The Michigan Child Collaborative Care Program (MC3): Telepsychiatry for Children of Rural Michigan

Dayna LePlatte MD
Sheila Marcus MD

Why Rural Michigan?
Why Children?

- Up to 20% of children have a mental health disorder—the vast majority are undiagnosed and undertreated.
- Up to 50% of impoverished children have psychiatric/behavioral disorders.

Why Primary Care Providers?

- Pediatricians prescribing 85% of psychotropic meds (Goodwin et al, 2001)
- 60-70% of PCPs report appointment delays for mental health referrals of 3-4 months (MCPAP Survey)
- Long delays in emergency rooms for mental health beds
Why Collaborative Care?

MC3 Counties and BHCs
What Is MC3

- Teleconsultations: “Answers in real time” to PCPs
- Telepsychiatry: Video Consultations with diagnostically complex families
- Care Coordination across the state
- Screening for common mental health disorders
- Education: Webinars, ongoing case consultations and panel reviews
- Outcomes: Clinical and Adherence

An overall flow

PCP identifies a need for psychiatric consultation
PCP (or MA) contacts BHC and gives basic information and reason for call
BHC will page the child psychiatrist who will return call within the same day
If MC3 tele consultation needed, will be arranged and feedback provided to PCP
Evaluation of Program
MC3 Screening

- MC3 team and BHC’s can also assist primary care clinics in developing work-flow for screening tools (PHQ or MCHAT)
- Helping to incorporate screening in EMR
- BHC’s can also assist with triaging positive screens

Progress to Date Total

- 1373 providers across Michigan enrolled
- 5379 consultations to date BHC+MD (2268 MD consults for medication consultation or diagnostic clarification)
- 97% of children without other access to psychiatrists, 8% avoided higher LOC
- Satisfaction 98% were highly or very satisfied with consultation
- Michigan Department Of Health and Human Services, Michigan Department of Education Health Systems (Mid Michigan, Spectrum, Munson, Bronson, Borgess, Hurley, Mott Childrens/Flint, Michigan State University)
Perinatal Consultations

- Provision of phone/telepsychiatric consultation on women in pregnancy and postpartum with children up to 1 year.
- 176 perinatal consultations to date
- Common diagnoses: major depression, addiction, r/o bipolar illness, attachment issues
- Opioid addiction common in rural counties among these consultations

Age Distribution For Phone Consultations
Rural County Data

Phone consults by county classification (n=2268)

- **Urban** (n=14 counties): 72.8% [VALUE]
- **Rural** (n=22 counties): 27.2% [VALUE]

Symptom Severity: Rural Patient
Higher Severity

Percentage of rural and urban patients with severe symptoms

![Bar chart showing higher severity of symptom in rural patients]

Diagnoses

Diagnoses for rural patients

- ADHD: 210
- Anxiety NOS: 166
- Autism: 48
- Bipolar: 25
- Depression NOS: 44
- Disruptive behavior: 42
- GAD: 21
- MDD: 11
- Mood NOS: 14
- OCD: 46
- ODD: 31
- PTSD: 57
- Social anxiety: 23
- Substance abuse: 70

Legend:
- PCP
- CAPF
Anecdotal Differences in Prescribing Patterns Rural/Near Academic

- PCP’s in rural areas following youth who are more severe
- Near academic centers refer for questions re: SSRI’s, stimulants and alpha antagonists
- Rural youth on more medications, and more complex medications
  - Atypical neuroleptics
  - Mood stabilizers
Trauma

23% of children where trauma is identified as a potential concern in rural counties (22% urban)

- Diagnoses often considered include bipolar illness, ADHD, ODD
- In 24% PTSD was considered as diagnosis by CAP but only in 14% considered by PCP
- Pharmacotherapy: More Medication - average 3.25 meds (with trauma) vs 2.3 meds (without trauma)

WHY IS THIS IMPORTANT?

EARLY CHILDHOOD TOXICITY AND TRAUMA FUNDAMENTALLY ALTERS A CHILD’S LIFE TRAJECTORY
Reciprocity and Relationships Shapes Brain Function

Let’s Start At The Beginning

- Ed Tronick Still Face
  https://youtu.be/apzXGEBZht0
Brains Are Built From The Bottom Up

Adverse Childhood Experiences Study

- The ACEs Study is an ongoing collaborative research project between CDC and Kaiser Permanente (17,000 subjects)
- Explores impact of childhood experiences and long term health outcomes
- A series of 10 questions; each question worth 1 point for positives
The ACE’s Pyramid

Number of children in Michigan living in poverty: 1 in 4

Children with incarcerated parent: 53,000

Children with parents with mental illness: 190,000
What if your safe haven is also a source of trauma?

MC3 and Northern Michigan

- 6 year old from “The Northern 21”
- Father incarcerated after beating mother; witnessed by child
- Mother with polysubstance disorder; not available to child when he was younger
- Frequent moves; lives in tent in summer
- Already on 4 medications with diagnosis of ADHD and “bipolar disorder” when we are consulted
“Why Does He Act That Way?”

- “Disorganization” commonly has its roots in severe abuse, neglect, parental mental illness and substance abuse.
- When the harbor of safety is also the source of fear and threat
- Medication does not treat

Diagnostics and Medication Use

- Children with trauma histories and those with chronic stress are more frequently medicated
- Substantial issue for youth in foster care and kinship adoptions/foster
- Trauma is often misdiagnosed as ADHD, ODD, and Disruptive Behavioral Disorders
- Traumatized and helpless parents may “ask” for medication to address behavioral issues
What Helps?
Supportive relationships buffer/protect young children from the effects of trauma/toxic stress

London WWII
Early Relationships and Attachment

- Become the framework for personality
- Guide capacity for cognition/socialization/regulation and intimacy.
- Attachment is the innate tendency to create a bond with a primary caregiver, characterized by contact and proximity seeking
Video

Be Bigger Stronger
Wiser and Kind
Take Home Points

- You are dealing with complex, ill patients!
- It is “how to think about cases” that is key
- Many children have trauma, substantial poverty and violence in their lives
  - Most are misdiagnosed and treated with inappropriate medication
  - Most have relational disturbance, and supporting caregiving relationship makes a difference.

We enjoy working with you! Relationships do help!

Consulting Psychiatrists

Dr. Sheila Marcus  Dr. Paresh Patel  Dr. Maria Muzik  Dr. Nasuh Malas

Dr. Dayna Leplatte-Ogini  Dr. Joanna Quigley  Dr. Rich Dopp  Dr. Kate Fitzgerald