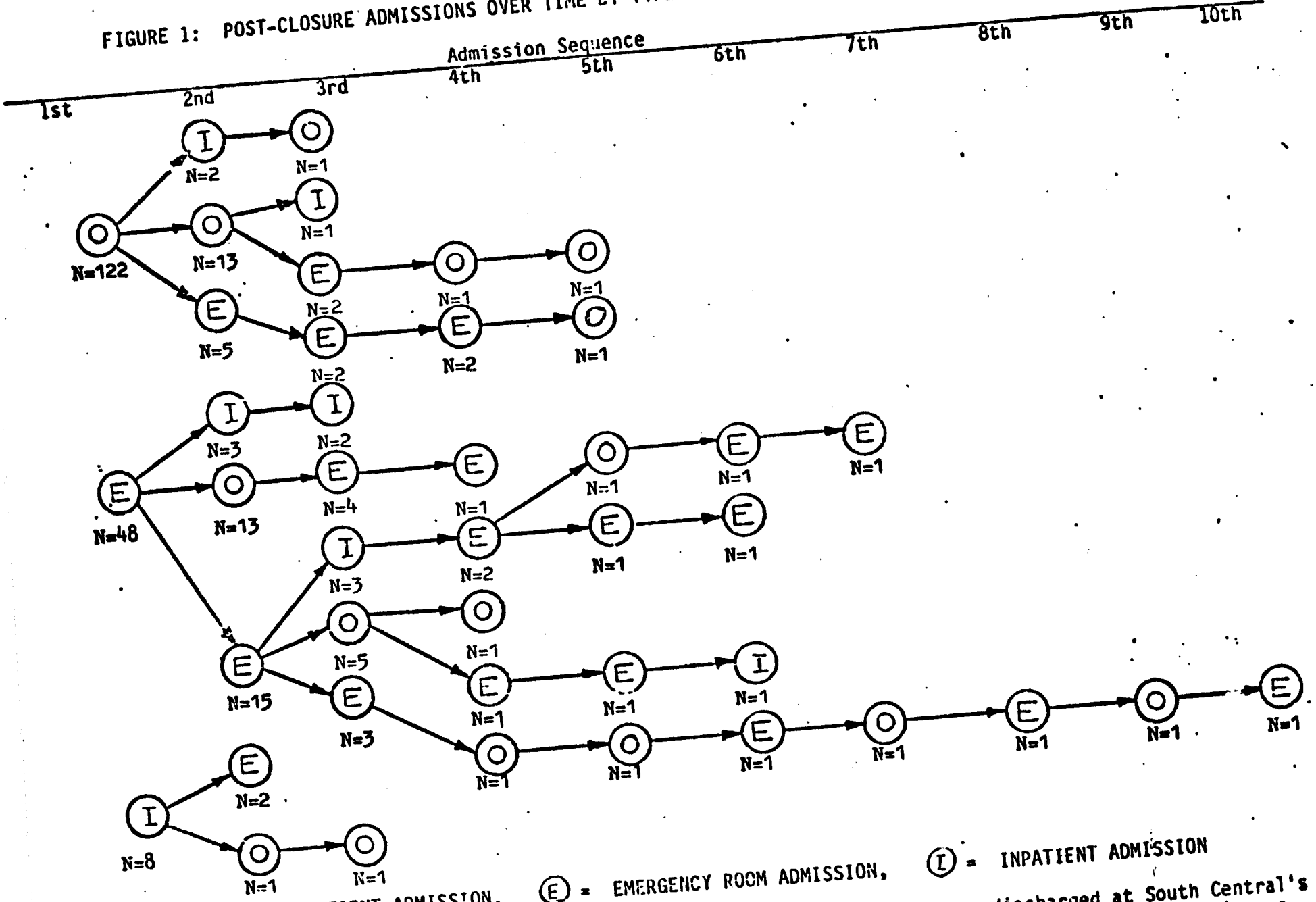
SL:shg

TABLE 9: CHANGES ON NUMBER OF ADMISSIONS SIX MONTHS BEFORE ADMISSION AND SIX MONTHS AFTER DISCHARGE FROM SOUTH CENTRAL FOR TOTAL SAMPLE OF ACTIVE CASES (N=367).

Change* On Number of Admission	Inpatient Admissions		Em. Room Admissions		Outpatient Admissions	
	freq.	%	freq.	%	freq.	%
+6	0	--	1	.27%	0	--
+5	0	--	0	--	0	--
+4	0	--	1	.27%	2	.54
+3	0	--	4	1.09	11	3.00
+2	8	2.18%	9	2.45	99	26.98
+1	314	85.56	24	6.54	189	51.50
0	36	9.81	274	74.66	52	14.17
-1	6	1.64	45	12.26	11	3.00
-2	1	.27	6	1.64	1	.27
-3	2	.54	2	.54	1	.27
-4	0	--	0	--	1	.27
-5			1	.27		
N	367	100.00%	367	99.99%	367	100.00%
Mean	-.14		-.01		+.11	

* Change was calculated by subtracting the number of subsequent admissions from the number of prior admissions (within each admission category) for each client in the sample.

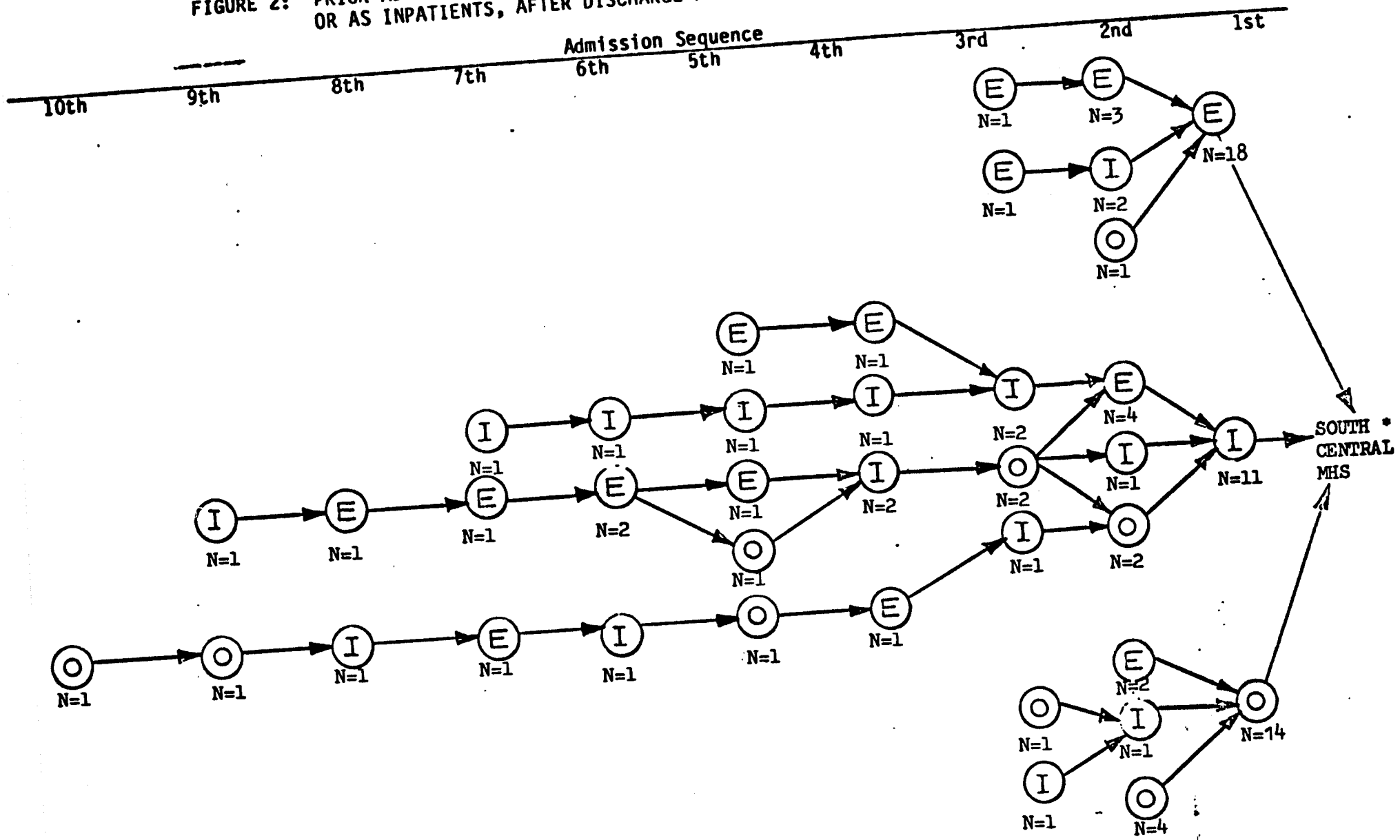
FIGURE 1: POST-CLOSURE ADMISSIONS OVER TIME BY TYPE OF SUBSEQUENT FIRST ADMISSION*



KEY: (O) = OUTPATIENT ADMISSION, (E) = EMERGENCY ROOM ADMISSION, (I) = INPATIENT ADMISSION

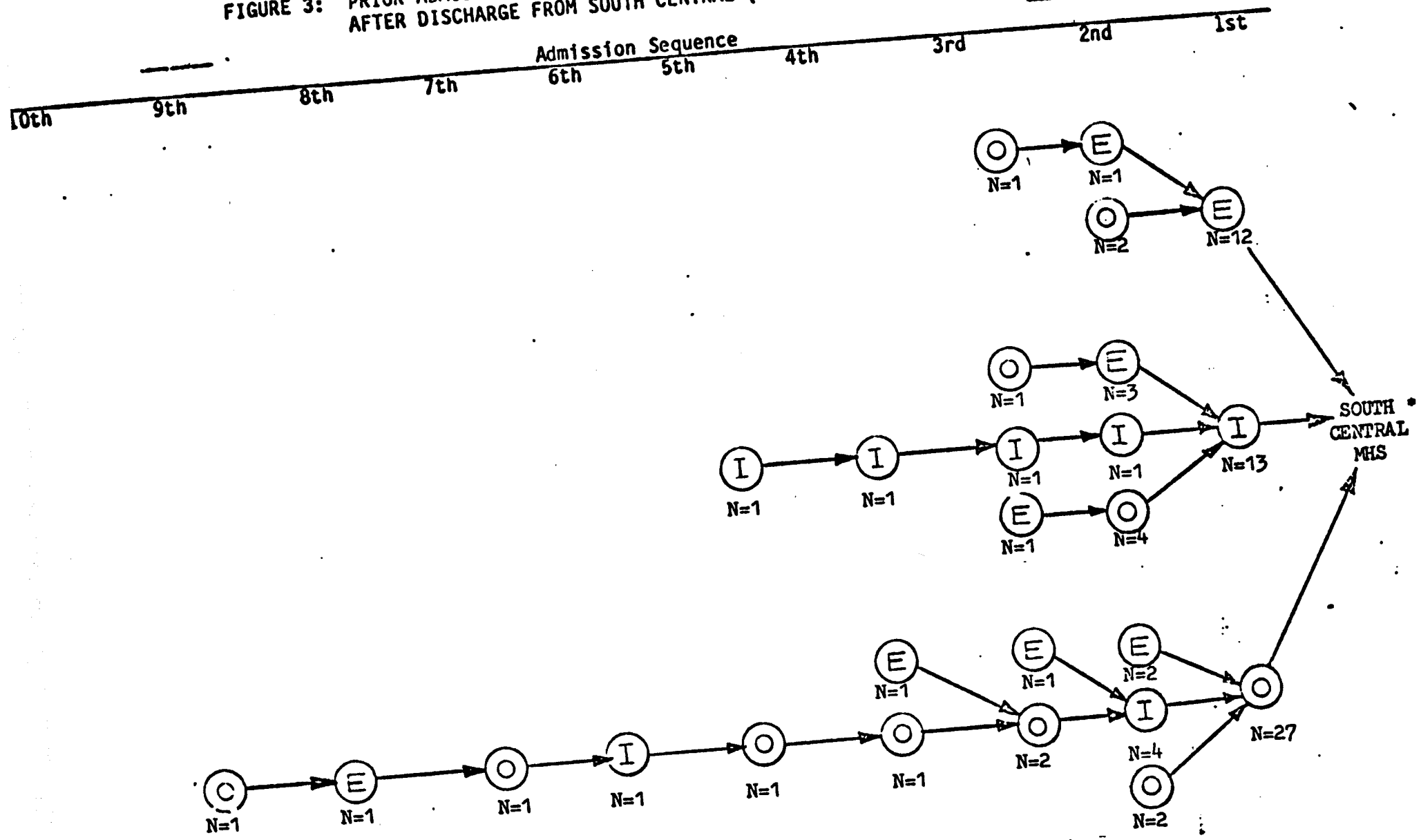
* This figure treats each of three admission groups (i.e., active clients who were discharged at South Central's closure subsequently first admitted as outpatients, or as emergency room clients, or as an inpatient) as a separate cohort. The subsequent admissions of each cohort are tracked sequentially over the six month follow-up period of this study and graphically represented.

FIGURE 2: PRIOR ADMISSIONS OVER TIME FOR CLIENTS' FIRST ADMITTED TO EMERGENCY ROOMS OR AS INPATIENTS, AFTER DISCHARGE FROM SOUTH CENTRAL (TOTAL N=56)



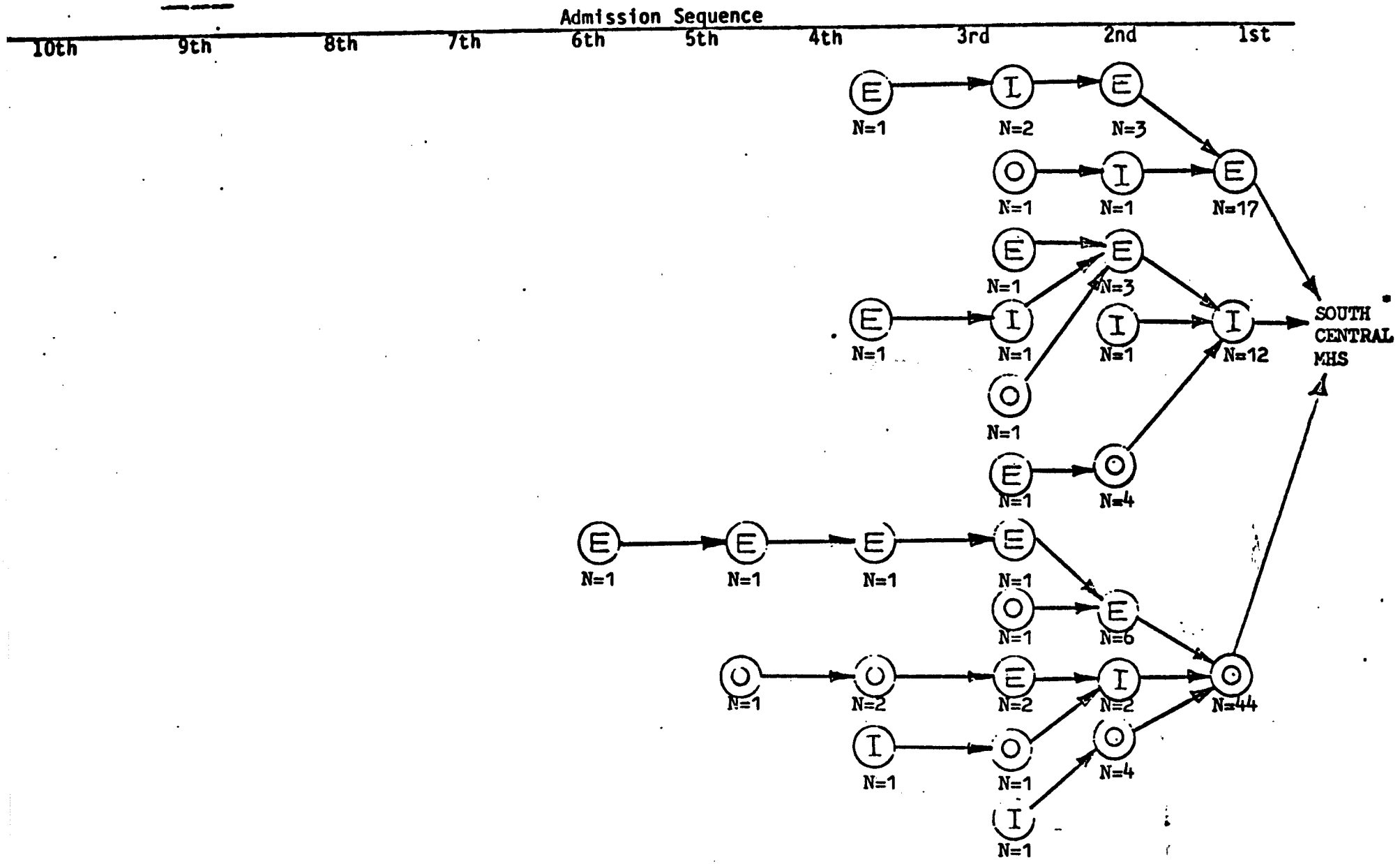
* 13 of the 56 clients in this group had no prior Short-Doyle admissions within 6 months before admission to South Central.

FIGURE 3: PRIOR ADMISSIONS OVER TIME FOR CLIENTS FIRST ADMITTED AS OUTPATIENTS AFTER DISCHARGE FROM SOUTH CENTRAL (TOTAL N=122).



* 70 of the 122 clients in this group had no prior Short-Doyle admissions within 6 months before admission to South Central.

FIGURE 4: PRIOR ADMISSION OVER TIME FOR CLIENTS WITH NO ADMISSIONS AFTER DISCHARGE FROM SOUTH CENTRAL (TOTAL N=189).



* 116 of the 189 clients in this groups had no prior Short-Doyle admissions within 6 months before admission to South Central.