

# A Comparison of Practice Patterns and a Model Continuum of Ambulatory Behavioral Health Services

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In response to cost-containment pressures, behavioral health care providers are rapidly developing less intensive and expensive services and treatment alternatives (1). In light of this burgeoning interest, it seems a good practice—in fact, a best practice—to base development of new clinical services on sound principles. Service delivery and program development should be driven by well-constructed models of clinical practice rather than the whims of payers and policy makers. In this column we describe one such model: a continuum of ambulatory behavioral health services that can be used to direct the development of new services.

## The model continuum

The continuum of ambulatory behavioral health care is intrinsically linked to institutional care and outpatient visits, providing definition and structure to what falls in between (2). Three levels of care along this continuum represent functionally different treatment options of different intensities. The three levels are distin-

guished from each other by service characteristics and patient characteristics. Service characteristics include function, presence of scheduled programming, structure, milieu, availability of crisis services, involvement of medical personnel, accessibility, responsibility, and control. Patient characteristics include psychiatric symptoms, level of functioning, level of risk and dangerousness, presence of support, and commitment to treatment (2).

Descriptions of the three levels of care illustrate their clinical applicability. While the prototype for level 1 is the traditionally defined partial hospital program, this level also describes other intensive hospital diversion services that provide crisis stabilization and acute symptom reduction. Level 1 provides access to care within 24 hours and incorporates a high degree of medical input and an organized system of crisis back-up for patients with unstable, disabling symptoms.

Level 2 services provide treatment for patients with moderate to severe disorders who require interventions focused on improved level of functioning, skill building, and disease management. Intensive outpatient programs, characterized by coordinated, multimodal treatment with structured program activities, are most frequently categorized as level 2.

Level 3 represents the least intensive ambulatory services. They are focused on treating patients who either maintain role functioning in several areas or can obtain adequate family or

community support. The array of active therapies, although coordinated, is not necessarily offered within a single agency. Treatment at this level is distinguished from outpatient care by the number of hours of weekly involvement, the multimodal approach, and the availability of specific services that provide crisis intervention.

## Methods

We compared the continuum model of ambulatory behavioral health care with current practice patterns identified in a survey of partial hospital and other ambulatory service providers conducted in 1994 by the Association of Ambulatory Behavioral Healthcare (3). The association mailed the survey to 3,652 service providers. Survey respondents, primarily clinical or program directors, were asked to classify their services according to the three levels of ambulatory care and provide information about their organization, the specific services offered, and the patient population treated. For those who were not familiar with the continuum model, definitions and examples were provided.

A total of 746 service providers responded with completed surveys, resulting in an overall response rate of 20 percent. Respondents included multiservice mental health organizations (28 percent), outpatient mental health clinics (14 percent), freestanding partial hospital programs (5 percent), psychiatric hospitals (11 percent), general hospital psychiatric units (27 percent), and other types of organizations (16 percent).

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## Results

The analysis of the survey data used the level-of-care classifications provided by the respondents and determined whether the characteristics of services offered by the respondents' organizations corresponded with those included in the three levels of the model. Significant differences in service characteristics were found between the organizations that identified themselves with each of the three levels of care. Due to the type of survey questions, differences in patients' conditions among the organizations were more difficult to assess. However, basic differences do exist between the levels based on the types of patients treated.

Data on practice patterns supported the decreasing intensity of care from level 1 to 3. For example, lengths of stay were significantly shorter at level 1 than at level 2 ( $F=8.61$ ,  $df=2$ , 534,  $p<.001$ ). In addition, treatment plans were reviewed more frequently at level 1 than at either level 2 or level 3.

As another indication of acuity, level 1 services received a greater percentage of referrals from hospital or inpatient units or emergency rooms than did the other levels. Compared with level 1, level 2 services received more referrals from the criminal justice system, employee assistance programs, and social services, and level 3 programs received more referrals from the criminal justice system, social services, family members, and friends, as well as more self-referrals.

Survey questions related to scheduled programming indicated an interesting phenomenon. According to the survey, level 3 providers had longer hours of operation per day than level 1 providers, a counterintuitive result. However, the finding became understandable when data on length of a day of service were analyzed. For this variable, level 1 defines a day of service, on average, as 5.92 hours, which is significantly longer than a day of service at level 2 (4.94 hours) and at level 3 (4.15 hours) ( $F=11.55$ ,  $df=2$ , 625,  $p<.001$ ). The hours of operation per day at level 3 indicate the hours necessary for the provision of multimodal outpatient services, while the hours of operation per day at level 1

reflect the more tightly scheduled programming offered at that level.

Practice differences were also found in specific therapeutic modalities. Level 1 programs offered a mean of 6.53 hours of group psychotherapy per week, which was significantly more than the mean of 3.72 hours offered by level 3 providers ( $F=3.19$ ,  $df=2$ , 548,  $p<.05$ ). Level 2 offered the most life skills activities per week (mean=4.39 hours), which was significantly more than level 3 (mean=2.56 hours) ( $F=3.99$ ,  $df=2$ , 440,  $p<.05$ ). Level 1 services used more hours of specialty groups per week than did either level 2 or level 3 services and more hours of expressive therapies than level 3 services.

Data on the use of special treatment procedures suggested that different levels of structure were provided across the continuum. A greater percentage of level 1 services had policies describing the use of seclusion, physical holding, manual restraints, chemical restraints, and suicide precautions, compared with level 2 or 3 services.

Interesting differences between levels were also evident in the milieu. Greater percentages of level 1 and level 2 services (98.5 percent and 90.2 percent, respectively) included a structured therapeutic milieu, compared with level 3 services (63.6 percent). Within this therapeutic milieu, almost all level 1 and 2 providers offered staff support of the milieu and had a regular schedule of patient attendance; fewer level 3 providers offered these features. A greater percentage of level 2 services provided self-help groups (68 percent), compared with level 1 or 3 services (48.6 percent and 46.9 percent, respectively).

The programs surveyed differed slightly in the availability of crisis services. Although no significant differences among levels were found in the availability of on-call services or referrals to hospital emergency rooms, other emergency services provided within the organization were offered by a greater percentage of level 1 programs (40 percent) than by level 2 or level 3 programs (29 percent and 21 percent, respectively).

Involvement of medical personnel also differed between the levels of

care, with a psychiatrist most likely to function as team leader in level 1 programs, followed by level 2 and level 3 programs. Psychiatrists also played a role in program management more frequently in level 1 programs than in level 2 or 3 programs. Finally, according to staff-to-patient ratios, level 3 programs provided significantly less psychiatric coverage (one psychiatrist for 577 patients) than did level 1 or level 2 programs (one psychiatrist for 124 patients and one psychiatrist for 199 patients, respectively;  $F=23.19$ ,  $df=2$ , 396,  $p<.001$ ).

Although differences between levels in the patient population were more difficult to assess from survey data, some differences were found. Level 1 services treated a greater number of patients diagnosed with affective disorders than did level 2 or level 3 services. More patients with anxiety disorders were treated in level 1 services than in level 2 services. Substance use disorders were less likely to be treated at level 1 than level 2 or 3.

Discharge disposition differed between the levels of care, with a significantly greater number of referrals to outpatient care made by level 1 and level 2 providers (76 percent and 56 percent, respectively) than by level 3 providers (39 percent); more referrals to outpatient care were made by level 1 providers than by level 2 providers ( $F=32.4$ ,  $df=2$ , 528,  $p<.001$ ). Level 3 and level 2 providers more often recommended no mental health follow-up (44 percent and 21 percent, respectively) than did level 1 providers (6 percent).

## Discussion

Currently, much ambiguity exists in managing care that falls between inpatient and traditional outpatient treatment. Although partial hospitalization has been more clearly defined in recent years through recognized standards and guidelines (4), the picture has been made more complex by other emerging modalities such as intensive outpatient treatment and home care. A typology such as the one described here can therefore be valuable in bringing greater order and

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clarity to the treatment frontier in the ambulatory sector. The consistent pattern of differences between the levels of care in staffing, services offered, program structure, referral, and discharge disposition suggests that the parameters used to define the levels can be used in developing best practices that will lead to better communication and understanding between payers and providers.

Certain limitations of the study should be noted. The ambulatory continuum model that we examined is based on a classification system of both treatment settings and patient variables. However, the nature of the survey data we used resulted in a primary focus on program variables. Although the data indicated that the patient population represented by this survey is well distributed across sex, age, and ethnicity variables, it is primarily a publicly insured population (73 percent) suffering from affective disorders (35 percent) and major psychotic disorders (25 percent). Further empirical inquiry with individual patient data would be helpful in seeking similar support for the patient-characteristic components of the model.

Another limitation was the distribution of programs classified among the three ambulatory levels. Although the sample sizes we obtained were acceptable, a more robust sample of level 2 and 3 programs would be helpful in reliably generalizing these findings to the broader industry.

## Conclusions

As the delivery of behavioral health care continues to undergo rapid changes, it is imperative to reflect on the scientific foundations of our practice. Change that is driven purely by economic concerns undercuts our ability to use valid clinical decision-making techniques. The continuum-based model of ambulatory behavioral services along with the pragmatic support of this model presented here can provide some empirically based structure to the rapid development of treatments between the traditional extremes of outpatient and inpatient care. ♦

## References

1. Schreter RK: Ten trends in managed care and their impact on the biopsychosocial model. *Hospital and Community Psychiatry* 44:325-327, 1993
2. Kiser LJ, Lefkowitz PM, Kennedy LL, et al: The continuum of ambulatory mental health services. *Behavioral Healthcare Tomorrow* 2:14-16, 1993
3. Kiser LJ, Barksdale SH: Overview of the Partial Hospitalization Industry: An Analysis of the Data From the 1994 National Program Survey. Alexandria, Va, Association for Ambulatory Behavioral Healthcare, 1996
4. Block B, Lefkowitz PM: Standards and Guidelines for Partial Hospitalization. Washington, DC, American Association for Partial Hospitalization, 1991