

The Current Practice of Child and Adolescent Partial Hospitalization: Results of a National Survey

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ABSTRACT

Objective: In 1992, the American Association for Partial Hospitalization initiated a national survey of partial hospitalization providers to investigate their present status (programming, staffing, and pricing), to track market trends, and to improve advocacy for appropriate utilization and reimbursement. **Method:** Instrument development and field testing preceded widespread distribution of the survey. From survey data, a description of child and adolescent partial hospital services based on statistical averages is reported as are analyses of program differences by length of stay and for-profit/not-for-profit status. **Results:** Of the 580 programs responding, 95 indicated that at least 50% of their patient population consisted of children and adolescents. Descriptive statistics on this subsample suggest continued variability in child and adolescent partial hospital programming. Program differences in referral and discharge patterns, population and programming, and utilization and funding patterns based on length of stay and profit status are presented. **Conclusions:** The pattern of significant program differences between acute-care and long-term child and adolescent partial hospital programs and for-profit/not-for-profit programs (along with the absence of for-profit programs treating children and adolescents in long-term programs) points to an evolving system of care. *J. Am. Acad. Child Adolesc. Psychiatry*, 1995, 34, 10:1336-1342. **Key Words:** partial hospitalization, national survey, child, adolescent.

Movement toward health care reform was triggered primarily by the need to contain skyrocketing costs. Although escalating costs represent a complex set of political and economic factors, the overuse of expensive inpatient procedures is one of the main causes (Patrick et al., 1993). With the onset of managed care and with the proposed changes in health care delivery, attention is shifting to ambulatory treatment modalities, in particular, partial hospitalization. However, the partial hospitalization modality is frequently criticized for the paucity of available information delineating industry standards and practices. With shifting priorities, insurance companies, state mental health authorities, managed-care organizations, employee assistance programs, referral sources, and consumers are

demanding information about the current practice of partial hospitalization.

Partial hospitalization, a program that provides more intensive professional services than are offered in the typical outpatient clinic yet not the restrictiveness of 24-hour supervision, is an alternative to traditional outpatient and inpatient psychiatric treatment. Published literature regarding child and adolescent partial hospitalization contains program descriptions (Comer, 1985; Gaylor, 1979; Rogers and Lewis, 1989), clinical and demographic descriptions of patient populations (Kiser et al., 1988; Zimer et al., 1980), reports on outcome (Baenen et al., 1986; Corky and Zimet, 1987; Gabel and Finn, 1986; Kettlewell et al., 1985; Leone et al., 1986; Prentice-Dunn et al., 1981), and two surveys (Doan and Petti, 1989; Kiser et al., 1986).

Child and adolescent partial hospital programs are characterized by wide variability in all aspects of program design and implementation. Programs exist in a variety of settings and offer widely differing levels of intensity and restrictiveness (Kiser et al., 1986; Zimer and Farley, 1985). Thus, summarizing this literature about child and adolescent partial hospitalization is difficult. However, some generalizations can be deduced. Partial hospital programs treat children and

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adolescents with moderate to severe emotional problems, many exhibiting acting-out behavior disorders (Doan and Petti, 1989; Kiser et al., 1986). In addition to individual pathology, the children and adolescents treated in partial hospital programs come from family settings with significant emotional and economic stresses (Doan and Petti, 1989; Kiser et al., 1988), although studies suggest that family functioning (structure and stability) is a major factor in improvement (Prentice-Dunn et al., 1981). Schools and other non-mental health sources appear to make the majority of referrals to child and adolescent partial programs. Finally, the majority of children and adolescents treated in partial hospital programs continue to require mental health care and often special educational services after discharge (Baenen et al., 1988; Doan and Petti, 1989; Gabel and Finn, 1986; Hersov and Bentovim, 1985).

Two recent shifts in the delivery of partial hospitalization coincide with managed care's pursuit of alternative treatments. Of specific interest is expansion in the use of partial hospitalization in the for-profit sector. Another trend is the use of partial hospital programs for short-term crisis intervention. Programs designed to provide acute-care services are a significant addition to the child and adolescent partial hospital modality.

METHOD

In 1991, the American Association for Partial Hospitalization (AAPH), in response to increased demands for information, established the following goals: (1) to create a picture of this rapidly expanding segment of the behavioral health care system by providing significantly improved documentation of utilization patterns in the partial hospital industry; (2) answer questions from payers, employers, providers, legislators, and consumers regarding the current status of partial hospitalization, including data on staffing and pricing of programs; (3) track current trends in terms of the expanding market; and (4) improve the ability of industry leaders to advocate for appropriate utilization and reimbursement of partial hospital services.

Thus, AAPH developed and implemented a national survey of partial hospital providers. The survey instrument was designed in a form compatible with and to complement data obtained in the National Institute of Mental Health's biennial Inventory of Mental Health Organizations (IMHO). The AAPH instrument augments the information obtained by IMHO with specific and detailed questions regarding partial hospitalization program and population characteristics.

The survey instrument was field tested on a random sample of 70 programs prior to circulation. Then in January 1992, the AAPH mailed surveys to its membership ($N = 443$), to organizations reporting to the IMHO as providers of "partial care" services in 1988 ($N = 2,120$), and to all other inpatient, residential, and multiservice mental health providers reporting to the IMHO in

1988 ($N = 1,712$). The mailings included a self-addressed, stamped postcard allowing recipients to indicate easily that no partial hospital services were provided by their organization.

To ensure an adequate response to the survey, several stages of follow-up were implemented. Four weeks after the initial mailing, a letter was sent urging participation and extending the deadline for submission of a completed survey. The final step involved telephone follow-up of all nonrespondents. This was done by utilizing a structured telephone interview including a shortened version of the survey for those unwilling to complete the instrument but willing to answer questions over the phone.

RESULTS

An overall response rate of 48% ($N = 2,046$) was achieved, including 23% from AAPH members, 57% from the IMHO "partial care" group, and 43% from the IMHO other group. Of the total survey population responding, 28% returned completed surveys and 72% reported not providing partial hospital services. Analyses for response bias (IMHO samples) on respondents versus nonrespondents based on profit/nonprofit status, organization type, and ownership resulted in no significant findings.

The final pool of surveys consisted of 580 respondents. Of the 580 programs responding to the survey, 141 programs reported providing services to children and adolescents, with 95 of those indicating that at least 50% of their patient population consists of children and adolescents. The remainder of this article describes the partial hospital services provided by the 95 predominantly child and adolescent programs and reviews current practice shifts as demonstrated in the survey data.

Child and Adolescent Programming

First, a summary of data describing a typical child and adolescent partial hospital program is presented. Most child and adolescent partial hospital programs are moderate in size, with an average daily census of 19 patients. These programs operate 5 days per week for 8 hours per day, offering a variety of active treatment components. The most popular and most frequent treatment component is group psychotherapy, which is provided for an average of 7.45 hours per week.

Patients are referred to partial hospital programs from a wide variety of sources; however, inpatient units and school systems together refer almost half of the patients treated. Child and adolescent partial hospital programs treat a variety of mental health problems, with disruptive behavior disorders (mean = 47.8%)

being the most common, followed by affective disorders (mean = 21.7%).

The average length of stay is 143.07 (median = 94 treatment days) treatment days, with 80.68% of patients discharged in a planned fashion. On the basis of practice patterns and reimbursement issues, programs are frequently categorized by length of stay into acute (1 through 30 days), medium-term (31 through 90 days), and long-term (91 days or greater) providers. Further analysis of the length-of-stay data reveals that 20.9% of the programs provide acute care, 28.6% provide medium-term care, and 50.5% provide long-term care.

Staff-to-patient ratios for child and adolescent partial hospital programs provide an indication of staff composition and staffing patterns. A staff-to-patient ratio for each category of staff member (psychiatrist, psychologist, etc.) is computed by dividing the average daily census by the number of full-time equivalent professionals in that category. Full-time equivalents are computed by dividing total staff hours per week per staff category by 35 hours. This standardized staff-to-patient ratio, then, indicates the number of patients that would be cared for by one full-time equivalent professional.

Accordingly, the average daily caseload of a psychiatrist spending 35 hours per week in a program would approximate 100 patients. The average daily caseload of a full-time equivalent psychologist would approximate 179 patients. Review of the staff-to-patient ratios indicates that partial hospital programs for children and adolescents are staffed primarily by bachelor's-level mental health workers, teachers, master's-level counselors, and social workers. Programs generally have fairly low staff-to-patient ratios, with an average total staff-to-patient ratio of 1:3.93, an average clinical (psychiatrists, other physicians, psychologists, social workers, master's-level mental health counselors, registered nurses) staff-to-patient ratio of 1:9.36, and an average direct-care (bachelor's-level mental health workers, activity and recreation therapists, educators, support staff) staff-to-patient ratio of 1:6.94.

The section of the survey dealing with fiscal operations requested information regarding daily charges, yearly expenditures, and revenue sources. Many respondents failed to complete this section, so analyses concerning fiscal operations are based on considerably fewer programs than other data presented, limiting the

interpretability of this data. The average daily charge for child and adolescent partial hospitalization is \$158.17.

Current Practices

Second, this article explores current shifts in the practice of child and adolescent partial hospitalization. In response to cost-containment pressures, interest and growth in child and adolescent partial hospitalization has concentrated in particular markets. The changing mental health delivery system is reflected in decreasing lengths of stay, with a greater number of programs focusing on acute care, and in growth of programs in the for-profit sector. These two industry developments are not occurring independently, however. According to the survey data, for-profit programs report significantly shorter lengths of stay (mean = 36.23, median = 35) than not-for-profit programs (mean = 162.68, median = 120) ($F = 8.19$, $df = 1,88$, $p < .01$).

Given the significant differences in lengths of stay between for-profit and not-for-profit programs, the most appropriate method for exploring program types is analysis of variance (ANOVA) using both length of stay and ownership status as independent variables. Unfortunately, no for-profit programs reported average lengths of stay greater than 90 treatment days. Consequently, analyses of program differences focus on length of stay and ownership using one-way, five-group ANOVAs. Follow-up of significant group differences is analyzed using Student-Newman-Keuls post hoc comparisons. Given the number of analyses, it is important to point out that the probability of obtaining significant results by chance increases when performing multiple tests of significance. Thus, some of the significant results presented could be spurious and should be interpreted cautiously.

ANOVAs on acute-care, for-profit ($N = 5$), medium-term, for-profit ($N = 8$), acute-care, not-for-profit ($N = 13$), medium-term, not-for-profit ($N = 18$), and long-term, not-for profit ($N = 46$) programs demonstrate significant differences between these five program types. These programs are differentiated on the basis of referral and discharge patterns, population and programming, and utilization and funding patterns. Significant results of ANOVAs are summarized for referral and discharge variables, population and programming variables, and utilization and funding variables in Table 1.

In terms of referrals to child and adolescent programs (ANOVA calculated using the mean percentages of

TABLE 1
Results of Analyses of Variance among the Five Program Types, by Program Variables

Area of Analysis/Program Variables	F Ratio	df	p Value	Groups with Significant Post Hoc Differences ^a
Referral and discharge patterns				
Hospital/inpatient referrals	5.53	4, 73	<.001	3: 5
Emergency unit referrals	4.40	4, 74	<.01	3: 4,5
EAP referrals	4.81	4, 74	<.01	1,2: 5 & 1: 4
School system referrals	6.12	4, 73	<.001	5: 1,3,4
Disposition to hospital/RTC	4.71	4, 70	<.01	2: 3,5 & 4: 5
Disposition to no treatment	3.87	4, 70	<.01	2: 5
Disposition to outpatient	2.50	4, 70	<.05	None ^b
Planned discharge	3.30	4, 73	<.05	None ^b
Population and programming				
Gender	2.69	4, 72	<.05	None ^b
Affective disorders	8.17	4, 60	<.001	2: 5 & 3: 4,5
Disruptive disorders	7.72	4, 60	<.001	4,5: 2,3
Substance abuse	5.63	4, 60	<.001	2: 5
Days to initial treatment plan	2.52	4, 82	<.05	None ^b
Days to master treatment plan	5.60	4, 80	<.001	1,2,3,4: 5
Frequency of treatment plan review	6.92	4, 83	<.000	1,2,3,4: 5
Hours of individual psychotherapy	3.23	4, 84	<.05	3: 5
Hours of psychological assessment	3.08	4, 85	<.05	2: 3,5
Utilization and funding				
Occupancy rate	10.75	4, 81	<.001	2,4,5: 1 & 5: 4
Average daily census	2.67	4, 85	<.05	5: 3
Per diem charge	8.61	4, 29	<.001	1,3,4: 5
Share of revenues from clients	9.02	4, 33	<.000	2: 1,4,5 & 4: 5
Collection rate	4.09	4, 33	<.01	1: 4,5

Note: EAP = employee assistance program; RTC = residential treatment center.

^a Groups: 1 = acute, for-profit; 2 = medium-term, for-profit; 3 = acute, not-for-profit; 4 = medium-term, not-for-profit; 5 = long-term, not-for-profit. See text for detailed explanations of interactions.

^b These variables, unlike the others, showed significant *F* ratios only when analyzed broadly across the five program types, and they yielded no particular between-program differences at the .05 level when examined for more specific interactions by means of Student-Newman-Keuls post hoc tests.

patients referred within each of 10 categories of potential referral sources), a significant difference was found on referrals from hospital or inpatient services, with post hoc analysis indicating that in not-for-profit programs, those providing acute care receive a significantly greater number of referrals from inpatient units than those providing long-term care. Follow-up to ANOVA on referrals from emergency services indicates that, in not-for-profit programs, acute-care programs as opposed to medium- and long-term programs receive a greater number of emergency referrals. Programs also differed significantly in the percentage of referrals received from employee assistance programs, with for-profit programs receiving more patient referrals from employee assistance programs than not-for-profit, long-term programs, and for-profit, acute-care programs differing from not-for-profit, medium-term programs in this

regard, as well. Finally, ANOVA on school referrals indicates that these referrals go primarily to not-for-profit, long-term programs when compared to for-profit and not-for-profit acute-care, and not-for-profit, medium-term programs.

Although the results did not indicate differences between the five program groups in the discharge status of patients, there are significant differences in the percentages of patients recommended for hospital or residential treatment and for no treatment after discharge. Post hoc comparison indicates that for-profit, medium-term programs make more referrals for hospital/residential treatment after discharge than either not-for-profit, short- or long-term programs and that not-for-profit, medium-term programs make more hospital/residential referrals than not-for-profit, long-term programs. In terms of no treatment referral after discharge,

for-profit, medium-term programs make fewer recommendations for follow-up treatment than not-for-profit, long-term programs.

The results also indicate some significant group differences in the areas of population and programming (Table 1). Significant sex differences were found on ANOVA. However, although more males than females are treated in each program type and not-for-profit, long-term programs treat a greater percentage of males than the other groups, on post hoc comparison no two groups were significantly different at the .05 level.

ANOVAs using diagnostic classifications were calculated using the mean number of patients (on the roll book the first day of reporting year) reported in each of 11 diagnostic groups. Results from these ANOVAs suggest that affectively disturbed patients are more often treated in for-profit, medium-term settings than not-for-profit, long-term programs and in not-for-profit, acute-care settings than in the longer-term settings. The reverse picture is true for disruptive disorders, with a greater percentage treated in not-for-profit, long- and medium-term programs than in for-profit, medium-term or not-for-profit, acute-care programs. Finally, patients with substance abuse disorders are more often treated in for-profit, medium-term versus not-for-profit, long-term programs.

Regarding programming differences, post hoc analyses reveal that not-for-profit, acute-care programs provide more hours of individual therapy per week per patient than not-for-profit, long-term programs and for-profit, medium-term programs provide more hours of psychological assessment per week per patient than not-for-profit, acute-care, and long-term programs. Other significant findings indicate that programs with short or medium lengths of stay accomplish treatment planning (master and reviews) more rapidly than long-term programs.

Regardless of pressures to reduce lengths of stay, not-for-profit, long-term programs are significantly larger than not-for-profit, acute-care programs, with an average daily census of 26 as opposed to 7. Longer-term programs also report significantly higher occupancy rates, calculated as the ratio of average daily census/daily capacity, than acute-care facilities, with for-profit, medium-term, and not-for-profit, medium- and long-term programs reporting greater occupancy rates than not-for-profit, acute-care programs. Within

the not-for-profit sector, long-term programs also report a higher occupancy rate than medium-term programs.

In addition to these utilization differences, funding differences are also evident. Again, due to smaller numbers reporting fiscal data, these results must be interpreted cautiously. ANOVA on per diem charges indicates that shorter-term programs (for-profit, acute-care, not-for-profit, acute-care, and medium-term) charge significantly more, over \$100 per day on average, than long-term programs. In addition to differences in charges, collection of fees from clients is significantly different between these program types. For-profit, medium-term programs report that a greater proportion of program revenues come from client fees than for-profit, acute-care or not-for-profit, medium- and long-term programs. Medium-term programs also differ in this regard from long-term programs within the not-for-profit sector. Finally, the collection rate (calculated as the ratio of total funds/[days/week of operation \times average daily census \times 50 weeks]) reported differs significantly between the five groups with for-profit, acute-care programs collecting a greater percentage of charges than not-for-profit, medium- and long-term programs.

DISCUSSION

Currently, only approximately 2% of adults and children/adolescents requiring mental health services receive treatment in partial hospital programs. Enhancement in knowledge regarding the contemporary practice of child and adolescent partial hospitalization is crucial for improving placement decisions and for altering utilization patterns. This survey project represents an attempt at alleviating this pressing need.

Results of this survey generally support the information previously available regarding partial hospitalization for children and adolescents. Although it is possible to describe a typical program based on statistical averages, the sizes of the standard deviations found indicate that partial hospital services for children and adolescents continue to vary widely on almost every variable measured. However, the development of new program types during the late 1980s and early 1990s has resulted in a pattern of program differences based primarily on length of stay and creates a program typology that was not previously possible.

The growth in acute-care partial hospital services designed for integration within psychiatric service centers widens the range of options for treating children and adolescents. Acute-care partial hospital programs appear to be newer, not utilized to capacity, and designed to treat higher-functioning patients with acute affective episodes and substance abuse disorders. Long-term programs appear to be serving a population composed predominantly of males with behavior disorders, referred by schools or other social agencies, and utilizing less individualized therapies.

Although there is a pattern of significant differences between acute-care and long-term, not-for-profit programs, there are many aspects that do not differ. Significant results are conspicuously absent for many aspects of programming and for staffing patterns, including staff-to-patient ratios and level of professionals providing treatment. This is a curious finding given program differences in patient population treated, lengths of stay, and cost of services.

The pattern of program differences, along with the absence of for-profit programs treating children and adolescents in long-term programs, illustrates the evolution occurring in the provision of partial hospitalization for children and adolescents. Moreover, the results indicating significant population differences, ownership differences, and funding differences support the conclusion that developing programs serve different functions and patient populations. It is clear that the programs developed for acute-care, partial hospitalization (often, in for-profit settings) provide services for an acutely affected, if less demanding, population, for a brief time, and for more money. The not-for-profit, long-term programs provide ongoing care to highly dysfunctional, conduct-disordered youths. The problem is that both types of programs provide essentially the same treatment components (with the exception of psychological assessment and individual therapy) with essentially the same staff.

Theoretically, it seems appropriate for programs to differentiate based on patient needs, such as acuity of symptoms or diagnosis. Program differences, then, can be based on the needs of the target patient population and differ according to a number of variables, such as program availability, involvement of medical personnel, and treatment provided. However, the current situation seems to suggest differentiation of programs based primarily on population variables that are not supported

by the corresponding differences in program variables. Only the two programmatic differences (individual therapy and psychological testing) found are consistent with this notion. In fact, the difference in the use of individual therapy between the program types provides a good example of the matching of program variables to patient needs as children and adolescents with acute affective symptoms are more appropriate candidates for individual therapy than children and adolescents with chronic behavior disorders.

But many more program and staff differences are necessary to feel confident that the programs are adequately addressing their distinct functions and patient needs. Programmatic differences should extend well beyond the results reported here in order to justify the significant differences in length of stay and per diem charges. The model for a continuum of ambulatory mental health services developed by the AAPH (Kiser et al., 1993) delineates many of the service variables that can be matched to patient needs and suggests specific programmatic differences for each variable. Perhaps this model will stimulate further differentiation of acute-care versus long-term programs within a therapeutically relevant framework.

The clinical relevance of these findings for altering practice patterns is immediately evident when focusing on the function of acute-care versus long-term partial hospital care. Acute-care services render treatment targeted at crisis stabilization and acute symptom reduction. Longer-term programming with patients demonstrating chronic disabling symptoms focuses on rehabilitative/reeducative intervention and relapse prevention. Translating these service functions into clinical decision-making and treatment requires meaningful differences in orientation, philosophy, goal setting, and technique.

In acute, crisis-oriented partial hospital settings, the emphasis needs to be placed on observation and assessment followed by immediate and targeted interventions that stress goal setting, problem solving, and conflict resolution. Security and safety concerns when dealing with a highly volatile patient population receive considerable attention. On the other hand, the focus of treatment in long-term partial hospital settings needs to be on structuring relationships and milieus (within both the treatment environment and the family/school/community) to support skill teaching and functional adaptation. Additional research and exploration of the

clinical dimensions of these service types is necessary to track their continued evolution as well as determine their relative effectiveness.

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