Case-Level Data: Improving Clinical Practice and Outcomes

Jordan Institute Big Data Summit
October 2013

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To Cover:

• NC Child Treatment Program: Data Exchange Platform
• *Fostering Connections* Legislation: Data Exchange Development Opportunity
• Discussion
NC Child Treatment Program

Brief Overview
The NC Child Treatment Program

Implementation platform for the delivery and support of evidence-based mental health treatment (EBPs) in multiple settings.
NC CTP Administration and Leadership

Administrative Home
- Center for Child and Family Health
- Executive Director: Robert Murphy, PhD

NC CTP Co-Directors
- Lisa Amaya-Jackson, MD, MPH
- Dana Hagele, MD, MPH

NC CTP Contracting Agency
- NC Division of Mental Health/Developmental Disabilities/Substance Abuse Services
Successful Implementation Requires: Institutional Funding

Per NC General Assembly (2013):

- $1.8 million annually-recurring funds to support:
  - Program implementation
  - Statewide dissemination
  - Ongoing clinical support and monitoring

- $500,000 over two years to support development of data exchange platform (NC POP):
  - Program management
  - Report to authorized entities
NC CTP Cornerstones

- EBP-specific training and coaching platform
- Treatment in community-based and restricted settings
- Performance and outcomes data platform (NC POP)
- Public roster of NC CTP-trained clinicians
- Collaboration with professionals and state entities:
  - Data-sharing
  - Expert case-level auditing
  - Public MH infrastructure development and support
NC CTP: Expanded Service Array

- Trauma-Focused Cognitive Behavioral Therapy (TF-CBT)
- Parent and Child Interaction Therapy (PCIT)
- Child-Parent Psychotherapy (CPP)
- Structured Psychotherapy for Adolescents Responding to Chronic Stress (SPARCS)
- Attachment and Bio-Behavioral Catch (ABC)
- General behavioral management model
Child Public Mental Health: Infrastructure, Core Functions, and Service Continuum

Public Mental Health Service Continuum

- Screening
- Multi-Tiered Assessment
- Integrated Service Plan
- Clinically-Driven Referral Process
- Integrated, Quality Service Array
- Targeted Outcomes Monitoring

Effective Case Management and Critical Caregiver Support

Core Public Mental Health Functions

- Assessment
  - Individual and Population Needs
  - Community and System Capacity
- Development
  - Policies and Procedures
  - Programs, Networks and Resources
- Assurance
  - Access to Well-Being Services
  - Achievement of Targeted Outcomes

Public Mental Health Infrastructure

- Data Management and Exchange
- Infrastructure Staff and Competent Workforce
- Systems Capacity and Organizational Capacity
Data Exchange Platform

Performance and Outcomes Platform (NC POP)
NC CTP Performance and Outcomes Platform (NC POP) will support:

- Training platform implementation
- Public roster of trained clinicians
- EBP implementation (treatment)
- Utilization monitoring
- Fidelity and clinical outcomes tracking
- Data-sharing with stakeholders: Case and aggregate levels
NC CTP: Public Access

Find a Therapist >

Training Opportunities >
NC CTP: TF-CBT Roster

The NC Child Treatment Program

NC CTP Therapist Search

More Search Options

County Name

[Select County]

Providers Per County

None

1 to 2

3 to 4

5 to 9

10 to 14

15 or More

Instructions

To view a list of therapists for a selected county, select a County Name or click the Information icon then click the desired county on the map. HINT: County names will appear on the map if you zoom in.

You may also search by city, county, and/or therapist name by clicking the More Search Options link.

Links

About Our Roster
Clinician/Trainee Home Page (requires login)
NC POP

Data Points and Data Exchange
Data Points: Clinician-Specific

- Demographics
- Training data
- Clinical practice data
- Aggregate (caseload): Fidelity and outcomes data
Impact: Clinician-Specific Data

System:
- Work force mapping (drives future training)
- Monitor training success (drives future trainee-recruitment and program pruning)
- Performance-based contracting

Agency:
- Manage training investment

Clinician
- Self-monitoring
Data Points: Child-Specific

- Client/patient demographics
- Critical caregiver information
- Baseline clinical symptoms (per standardized assessment battery)
- Diagnoses and symptom profile
- Post-treatment outcomes (comparison pre- and post-treatment standardized assessment scores)
- Attrition rates and reasons
Impact: Child-Specific Data

- Map child service (and caregiver) need
- Map service gaps
- Inform referral process
- Monitor symptom improvement
- Predict attrition
- Predict treatment failure/identify on-going service needs
- Monitor outcomes across multiple domains
Data Points: Dyad-Specific

- EBP-specific fidelity score
- EBP-specific service utilization data
  - Number, duration and frequency of sessions
  - Session participants
  - EBP-specific session content
- Case management activities
Impact: Dyad-Specific Data

- Case and aggregate level: Clinical competency and fidelity monitoring
- EBP-specific cost modeling
- EBP-specific cost-effectiveness assessment
- Case management support
Potential Data-Sharing Process

• Identify meaningful data points
• Select unique ID numbers
• Identify authorized data recipients
• Develop secure, confidential data exchange process
Potential Data Sharing Process continued:

- **Clinicians:**
  - Enter enrollment and clinical encounter data
  - Share case/caseload data with supervisors and agency administrators

- **NC Child Treatment Program faculty:**
  - Aggregate case-level data
  - Send automated (aggregate) report to authorized entities
  - Send “flagged” case-level data to authorized entities
Figure Three: NC Child Treatment Program
Performance and Outcomes Platform (NC POP)

**Standard Queries/Reports**
- Are children demonstrating significant clinical improvement?
- Are clinicians providing an EBT with high fidelity and clinical competence?
- Is service delivery cost-effective?
- Are we meeting critical population service needs?

- Secure data management system
- HIPAA compliant

**Performance and Outcome Platform (NC POP)**
- Child Demographics + Symptoms
- Clinician Practice Information
- Clinical Outcomes
- Clinician Fidelity and Competency
- EBT-Specific Service Utilization and Cost

**Data collection and entry per routine clinical practice**

**COMMUNITY-BASED CLINICIAN**
(Providing Evidence-Based Treatment)

**CHILDREN AND FAMILIES**
(With Costly Behavioral-Emotional Problems)

**Authorized Data Access**
- DMA
- DMH/MCO
- DSS

**NC Child Treatment Program**
- Intensive training and clinical coaching
- Roster of highly competent clinicians
- Ongoing clinical consultation
- Outcomes and fidelity monitoring through NC POP
- Advanced training
Fostering Connections Legislation

Clinical Data System
Development Opportunity
Fostering Connections to Success and Increasing Adoptions Act of 2008

Foster Care Health Oversight and Coordination Plan to:

- Meet health, dental, developmental, behavioral-emotional, and educational needs of children in foster care.

- Update and share critical health data, through standardized protocols - potentially an electronic, “well-being passport.”
To Consider:

Through CCNC Informatics Center:

- Develop **Foster Care Well-Being Passport** template
- Develop an access protocol
- Integrate easily accessible data
  - Administrative data
  - Large health data sets (immunization records)
- Identify pie-in-the-sky data sources
  - Education (promotion/retention, IEP)
  - Medical home data (EHR)
  - Case-level treatment/outcomes/fidelity data (NC CTP
Discussion

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