Management and Monitoring of Psychotropic Use in Youth: Collaborative Initiatives to Address Policy, Programmatic and Quality Improvement Challenges

Stephen Crystal
Director, Center for Education and Research On Mental Health Therapeutics, Rutgers U.
scrystal@rci.rutgers.edu

Presented for Administration On Children, Youth and Families Webinar On Psychotropic Use in Foster Care Youth 2/13/12
Context for Challenges in Foster Care Youth

• Overall sharp increases in psychotropic prescribing among youth—reflecting multiple factors including increased diagnosing of bipolar disorder and increased rates of prescribing across diagnostic categories.

• Limited supply and access challenges for mental health services, particularly for child psychiatry and evidence-based psychosocial interventions.
Antipsychotic Use Rates in Youth Aged 6-17

Percent with AP Use


MAX Medstat

4.11% 0.93%
### Annual Antipsychotic Use Rates by Foster Care Medicaid FFS Youth* Ages 6-17

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2003</th>
<th>2005</th>
<th>Change 2001-2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foster Care</td>
<td>9.3</td>
<td>12.1</td>
<td>13.6</td>
<td>46% ↑</td>
</tr>
<tr>
<td>Non-Foster Care</td>
<td>2.3</td>
<td>2.94</td>
<td>3.4</td>
<td>48% ↑</td>
</tr>
</tbody>
</table>

*MAX all states except AZ, DE, DC, OR, NV, RI, NJ, ME
### Polypharmacy (Cross-Class):
Other Psychotropic Medication Use in AP Users
Medicaid FFS Youth* Ages 6-17

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2003</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antidepressants</td>
<td>56.6</td>
<td>54.1</td>
<td>45.2</td>
</tr>
<tr>
<td>ADHD Drugs</td>
<td>52.9</td>
<td>60.5</td>
<td>63.1</td>
</tr>
<tr>
<td>Mood Stabilizers</td>
<td>39.2</td>
<td>37.4</td>
<td>34.6</td>
</tr>
<tr>
<td>Anxiolytics/Hypnotics</td>
<td>10.2</td>
<td>8.4</td>
<td>8.4</td>
</tr>
</tbody>
</table>

* MAX all states except AZ, DE, DC, OR, NV, RI, NJ, ME
Summary: Antipsychotic Use in Medicaid Fee For Service Youth (2005)

- ≈210,000 (4.1%) received antipsychotics
- Overall use rate increased by 43% (2001-2005)
- Increase consistent across demographic strata
- 75% of use “off label”
- 50% of use “for” CD/DBD, or ADHD
  - Triggered by aggressive behaviors?
- Substantial majority also treated with other psychotropic drugs
- Minority received MH assessments or psychotherapy
Local Area Variation:
Rates of APM Receipt in Medicaid Youth: MO

MAX FFS enrollees age 6-17, 2005 data
Areas of Concern for Monitoring and Quality Improvement

- Rates of AP use--including understanding local-area variation; use by prescriber sector (psychiatry, pediatrics, family practice, other prescribers); outlier prescribers.
- Cross-class and within-class polypharmacy: e.g. 4+ psychotropics; 2+ or 3+ antipsychotics.
- Use in very young children.
- Dosage ("too many, too young, too much").
- Diagnosis consistent with treatment.
- Monitoring for metabolic impact (weight, glucose, lipids; use of most metabolically aggravating SGAs).
- Adequacy of initial assessment; initial trial or concomitant use of psychosocial interventions; services consistent with treatment.
Collaborative CERTs/Multistate Initiatives on AP Use in Kids

- Expert survey and consensus conference on treatment of maladaptive aggression in youth (TMAY).
- T-MAY clinician toolkit (chsr.rutgers.edu or google CERTs toolkit on aggression in youth).
- CERTs/MMDLN 2007 meeting on mental health challenges; AP use in kids selected as topic for first MMDLN collaborative, cross-state project.
- 16-state Antipsychotics in Children project (see report and resource guide at chsr.rutgers.edu).
Collaborative CERTs Project with MA Medical Directors Learning Network: “Antipsychotics in Children Project”

- Worked with 16 states to help states examine patterns of AP use, using common variable definitions and table shells. Concurrent effort to describe relevant state policies/program structures and identify promising practices.


- Project identified need for a more robust program to develop and use quality metrics to guide policy and interventions; utilization of metrics for provider feedback; implementation of quality improvement initiatives to educate prescribers in evidence based practices; develop systematic collaborations among state Medicaid, mental health, and children’s services around psychotropics; and create state quality collaboratives that bring together key stakeholders to address QI challenges. Resource Guide identifies key promising practices.
CERTs Educational and Stakeholder Collaboration Initiatives on AP Use in Kids

• MEDNET 6-state network on implementation of evidence based practices in MA mental health, including appropriate management of antipsychotics:
  – Development and use of quality metrics.
  – Antipsychotic polypharmacy.
  – Practices to address metabolic risks including monitoring, avoidance of most-challenging meds in patients with established risk factors (typically adults).
  – Examining/addressing geographic and provider var.
  – Appropriate evaluation and monitoring.
  – Diagnoses consistent with treatments.
  – Provider feedback.
  – Clinic based QI initiatives.
### AP Medication Utilization Rates by Gender, Age Group in Medicaid FFS Youth Ages 0-18 in Selected States*

<table>
<thead>
<tr>
<th>Age Group</th>
<th>2004</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Use Rate</td>
<td>Min</td>
</tr>
<tr>
<td>All</td>
<td>1.45</td>
<td>0.90</td>
</tr>
<tr>
<td>Male</td>
<td>2.00</td>
<td>1.26</td>
</tr>
<tr>
<td>Female</td>
<td>0.95</td>
<td>0.53</td>
</tr>
<tr>
<td>Age Group</td>
<td>2004</td>
<td>2007</td>
</tr>
<tr>
<td>&lt; 6</td>
<td>0.23</td>
<td>0.05</td>
</tr>
<tr>
<td>6 - 11</td>
<td>1.83</td>
<td>0.91</td>
</tr>
<tr>
<td>12 - 14</td>
<td>3.02</td>
<td>1.90</td>
</tr>
<tr>
<td>15 - 18</td>
<td>2.99</td>
<td>1.58</td>
</tr>
</tbody>
</table>

* from 16 states with ≥ one month eligibility for FFS Medicaid per calendar year

Source: *Antipsychotic Medication Use in Medicaid Children and Adolescents: Report and Resource Guide from a 16-State Study. MMDLN/Rutgers CERTs Publication #1.*
ACP Report/Resource Guide and other materials at:
http://chsr.rutgers.edu/MMDLNAPKIDS.html
(or google Rutgers MMDLN Resource Guide)
Clinician’s Toolkit for Management of Atypical Aggression in Youth
http://www.chainonline.org/content.cfm?menu_id=232

Email: scrystal@rci.rutgers.edu
Lessons Learned from ACP Project

- ACP demonstrated potential of researcher/state collaboration in multistate QI initiatives in Medicaid mental health as well as the scope of the challenge and the need for a more extensive follow-on project to support more robust implementation of evidence based practices, further engagement of providers and other stakeholders, necessary data/metrics infrastructure, and initiatives to address treatment challenges in adults.

- Project experience, as well as other evidence on translation and implementation of delivery system interventions for evidence adoption in this area, indicates:
  - vital role of stakeholder engagement and systematic collaboration;
  - need for development and implementation of appropriate quality metrics for use both at statewide and provider levels;
  - a systematic process for setting goals and measuring progress;
  - and active provider feedback with systematic educational followup, as incorporated in the NET approach.
MEDNET

• Building on experience of the ACP, a group of states worked together with Rutgers and other partners to develop a plan for a systematic, collaborative, multistate initiative to accelerate the implementation of comparative effectiveness findings in Medicaid funded mental health care, addressing treatment challenges for adults as well as children and utilizing common quality metrics to support problem identification, monitoring, and provider feedback interventions.
MEDNET Mission

• Accelerate adoption in Medicaid mental health of two types of CE findings:
  – Findings on effectiveness and safety of specific clinical practices, in particular patient populations;
  – Findings on effectiveness of organizational practices, strategies and policies related to management of these treatments and of risks associated with treatments across subpopulations.
MEDNET Consortium

- Multi-partner collaboration focused on increasing utilization of evidence-based clinical and service delivery system practices in provision of mental health treatment for Medicaid beneficiaries.

- Partners include states of California, Washington, Texas, Missouri, Oklahoma, and Maine, in addition to Rutgers, Columbia University, and AcademyHealth.
  - Participating states account for about 30% of FFS Medicaid enrollment nationally.
  - Analyses of MAX data from five of these states for 2005 indicate that more than 550,000 beneficiaries received antipsychotic medication prescribed by more than 74,000 prescribers at a cost of $1.4 billion (most costly med class for MA).
Initially Targeted Clinical Practices

- Psychotropic polypharmacy, including concurrent use of multiple antipsychotic medications;
- Safe dosing;
- Managing metabolic risks of antipsychotics;
- Improving treatment adherence for adults with SMI;
- Use of appropriate mental health services and psychosocial interventions as complement or alternative to antipsychotic medication;
- Antipsychotic use in children under age 6 and in foster care;
- Assessing and addressing geographical, provider, racial/ethnic, and other variations in treatment practices that lack apparent clinical or epidemiological rationale and may add costs and risks without concomitant benefit;
- Consistency of treatments and diagnoses (e.g., antipsychotic use in children diagnosed only with ADHD; cf. Crystal et al, *Health Affairs* 2009).
Prioritization in Year 1 Planning

- Clinical practices prioritized included polypharmacy, management of metabolic risks of APs, dosage, adherence; second tier measures include diagnosis consistent with treatment and appropriate use of psychosocial services.

- DUA processes underway for release of claims and eligibility data for its Medicaid population; Secure Remote Access system established.

- Metrics team developing core set of metrics for tracking treatment patterns, monitoring change over time, and for use in provider feedback and other QI programs.

- State-level quality collaboratives and QI plans.

- Implementation of state plans in Year 2.

- Core set of metrics developed; states developed intervention plans; site visits underway; first annual consortium meeting completed.
Washington: Overview

- MEDNET is one prong of a 3-prong initiative focused on improving prescribing practices in WA – called PMAP (Psychotropic Medication Action Plan)

QI Goals:
- Improve medication adherence
- Reduce unnecessary ER services
- Reduce psychiatric re-hospitalizations
- Reduce or bend cost
- MEDNET metrics: polypharm, dose, adherence
Texas: Overview

QI Goals:

• Expand “too many, too young, too much” strategy to all “high risk” Medicaid children, particularly interfacing with Medicaid MC

• Age, dose and number of APs

• ROI – how much to spend on provider feedback for comparative savings on script reduction

• Stakeholders (8/2011) decided to target high prescribers
Missouri: Overview

QI Goals:

• Identify individuals at risk for adherence and care gaps leading to ambulatory care-sensitive hospital admissions

• Provide prescribers with BH and medical information to improve cardio-metabolic outcomes

• Better management at the provider level to improve total healthcare expenditures - ROI

• Improve prescriber attention to AP use for adults with SMI and co-morbid medical conditions
California: Overview

- Only state targeting one large county (Orange) and working within a Managed Care (CalOptima) framework
- Orange County 2010 population 3,010,232 – 378,000 Medicaid members enrolled in CalOptima

QI Goals:
- Improve cardiometabolic risk reduction for adults on APs
- Reduce the incidence of polypharmacy for adults receiving APs
- Identify highest prescribers, and prescribers >=3 APs and intervene
- Develop health information sharing between primary care providers and behavioral health providers for high risk enrollees
Maine: Overview

QI Goals:

• Identify prevalence of APs in specific populations and state agencies to recruit “buy in” and interest at the agency level

• Reduce gaps in adherence among children and adults taking APs

• Identify, monitor, and reduce cardiometabolic risk for adults taking APs

• Explore indicator geographic variation across counties and hospital service areas
Oklahoma: Overview

- Target children under age 18 on APs, Medicaid and CHIP kids
- Stakeholder concern: children on psychotropic medication without concurrent community treatment

QI Goals:
- Considering “too much, too many, too young”
- AP without any treatment
- Considering a “detailing” approach to provider education
Key Strategies for Collaborative State-Based Initiatives to Address Issues Surrounding Psychotropic Use in Foster Youth, Based on Experience of 16-State Study and MEDNET

- Need *structures to support sustained interagency collaborative QI initiative* – e.g., standing, *active* interagency working group bringing together children’s services, Medicaid, state mental health and other involved agencies.

- *Strategies and tools* include guidelines, metrics, provider feedback, contractual and network adequacy requirements, clinic based QI, retrospective and prospective DUR, second opinion, expansion of evidence based programs among others.

- *Guidelines*: can establish expectations for care processes and define cases in need of additional review (“red flags”) – e.g., example, Texas foster care parameters.

- *QI collaboratives* that extend beyond multiple state agencies to engage providers, consumers, health plans, and other stakeholders.
Key Strategies for Collaborative State-Based Initiatives

• *Health homes/care integration models* can be important tool (e.g., supporting improved monitoring and management of metabolic impacts of AP medications).

• Need to *develop and implement system of metrics* (which can be based initially largely on existing data systems with appropriate merging) that can serve multiple purposes:
  – Needs assessment -- focus and target interventions by identifying existing treatment patterns, problematic practices, geographic and other variations; identify unmet service needs.
  – Assessing progress.
  – Provider feedback -- including comparisons of providers’ treatment patterns to benchmarks.
  – Patient-level – flagging cases in which review or other action is needed.

• *Informatics and linkage of data silos* is a key tool to drive QI.
Examples of Metrics and Reports

- Rates of antipsychotic use by age, geographic areas, major providers, demographics, etc.
- Within-class and between-class polypharmacy.
- Management of metabolic risk.
- Dosage.
- Consistency of treatments and diagnoses.
DATA SOURCES

- Medicaid FFS Claims
- Medicaid Eligibility Files
- Medicaid MC Encounter Data
- Medicare (A, B, D)
- State Children Services Data
- Mental Health Carveouts (Managed Care, county, etc)
- State Mental Health Agency Data

DATA INTEGRATION

DATA USERS

- State Medicaid Agency
- State Mental Health Agencies
- State Children’s Services
- Mental Health Clinics
- Consumers
- Other Providers/Prescribers
In a Medication-Oriented Society With Extensive Drug Promotion, Much Work Needs To Be Done to Encourage Evidence-Based Treatment

“Could we up the dosage? I still have feelings.”
Questions?

Contact Information

Stephen Crystal, Ph.D.
scystal@rci.rutgers.edu