

checklist. Retrospective chart review was used to identify patients eligible for the CP in the 18 months before implementation and compare outcomes (mean length of stay, use of intramuscular medications, and use of restraint) of patients exposed to the CP in the first 18 months of implementation.

Results: Treatment fidelity to the CP was acceptable based on checklist review. Record review identified over 70 patients with ASD who were admitted in the 18 months before implementation. Of these patients, approximately 50 percent met CP eligibility criteria. Outcomes for these admissions were compared with outcomes for 30 admissions to the CP. Preliminary analysis indicated improved outcomes post-CP implementation.

Conclusions: Expert consensus has indicated that expanded, targeted admission assessment; basic supports for functional communication; predictable routines; developmentally appropriate milieu of activities, including physical activities; and increased density of positive reinforcement are critical elements for effective inpatient care of children with ASD or ID. The design and pilot implementation of a clinical pathway using these elements at Bellevue Hospital Center over 18 months showed that it is feasible to incorporate these principles in a general inpatient child psychiatry unit and may improve outcomes.

ASD, ICP, TREAT

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21.2 INTENSIVE INPATIENT TREATMENT FOR CHILDREN WITH AUTISM AND OTHER NEURODEVELOPMENTAL DISORDERS (ICAN): SPECIALTY CARE PROGRAM IN A STATE-OPERATED HOSPITAL



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Objectives: Youth with autism spectrum disorder (ASD) or intellectual disability (ID) make up an increasing proportion of inpatient psychiatric admissions, and these children may experience higher rates of STAT behavioral medication usage when they are managed with approaches developed for the neurotypical inpatient population. We describe preliminary data from a novel inpatient program (International Center for Autism and Neurodevelopment, ICAN) in a New York State Children's Psychiatric Hospital. We hypothesized that aggregation of this population in one wing of one of the inpatient units, provision of individualized behavioral plans, a milieu setting focused on teaching and reinforcing social skills, and direct care staff training could lead to a decrease in the number of STAT behavioral medications used.

Methods: Four children hospitalized in the general child psychiatric unit met the ICAN program criteria of ASD or ID and were transferred to the ICAN wing. The number of STAT behavioral medications was abstracted from the medication administration records of four subjects for eight weeks before transfer and after a four-week transition period for the eight subsequent weeks. The ICAN program had two direct care staff for up to eight children, which was one more staff person than the standard hospital staffing ratio.

Results: The use of STAT medications substantially declined, although this did not reach statistical significance. During the preperiod, an average of 27.8 (SD 24.1) oral STAT medications and 6.25 (SD 5.31) intramuscular (injected)

STAT medications were used compared with 12.0 (SD 11.0) oral and 1.25 intramuscular STAT medications in the postperiod. Use of an antipsychotic drug as the STAT medication declined 81 percent. Notably, two of the four subjects were staffed 1:1 in the pretransfer period, so the effective staffing ratio decreased for these patients.

Conclusions: It is feasible to aggregate youth with neurodevelopmental disorders in one wing of a unit within a state-operated child inpatient facility and provide a more specialized population-specific program. Although no causal link can be offered because of the pre/poststudy design and the suggestion of an association is not appropriate given the very small sample group, the decrease in the use of STAT medications after implementation of the ICAN program bears further study.

ASD, ICP, TREAT

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21.3 SPECIALIZED INPATIENT PSYCHIATRY UNITS FOR YOUTH WITH AUTISM AND SERIOUS PROBLEM BEHAVIORS: TREATMENT MODEL AND BEHAVIORAL OUTCOMES



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Objectives: Children and adolescents with autism spectrum disorder (ASD) are hospitalized for psychiatric reasons at a much higher rate than children who do not have ASD because of serious emotional and behavioral problems, including aggression, self-injury, and tantrum-like behaviors.

Methods: This presentation focuses on the model of specialized child psychiatry units for the treatment of children with ASD and serious behavioral challenges and provides comparative outcomes for six specialized units participating in the Autism Inpatient Collection (AIC) study. ($n = 350$; aged 4–20 years), with an Autism Diagnostic Observation Schedule (ADOS-2)-confirmed ASD diagnosis, were prospectively enrolled in the AIC study, a six-site consortium investigating phenotypes, genotypes, and behavioral outcomes. A consistent caregiver completed measures at admission, discharge, and two months after discharge and reported their child's demographics, problem behaviors [Aberrant Behavior Checklist-Irritability (ABC-I) subscale], expressive communication, and adaptive behavior. Changes in problem behavior over time were examined using multilevel model repeated-measures analysis of covariance.

Results: The multidisciplinary bio-behavioral treatment model used by these six specialized units was associated with a significant decrease in child problem behaviors from admission to discharge for all study sites and slight increases in problem behaviors from discharge to two months follow-up, which varied by site. Improvement in problem behaviors, however, was not uniform across sites, even after controlling for significant site differences. Length of stay was the only statistically significant covariate in all models.

Conclusions: Hospitalization in specialized child psychiatry units appeared to be effective in reducing the severity of child problem behavior from admission to two months after discharge for children and adolescents with ASD, and length of stay may be a significant factor in this model of care. These results can help inform public policy on investing in services for this growing, high-needs population.

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