Outcome Trajectories for Adolescents in Residential Treatment: A Statewide Evaluation

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Although residential treatment represents one of the largest and most expensive components of the mental health service system for children and adolescents, little is known about the anticipated outcomes of this service. Still less is known about the trajectory through which change occurs within these settings. We examined the clinical status of 285 adolescents over a 2-year period after placement in residential treatment by the Department of Mental Health in a western state. Using a growth modeling technique, the rate of change was determined over a set of symptoms measured by the Acuity of Psychiatric Illness—Child and Adolescent Version (CAPI). Results suggest that while adolescents tended to improve overall during the course of their stays, there was considerable variation in which symptoms improved and which did not. Two symptoms actually became reliably worse with treatment. In addition, significant variation in outcomes was demonstrated across sites, with adolescents in one site getting reliably worse during the course of residential treatment. Our findings demonstrate the utility of outcomes management and have significant implications for how residential services for children and adolescents should be managed.

KEY WORDS: residential treatment; adolescents; outcome trajectories of treatment; Acuity of Psychiatric Illness—Child and Adolescent Version.

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Interest in the outcomes of residential treatment for children and adolescents has risen consistent with the emphasis on outcomes in other sectors of the mental health service system (Bickman, Lambert, Andrade & Penaloza, 2000; Curry, 1991; Pfeiffer, 1996). The special issue of American Psychologist (volume 51, number 10) in October of 1996 is evidence of this increased emphasis (c.f., Howard, Moras, Brill, Martinovich & Lutz, 1996).

The need for understanding the outcomes associated with residential treatment may be particularly acute for several reasons (Goocher, 1997). First, residential treatment is the most expensive service within the array of services for children and adolescents (LeCroy & Ashford, 1992). And, there is substantial variation in cost across facilities (Spencer, Shelton, & Frank, 1997). In addition, there is currently some controversy regarding the relative value of residential versus community-based alternatives (Bates, English & Kouidou-Giles, 1997; Magnuson, 1997). The need to develop an understanding of the clinical rationale for the use of residential services and the anticipated outcomes which should result from residential services is important to resolving this controversy (Lyons, Mintzer, Kisiel, & Shallcross, 1998).

Many states are moving towards managed care initiatives in public sector mental health services. One of the primary goals of these initiatives is to reallocate scarce resources from the most expensive services which serve a relatively small number of cases, to community-based alternatives that serve more individuals with less expensive services (Burns & Friedman, 1990; Lyons, et al, 1998). There have been a number of calls for improving the process of describing and operationalizing the mental health problems of children and adolescents (Eisikovits & Schwartz, 1991; Julian, Julian, Mastrine, Wessa, & Atkinson, 1992) and establishing criteria for ensuring that individual needs are appropriately addressed through service delivery within the residential context. Within this context, understanding the clinical benefits of residential treatment is a critical component for ensuring that children and adolescents receive the type of care they need to maximize healthy development and placement permanency.

There are three basic methodologies used to study service outcomes (Lyons, Howard, O’Mahoney, & Lish, 1997). Change analysis focuses on studying differences before and after services are received. Decision analysis focuses on modeling key decisions in the process of care. Outcome prediction involves the building of trajectories of change over the course of service receipt. While there has been a small body of research on change analysis (e.g., Gilliland-Mallo & Judd, 1986) and decision analysis (Lyons et al., 1998) with residential services, there has been no research that provides the foundation for modeling the trajectory of change in these settings.

Outcome prediction methodologies have evolved from earlier work on the “dose-effect” relationship in service delivery (Howard, Kopta, Krause, & Orlinsky, 1986). A dose-effect relationship presumes that if a service is effective,