VIEWPOINT

An Architecture for Transformation in Child Mental Health

John N. Constantino, MD
Children's Healthcare of Atlanta and Emory University School of Medicine, Atlanta, Georgia.

Laura J. Dilly, PhD
Children's Healthcare of Atlanta and Emory University School of Medicine, Atlanta, Georgia.

Clinical care to prevent or treat serious mental health impairments of children in the US lags far behind that for medical conditions of comparable risk, by any reasonable indicator of timeliness, adherence to evidence-based practice, or accessibility (the sole exception being hospitalization for safety). This defines the mental health parity gap: federal law mandates that the provision of medically necessary care for mental health and substance use conditions must be on a par with what is provided for medical conditions,[1] but mental health parity law has never been systematically enforced. Failure to achieve parity between mental health and medical care—as well as equity for reimbursements for mental health services across different health insurers—has severely compromised access to care especially among lower-income governmentally insured children and has driven major trends for adequately resourced families to seek outpatient care outside of the networks of their medical insurers.[2] In the US overall, large proportions of children with major psychiatric conditions do not receive any mental health treatment.[3,4]

Here, we describe the architecture of a transformation effort to provide timely, comprehensive intervention services to a large population-representative subset of children within a single health system, for the purpose of clarifying the critical steps necessary to implement the contemporary evidence base of our field. The opportunity was made possible by the allocation of a large financial resource by Children's Healthcare of Atlanta intended to complement the community's existing child mental health service structure by subsidizing loss after insurance reimbursement to meet quality and patient access standards (effectively removing the typical financial constraints that compromise care delivery) to demonstrate both the potential impact and the true cost of high-quality child mental health care when equitably delivered to a pediatric population.

Workforce

It is axiomatic, in a supply-and-demand market, that health workers must be attracted by a level of compensation and desirability of work conditions adequate to engage them in the quality care of a representative population and its payor mix. A corollary is that enough workers to deliver the standard of evidence-based care must be retained in accordance with the diagnostic prevalence of the condition in that population. Both principles are routinely compromised as evidenced by long wait lists and inadequate access to care within professional networks of insurance plans. A necessary step in care delivery is therefore to calibrate compensation and work-life balance to attract an adequate complement of clinicians to deliver intervention services to a target population. As an initial step, the program adjusted compensation levels for child and adolescent psychiatrists, psychiatric/mental health nurse practitioners, psychologists, master's degree–level psychotherapists, and care coordinators, which secured the workforce for the transformation model detailed below.

Specifying Target Populations and Domains of Higher-Impact Intervention

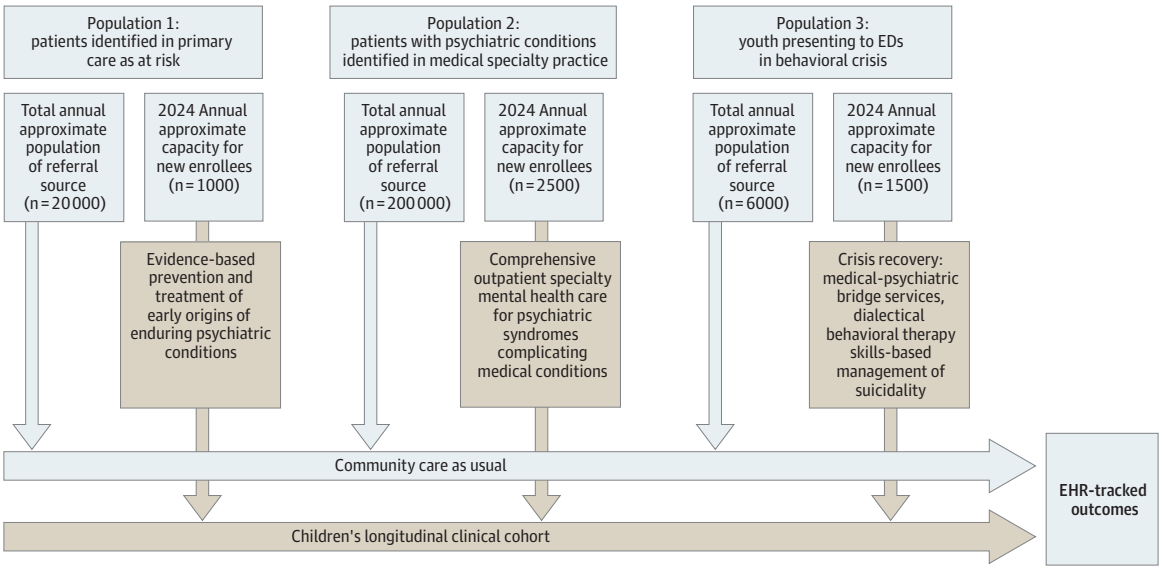
The program prioritizes the resolution of unmet mental health needs of 3 distinct, epidemiologically traceable populations at risk, schematically illustrated in the **Figure**. These needs encompass a continuum of outpatient intervention from primary preventive intervention to crisis recovery. The model prioritizes interventions with large, demonstrated effect sizes, including mental health support for primary caregivers of young children at risk[5]; established psychotherapies, including those designed to avert catastrophic consequences of mental health conditions[6]; psychopharmacology; and judicious intervention for early trajectories of adolescent substance use disorders. The service enhancements are transdisciplinary and, importantly, organized according to each family's needs, rather than by discipline, service line, or bureaucracy. This is emphasized to avoid both fragmentation of care and duplication of existing community care. The program subsidy is large enough to support thousands of new patient slots for enrollment into comprehensive care each year, but the size of the health system is such that its referral populations are more than an order of magnitude larger than the program's capacity; thus, assignment to the transformation model approximates quasi randomization, and enrollees are followed up prospectively along with their care-as-usual counterparts within a unified electronic health record system.

Ensuring Quality of Care

Sobering statistics from longitudinal research illustrate limited effects of traditional child psychiatric care on adult mental health outcomes[7]; therefore, efforts to transform child mental health must compellingly deliver something more effective. Because fragmentation plagues the delivery of child mental health services nationally, the program prioritizes accountability, ie, "ownership" of the enterprise of ensuring comprehensiveness of care. Transdisciplinary teams meet regularly to identify patient needs and calibrate approaches to specific conditions. After the derivation of each patient's treatment plan, each clinician documents any gaps in community access to the medically necessary elements of the plan; the cumulative inventory of those gaps (indexed by patient, payor, and unavailable evidence-based intervention) details deviations from the fulfillment of mental health parity and provides a data-driven basis for expanding nonduplicative service lines within the health system to meet the needs of the tar-

Corresponding Author: John N. Constantino, MD, Center for Behavioral and Mental Health, Children's Healthcare of Atlanta, Departments of Psychiatry & Behavioral Sciences, Pediatrics, and Genetics, Emory University School of Medicine, 1575 Northeast Expressway NE, Room E290, Atlanta, GA 30329 (john.constantino@choa.org).

Figure. Architecture and Status of a Mental Health Transformation Effort at Children's Healthcare of Atlanta



Enrollment capacity for transformation model of care (beige arrows) and estimates for numbers of children remaining within the respective referral populations (within which subsets of children affected by or at risk for enduring mental health conditions receive community care as usual; gray arrows) are listed for each respective group. The transformation model leverages and includes care as usual in the community whenever possible, thereby supplementing and participating in the existing regional ecosystem of care. The framing of 3 clinical-epidemiologic populations affords opportunity for rigorous evaluation of impact and cost using outcomes tracked by the electronic health record (EHR). For example, patients in population 3 can be followed to compare rates of recidivism for behavioral crisis between those receiving enhanced recovery care vs care as usual, because a vast majority of emergency department (ED) patients who present to a Children's ED for a behavioral crisis return to a Children's ED in the event of a recurrent crisis.

get population. The program continuously monitors the population-representativeness of its enrollees (currently at 60% Medicaid for the first 1500 patients) and adapts workforce recruitment and service protocols to maintain the highest possible standards of cultural competency.

Monitoring Cost and Impact to Inform Policy

Specification of populations at risk, quasi random assignment to enhanced care, and complete data capture within a health system afford major opportunities for monitoring (1) real-time information on unmet mental health needs within each population (critical for deriving policy targets within a geographic region), (2) the impact of innovation in comparison with care as usual (Figure), and (3) the true costs of transformation. Often, electronic health record systems need to be modified to systematically capture variables that are relevant to risk, intervention, and outcome in mental health service delivery, including reliable indices of familial and sociodemographic risk, intervention quality, dosage, and adherence, and systematic documentation of major adverse outcomes such as death by suicide or overdose, child welfare placement, school dropout, and juvenile justice system involvement. Clinical program monitoring strategies encompassing these metrics can be used to automate the accrual of large, highly informative datasets over time and to inform policy by modeling what would be possible in the "real world" if evidence-based practice were implemented as a standard and health-system transformation in mental health were made accessible to children everywhere.

ARTICLE INFORMATION

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REFERENCES

1. Constantino JN. Bridging the divide between health and mental health: new opportunity for parity in childhood. *J Am Acad Child Adolesc Psychiatry*. 2023;62(11):1182-1184. doi:10.1016/j.jaac.2023.03.019

2. Benjenk I, Chen J. Trends in self-payment for outpatient psychiatrist visits. *JAMA Psychiatry*. 2020;77(12):1305-1307. doi:10.1001/jamapsychiatry.2020.2072

3. US Surgeon General's Advisory. Protecting youth mental health. Accessed September 6, 2024. https://www.hhs.gov/sites/default/files/surgeon-general-youth-mental-health-advisory.pdf

4. Center for Disease Control and Prevention. Data and statistics on children's mental health. Accessed September 6, 2024. https://www.cdc.gov/childrensmentalhealth/data.html

5. Constantino JN, Buchanan G, Tandon M, Bader C, Jonson-Reid M. Reducing abuse and neglect recurrence among young foster children reunified with their families. *Pediatrics*. 2023;152(3):e2022060118. doi:10.1542/peds.2022-060118

6. Jobes DA. The Collaborative Assessment and Management of Suicidality (CAMS): an evolving evidence-based clinical approach to suicidal risk. *Suicide Life Threat Behav*. 2012;42(6):640-653. doi:10.1111/j.1943-278X.2012.00119.x

7. Copeland WE, Tong G, Shanahan L. Do "real world" childhood mental health services reduce risk for adult psychiatric disorders? *J Am Acad Child Adolesc Psychiatry*. 2022;61(8):1041-1049.e7. Published online January 19, 2022. doi:10.1016/j.jaac.2021.12.014