Pursuing Cost-Effectiveness in Mental Health Service Delivery for Youth with Complex Needs

Katherine E. Grimes, et al.

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**Background:** Mental health advocates seek to expand children's services, noting widespread failure to meet the needs of public sector youth suffering from serious emotional disturbance (SED). However, state and national budgets face deepening cuts, with rising health care costs taking the blame. As the gap between needs and finances widens, identification of cost-effective treatments that will benefit children with SED and their families is of increasing importance. Community-based interventions for this population, such as the wraparound approach and systems-of-care, are being disseminated but literature is scant regarding effects on expense. The Mental Health Services Program for Youth (MHSPY) model is aligned philosophically with wraparound and systems-of-care but unique in blending public agency dollars to deliver integrated medical, mental health and social services. MHSPY's linked clinical and expense data is useful to study community-based treatment cost-effectiveness.

**Aims of Study:** To examine the cost-effectiveness of an intensively integrated, family and community-based clinical intervention for youth with mental health needs in comparison to "usual care."

**Methods:** Study and reference populations were matched on age, gender, community, psychiatric diagnosis, morbidity and insurance type. Claims analyses included patterns of service utilization and medical expense for both groups. Using propensity score matching, results for study youth are compared with results for the population receiving "usual care." Clinical functioning was measured for the intervention group at baseline and 12 months.

**Results:** The intervention group used lower intensity services and had substantially lower claims expense (e.g. 32% lower for emergency room, 74% lower for inpatient psychiatry) than their matched counterparts in the "usual care" group. Intervention youth were consistently maintained in least restrictive settings, with over 88% of days spent at home and showed improved clinical functioning on standard measures.

**Discussion:** The intensive MHSPY model of service delivery offers potential as a cost-effective intervention for complex youth. Its integrated approach, recognizing needs across multiple life domains, appears to enhance engagement and the effectiveness of mental health treatment, resulting in statistically significant clinical improvements. Functional measures are not collected in "usual care," limiting comparisons. However, claims expense for intervention youth was substantially lower than claims expense for Medicaid comparison youth, suggesting clinical needs for intervention youth post-enrollment were lower than for those receiving "usual care."

**Implications for Health Care Provision and Use:** The MHSPY model, which intentionally engages families in "clustered" traditional and non-traditional services, represents a replicable strategy for enhancing the impact of clinical interventions, thereby reducing medical expense.
Implications for Health Policies: Blending categorical state agency dollars and insurance funds creates flexibility to support community-based care, including individualized services for high-risk youth. Resulting expenses total no more, and are often less, than "treatment as usual" but yield greater clinical benefits.

Implications for Further Research: Further research is needed regarding which intervention elements contribute the most towards improved clinical functioning, as well as which patients are most likely to benefit. A randomized trial of MHSPY vs. "usual care," including examination of the sustainability of effects post-disenrollment, would provide a chance to further test this innovative model.