

POSTER ABSTRACT

Integrated Care for Dual Diagnosis: A Co-Designed Pathway, Family Resilience, and Evidence-Based Pharmacological Review for Children with Autism and Epilepsy

International Conference on Integrated Care (ICIC26), Birmingham, 13-15 April 2026

Sheow Yun Sie^{1,2}, Claire Barbander^{2,3}

1: Cummings Graduate Institute for Behavioral Health Studies, United States

2: Department of Psychology, CUNY Queens College, United States

3: CUNY Graduate Center, United States

Background: Children with co-occurring autism spectrum disorder (ASD) and epilepsy face significant, interacting neurological, behavioral, and psychosocial challenges. Managing these dual diagnoses is complicated by fragmented healthcare systems that often treat conditions in silos. This lack of coordination leads to suboptimal patient outcomes, delayed interventions, high healthcare costs, and immense emotional and practical burdens on caregivers. A holistic, evidence-based model is urgently needed to shift the focus from disconnected treatment to coordinated, person-centered care that actively empowers the family unit.

Approach: This project presents a comprehensive, integrated care model developed from four synthesized components: clinical innovation, patient/carer involvement analysis, clinical pathway design, and evidence-based drug review. The approach centers on a multidisciplinary clinical pathway that standardizes care from initial referral through continuous monitoring and discharge. A Doctor of Behavioral Health (DBH) is designated as the central care coordinator, ensuring seamless collaboration between internal Applied Behavior Analysis (ABA) providers and an extended network of external specialists (e.g., neurologists, dietitians). Crucially, the model integrates a family resilience hub, which was co-designed with patient-carer representatives based on a deep analysis of patient-carer dynamics.

This hub formalizes the caregiver's role as an essential partner by providing training in self-management, crisis navigation, and resilient coping strategies. Furthermore, the pathway is grounded by an evidence-based drug review, specifically examining complex anti-seizure medication (like Levetiracetam), to inform the safe, coordinated management of pharmacological effects and associated neuropsychiatric risks (e.g., mood changes, aggression) within the integrated setting.

Results: Outcomes for this proposed model are strongly projected across clinical, family, and financial metrics. Clinically, we anticipate measurable improvements in children's seizure control,

behavioral regulation, and adaptive skills due to proactive, streamlined interventions. For families, the integrated support is expected to yield a significant reduction in caregiver stress and a measurable increase in self-efficacy and confidence.

Financially, the model demonstrates a strong economic case for integrated care, with a projected return on investment (ROI) driven primarily by reduced costly emergency department visits and hospital admissions resulting from improved crisis management and treatment adherence.

Implications: This work provides a highly replicable and sustainable framework for integrating medical and behavioral health services into complex pediatric populations. It validates the essential role of a dedicated non-physician coordinator (the DBH) in overcoming system fragmentation and optimizing resource allocation. By formally elevating the patient and their carer as co-designers and key partners, this model offers a blueprint for advancing health equity, improving overall quality of life, and transforming siloed care delivery into a unified, high-value network.