Development of a Vertically Integrated Program of Services for Persons With Schizophrenia

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Economic pressures are changing the nature and quality of services available to individuals with chronic psychiatric disorders. Vertical integration of services has been proposed as a strategy for cost-effective merging of resources. This report describes the integration of inpatient, continuing day treatment, and ambulatory clinic services over an 18-month period into a service line for patients with schizophrenia. Key principles in implementing the integrated program included an open admission policy, continuity of care, use of criteria for level of care that were set by external review agencies, rapid transfers between services, and maintenance of the integrity of the treatment plan. Steps toward integration included evaluating and securing treatment resources, establishing core treatment approaches, fostering staff development, implementing outcomes assessment, and presenting the new program to clients, family members, and the community. The integrated program was 15 percent more productive than the combined services before integration, and inpatient length of stay dropped by 66 percent. Vertical integration of services is cost-effective and offers the potential for significant clinical benefits. (*Psychiatric Services* 50:931–935, 1999)

Recent changes in health care financing and reimbursement have influenced the nature and availability of care for individuals with severe mental disorders. At a systems level these changes are largely positive– treatment is more community based, programs must demonstrate cost-effectiveness, and client satisfaction is a top priority. However, many practitioners experience the same changes differently. They have found that workloads are increasing, resources are diminishing, and a confusing array of external agencies influence treatment.

Recent efforts to adapt to economic pressures have involved vertical integration of services (1,2). Vertical integration, a growth strategy developed by corporations, involves obtaining control over "upstream" resources, such as raw materials, and "downstream" resources, such as distribution channels, in a manner that decreases administrative costs and increases efficiency (3). It has been argued that vertical integration can be useful for large health care systems (4,5), and preliminary research has suggested that this strategy is effective for providing services for the severely mentally ill population (6,7).

Although vertical integration emphasizes cost management, this strategy also offers the potential for significant clinical advances. Vertical integration requires continuity of care across services, and the greatest cost savings are achieved when hospital stays are diminished. Continuity of care and community-based treatment are primary clinical objectives, and newer, more effective treatments involving both medication and psychosocial interventions increase the chances of achieving these objectives. Vertical integration strategies therefore should have appeal for both administrators and clinicians, and program directors would benefit by having a core set of principles to guide their efforts.

In this report we describe the im-

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plementation of a continuum-of-care model at a hospital-based schizophrenia program over an 18-month period from July 1997 to December 1998. After reviewing key principles of continuity of care, we outline the steps required to consolidate traditional inpatient-based services into a vertically integrated program. Throughout the review, examples describing the evolution of our schizophrenia program will be given, although the principles outlined should be useful for any clinical population.

Definition and key principles

A treatment program consists of resources allocated for the care of a clinical population, such as those with affective disorders or a geriatric patient group. A treatment service is a locus of care defined by its setting, staffing pattern, or specialized treatment modality. For example, an inpatient service is defined by its 24-hour nursing staff and, usually, a locked door with continuous supervision. On the other hand, an electroconvulsive treatment service is defined by its role in providing a specialized treatment.

Traditionally, little distinction has been made between programs and services. The vertical integration approach, however, acknowledges that specific services have focused areas of expertise and that effective coordination of services is required to meet the overall needs of the clinical population. The care matrix is a conceptualization of an institution's resources as an array of services that each support one or more programs. Administrators reorganizing systems of care should begin by making this conceptualization, as it clarifies the nature of existing resources, suggests steps for consolidation, and identifies areas for development.

Vertical integration refers to the process of organizing services into programs that offer the range of treatments necessary to manage an entire course of a chronic illness. Five key principles underlie this approach.

Open admission policy. Vertically integrated programs offer comprehensive care to an identified population using an open-door policy, which holds that all applicants are accepted for treatment. If the program exists within a larger institution such as a hospital, a centralized evaluation service may be necessary to triage and assign clients to the appropriate program. Once a client is assigned, however, no further evaluation of suitability for treatment is made.

In many traditional programs, clients apply for and are interviewed before being accepted for care. The difficulties associated with this approach are illustrated by the situation of clients with schizophrenia and comorbid substance abuse, who are commonly rejected by psychiatric rehabilitation programs due to concerns about their drug use and also rejected by substance abuse programs because of active psychiatric problems. In a vertically integrated program these clients are automatically accepted for care, and the program staff organize resources from multiple services to meet the client's needs. This integration of services guarantees access to care and improves engagement in treatment, which are major goals for severely mentally ill patients (8,9).

Continuity of care. The principles of continuity of care have been reviewed elsewhere (10,11), and studies have suggested that this approach has significant benefits (12–14). Continuity of care implies that the same clinicians provide clients with core services for the duration of their treatment in the program. The psychiatrist provides medical services and supervises the overall treatment plan. The responsibilities of nonphysician care coordinators include case management, or securing benefits and resources, delivering psychosocial treatments such as psychotherapy or skills training, and coordinating treatments from outside services such as psychiatric rehabilitation or addiction treatment.

Care coordinators may have a variety of educational backgrounds, but they should have postgraduate education in a mental-health-related field. It is critical that care coordinators have the flexibility to work in a range of settings, and that they are trained in the basic skills necessary to work with the target population.

Level of care determined by external criteria. A variety of external review agencies set criteria for appropriateness of levels of care and reimburse services based on adherence to the criteria. Providers have little input in determining these criteria, which also vary from one agency to another. Unusually strict or sudden enforcement of criteria can disrupt and undermine the treatment. A vertically integrated program acknowledges that level-of-care decisions are greatly influenced by external agencies and allows for clients to move rapidly from one service to another while maintaining treatment continuity. If a client continues to work with the same core treaters regardless of level of care, sudden disruptions in treatment are avoided.

Seamless transfers. In the current environment, when a client is no longer acutely ill enough to meet requirements for hospitalization, the treatment team cannot wait for lengthy application processes to be completed before discharging the client to an appropriate outpatient service. Service boundaries must be seamless, with a minimum of requirements for transfer from one service to another. Inpatients are transferred to outpatient services immediately on meeting criteria for the new level of care, with communication often consisting of an initial phone contact to pass on the most relevant clinical information. In addition, making the receiving service staff responsible for completing the appropriate assessment documentation for the new service puts the onus on the staff to rapidly gather the information necessary for maintaining continuity.

Treatment not dependent on service resources. If a program has a primary emphasis on meeting administrative requirements of external reviewers, the quality of care will be poor. The final key principle of vertical integration addresses the need to protect the integrity of the treatment plan in the context of rapid transfers of a client from one service to another. The continuity-of-care principle implies that treatments judged to be critical for individual clients must be maintained until they are fully implemented. If a client has completed only three months of a six-month

skills training program but no longer meets criteria for a specific level of care, then the client should transfer to the next level of care but be allowed to continue in the training group as initially prescribed. Such adjustments require flexibility in clinical staffing and workloads that is best achieved in an integrated program.

Steps toward vertical integration

Before vertical integration, the schizophrenia services at our hospital consisted of a single inpatient unit. The program did not offer outpatient services, and it relied on comprehensive, extended inpatient care for the management of acute psychotic exacerbations. The average inpatient stay was 90 days, and there was mounting pressure to change the focus and orientation of treatment. The five steps taken to reorganize the service are reviewed below.

Evaluating and securing resources

In the matrix organization we outlined, program directors work side by side with service managers. Program directors identify and manage the array of treatments required by the target population, while service managers are responsible for the administrative needs of specific units, such as the inpatient, partial hospitalization, and ambulatory units. Service managers work with the program directors to preserve staffing expertise and consistency among programs while managing fluctuations in the types and quantity of services available.

At our hospital, the first step was to name a director for the schizophrenia program. The director subsequently identified three services that would be required for the program– an inpatient unit, a continuing day treatment program, and an ambulatory clinic. A program coordinator was also named and was given responsibility for interfacing with the hospital's evaluation service, assigning new clients, ensuring rapid transfer from one service to another, and supervising the work of the nonphysician care coordinators.

The integrated schizophrenia program was designed to provide care for a minimum of 200 clients. The new outpatient services were opened using staff from the hospital's existing day treatment and ambulatory services. Our hospital was faced with substantial resource constraints, and vertical integration was an effective way of merging and downsizing existing services. Services that were previously independent were grouped into a program with a single administrative structure and revised caseload expectations. Increased caseloads were not attributed solely to cutbacks but were justified with the belief that by sharing resources and using the continuity-of-care approach, clients would be better known to program staff, clients' needs would be more accurately identified, and administrative activities would markedly diminish.

Establishing core treatment approaches

In our program it was decided that the continuity-of-care team would include a physician and a care coordinator. As new clients were admitted to one of the three services in the program, the staff assigned to that service would take the case and maintain responsibility for that client from that point on. Caseloads became mixed, with varying combinations of inpatients and outpatients. All physicians were required to make rounds on the inpatient unit each morning and to have regular weekly outpatient clinic hours.

At the same time, we identified four major areas in which to focus treatment. They were psychopharmacologic management, case management, psychosocial treatments aimed at symptom stabilization and relapse prevention, and psychiatric rehabilitation. Staff were educated about the need to provide these services independent of any locus of care.

For example, the family psychoeducation and symptom management groups took place in the continuing day treatment unit, and rehabilitation treatments, including vocational and occupational training, were delivered within the ambulatory clinic. These treatments were open and available to clients in other services at all times. Rehabilitation counselors met regularly with the psychiatrist–care-coordinator teams to ensure integration of the medical and rehabilitation services, as advocated by Drake and others (9,15). Finally, staff were informed about services that could be obtained as needed by brokering with nonhospital agencies such as social clubs or drop-in programs.

Fostering staff development

Efforts were made to generate staff's interest and motivation for the new work and to prevent feelings of ineffectualness that arise when clinicians take on new responsibilities without proper orientation and training. A weekly staff development seminar provided ongoing education about the phenomenology of schizophrenia, the course of the illness, and treatment approaches. An important example of the usefulness of training strategies involved two treatment guidelines for schizophrenia published around the time the new program began (16,17). The guides were presented to staff as state-of-the-art summaries of clinical care issues, and they were used in the ongoing supervision activities.

In many instances clinicians questioned the changes in job responsibilities, especially those involving working simultaneously in more than one service. Many senior clinicians preferred the milieu-based model of care that was standard in the field, believing that the requirement of stable and firm boundaries between services was essential for the maintenance of a therapeutic environment. Some did not believe that the potential benefits of the continuity-of-care approach outweighed the difficulties associated with the changes, and several chose to leave the hospital. At the same time, the program attracted many young clinicians who had recently finished formal training and were interested in learning innovative approaches to care.

These examples of staff concerns highlight a critical task for administration– identification and support for discipline-based professional identities, such as social work, nursing, clinical psychology, and occupational therapy, in the context of fluid job responsibilities. A vertically integrated program requires flexibility to meet

the changing demands of the health care landscape, yet clinicians are trained in formal disciplines that provide the basis for professional identities. Undermining these professional identities will cause significant morale problems and will inhibit efforts to implement change. Program directors must be careful to identify and support focused areas of expertise associated with specific disciplines and must supplement the basic job duties of care coordinators, which are shared across disciplines, with assignments meant to capitalize on and foster each clinician's specific training and skills.

Implementing outcomes assessment

Outcomes assessment activities include ongoing efforts to systematically collect data on the treatment process. These data serve three potential needs. First, they can be used to guide treatment planning for individual clients. Second, outcomes data are required for performance improvement activities. Third, outcomes data can help answer research questions about the overall effectiveness of programs. Vertical integration is just beginning in the mental health field, and outcomes assessment activities will help identify the benefits and problems associated with the changes.

Specific outcomes assessment modules have been developed and tested (18,19), although programs may choose to develop their own assessment packages following general guidelines (20,21). During the initial phase of integrating our services, demographic and length-of-stay data were gathered for all new clients. Six months after the integration of inpatient and day treatment services, an analysis indicated that the average inpatient stay of clients discharged to the new day treatment service was 20 percent lower than that of clients discharged to other programs. This magnitude of difference was not expected by the staff or administration and was a powerful reinforcer for both the new clinical program and for the belief that outcomes assessment activities were necessary and helpful. With the growth and evolution of our integrated program, outcomes assessment has expanded to meet all three of the objectives that were noted above.

Presenting the new program to clients

It is important to regularly review developments and changes with the client population. Implementing a continuity-of-care approach is a gradual process, but periods of significant change in policy and procedures will occur. Like the clinical staff, clients and their families are most likely to be upset when they are uninformed of changes or the rationale for changes.

In our program, the senior program administrators periodically attended multifamily psychoeducation seminars to update families and address concerns. Also, open houses were scheduled to present the new program to other community treatment agencies and prospective clients.

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Throughout the early evolution of our new program, clients and family members were very enthusiastic. Many were thrilled with the prospect of working with one physician and one care coordinator over an entire course of treatment, which often began with an acute relapse. They also expressed great interest in keeping hospitalizations as brief as possible.

Over time, however, tensions emerged. Families of clients with the most severe and refractory symptoms expressed concerns about limited inpatient stays, and it was necessary to ensure appropriate outpatient resources for these clients. The willingness of program administrators to be available for consultation to both the clinical team and to clients and families was critical for the ongoing success of the vertical integration.

Experience with the program

Consolidation of services is occurring at all levels of the health care delivery system, and vertical integration has been proposed as an ideal strategy for merging and expanding clinical resources. Our experience has been positive, but there are drawbacks.

Inpatient and outpatient treatments involve many distinct tasks, and asking clinicians to have responsibilities in both settings increases the number of specific abilities required to be effective. The so-called "hospitalist," who is an expert in acute medical stabilization, will need to incorporate a broader and more flexible approach appropriate for extended community treatment. The psychiatrist will struggle with other inherent tensions between inpatient and outpatient perspectives. Inpatient nursing staff will often press for clients' early discharge, while care coordinators may appear more caring and compassionate because they advocate for increased time in the hospital to address complicated issues. Clinicians working in both settings can be caught in the middle of such splitting processes, further increasing tensions.

Another major question involves caseloads for clinicians. Our current target caseloads for physicians are 16 patients for inpatient care, 80 for continuing day treatment, and 150 for the ambulatory clinic. The corresponding figures for the nonphysician care coordinators are eight, 20, and 60. These caseload numbers were arrived at after consultation with similar programs and after trial-and-error clinical experience. The outpatient caseloads are high, and concerns have arisen that many patients are receiving only a minimal form of case management, losing opportunities for true rehabilitation.

Nonetheless, our experience suggests that vertical integration strategies can both increase efficiency and improve quality of care. After making changes, our schizophrenia service line is thriving. Inpatient stays averaged under 30 days in 1998; this figure is still high relative to national standards, but it represents a 66 percent reduction compared with average inpatient stays before vertical integration. In addition, outpatient visits increased by more than 15 percent over the one-year period.

Clients and their families clearly favor the continuity of care achieved by working with the same core treatment team indefinitely. To date, we have only anecdotal reports of better care and outcome, and a future goal is to use our outcomes assessment program to empirically establish the areas in which quality of care has improved (or declined). It is clear, however, that vertical integration of services can be accomplished in a setting of economic cutbacks and diminished resources. The key principles and steps reviewed above can guide efforts to integrate services, not only with an eye toward cost savings, but with the aim of improving the quality of services available to individuals with chronic psychotic disorders. ♦

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