MEDICATION USE IN ADULTS WITH ID/DD LIVING IN COMMUNITY HOMES AND STATE EFFORTS TO REDUCE OVERUSE

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Overview of National Core Indicators

- Launched in 1997 in 13 participating states
- NASDDDS – HSRI Collaboration
- Administration on Intellectual and Developmental Disabilities (AIDD) awarded NCI a contract with goal to increase participation to all 50 states and District of Columbia within 5 years.
- Multi-state collaboration of DD agencies
- Measures performance of public systems for people with intellectual and developmental disabilities
- Assesses performance in several areas, including: employment, community inclusion, choice, rights, and health and safety
- NASDDDS – HSRI Collaboration
- Administration on Intellectual and Developmental Disabilities (AIDD) awarded NCI a contract with goal to increase participation to all 50 states and District of Columbia within 5 years.
NCI Participation 2013-2014

- States included:
  - Minnesota (MN)
  - Kansas (KS)
  - Colorado (CO)
  - Tennessee (TN)

*Includes the Mid-East Ohio Regional Council
**Includes 21 Regional Centers
NCI Goals

- Established a **nationally recognized set of performance and outcome indicators** for DD service systems
- Develop and maintain reliable data collection methods and tools that give voice to those receiving services and families and guardians
- Report state comparisons and national benchmarks of **system-level** performance
- Influence national and state policy
Source of NCI Medication Information

- Adult Consumer Survey, 2011-2012
  - Standardized, face-to-face interview with a sample of individuals receiving services
  - No pre-screening procedures
  - Conducted with adults only (18 and over) receiving at least one service besides case management
  - Takes 50 minutes on average
  - Training materials/interviewers
Source of NCI Medication Information

- Background Section - completed by case managers using existing records

“Does the person take medications to address.....

- Mood disorder
- Anxiety
- Psychotic disorder
- Behavior”

- Total N for whom information available is 11,595 people
Take Medications to Address:

- 54% of people with IDD receiving services take medications for at least 1 of these conditions:
  - mood disorders
  - anxiety
  - behavior challenges
  - psychotic disorders

- Most common condition medications are taken for is a mood disorder (38%).

- 13% of those taking at least 1 medication take them for all 4 conditions.

Of those who take medications........

Takes Medications For.....

- 39% take medications for 1 condition
- 30% take medications for 2 conditions
- 18% take medications for 3 conditions
- 13% take medications for 4 conditions
Takes Medications to Address:

- 92% of those with a co-occurring psychiatric diagnosis were taking medications for mood, anxiety or psychotic disorders.

- However, 35% of people without a psychiatric diagnosis were also taking medications for mood, anxiety or psychotic disorders.
Those who take at least one med are more likely to live in group homes, less likely to live with parent-relative.
Medications and Residence

- Another look at residence and medications:

Proportion taking at least one medication by type of residence

<table>
<thead>
<tr>
<th>Type of Residence</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institution</td>
<td>55%</td>
</tr>
<tr>
<td>Group Home</td>
<td>67%</td>
</tr>
<tr>
<td>Agency-Op Apartment</td>
<td>63%</td>
</tr>
<tr>
<td>Independent Home/Apt</td>
<td>56%</td>
</tr>
<tr>
<td>Parent/Relative</td>
<td>35%</td>
</tr>
<tr>
<td>Foster Home</td>
<td>60%</td>
</tr>
<tr>
<td>Nursing Facility</td>
<td>72%</td>
</tr>
<tr>
<td>Other</td>
<td>65%</td>
</tr>
</tbody>
</table>
What Health Differences Exist?

Those who take at least one medication are:

- Less likely to be in very good or excellent health
- More likely to use tobacco products
- More likely to be obese / less likely to be of normal weight
Another look at weight and meds:

- Proportion taking at least one med in each weight category:

<table>
<thead>
<tr>
<th>Weight Category</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underweight</td>
<td>39%</td>
</tr>
<tr>
<td>Normal</td>
<td>50%</td>
</tr>
<tr>
<td>Overweight</td>
<td>58%</td>
</tr>
<tr>
<td>Obese</td>
<td>58%</td>
</tr>
</tbody>
</table>
Statute, policies and procedures in many states affirm that people receiving services cannot be chemically restrained, or prescribed medication that has an impact on behavior, without first conducting an evaluation to determine if there are medical causes for the behavior.

Some states require functional assessments and positive behavior supports be implemented prior to use of medication.

Human Rights Councils review restrictive practices and rights violations, including under what circumstance people can be prescribed multiple psychotropic medications.

Annual service planning allows for review of all treatment regimens and efficacy, and the opportunity to discuss what is least restrictive and most helpful to the person.
DD Service System Initiatives Continued

- Increased care coordination
- More robust informed consent policies and practices
- Thorough assessment for potential medical conditions
- Assess whether behavior or mood disorders are related to abuse, neglect, or exploitation
- Cross-analysis with Medicaid paid claims data
- Enhanced physician education
- Enhanced state collaboration with community practice health care practitioners
- Quality improvement targets
State Presentations

- Massachusetts
- Georgia
MA Medication Utilization Patterns

- Medications are a common intervention in people with ID.
- ~87% of adults with ID (on Medicaid or Medicaid & Medicare) have one or more prescription within 7 months.
  - Adults with ID have substantially more prescriptions filled per year than other Medicaid recipients.
  - Utilization increases with age.
Comparison of Paid Claims

2008 Nonduals*, US: 6.8
2008 Duals*, US: 4.9
2011 MA DDS: 24.1 - 26.8

*Includes Children
## 2011 - Top Medication Categories

<table>
<thead>
<tr>
<th>Rank</th>
<th>Category</th>
<th>Est. of # MA DDS Adults with 1+ Rx in 7 months</th>
<th>All MA Duals&lt;sup&gt;3&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Vitamin/Supplement*</td>
<td>35.1% - 39.0%</td>
<td>5.9%</td>
</tr>
<tr>
<td>2</td>
<td>Anticonvulsants</td>
<td>34.6% - 38.5%</td>
<td>9.1%</td>
</tr>
<tr>
<td>3</td>
<td>Antibiotics</td>
<td>32.4% - 36.0%</td>
<td>&lt;2.2%</td>
</tr>
<tr>
<td>4</td>
<td>Antidepressant</td>
<td>25.5% - 28.3%</td>
<td>3.4%</td>
</tr>
<tr>
<td>5</td>
<td>Cardiovascular</td>
<td>24.5% - 27.2%</td>
<td>3.4%</td>
</tr>
<tr>
<td>6</td>
<td>Analgesic*</td>
<td>24.4% - 27.1%</td>
<td>4.4%</td>
</tr>
<tr>
<td>7</td>
<td>Laxatives/Cathartics*</td>
<td>24.2% - 26.9%</td>
<td>Unk.</td>
</tr>
<tr>
<td>8</td>
<td>Antipsychotics</td>
<td>20.7% - 23.0%</td>
<td>1.7%</td>
</tr>
<tr>
<td>9</td>
<td>Gastrointestinal Drugs*</td>
<td>20.2% - 22.5%</td>
<td>2.1%</td>
</tr>
<tr>
<td>10</td>
<td>Anxiolytic</td>
<td>19.0% - 21.2%</td>
<td>18.2%</td>
</tr>
</tbody>
</table>

*Includes some OTC medications*
## 2011 - Top Medications

<table>
<thead>
<tr>
<th>Rank</th>
<th>Generic/Brand Name</th>
<th>Class</th>
<th>Min. % of Adults</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lorazepam/Ativan</td>
<td>Antianxiety</td>
<td>11%</td>
</tr>
<tr>
<td>2*</td>
<td>Prilosec/Omeprazole</td>
<td>Gastrointestinal</td>
<td>11%</td>
</tr>
<tr>
<td>3</td>
<td>Divalproex sodium/Depakote</td>
<td>Anticonvulsant</td>
<td>11%</td>
</tr>
<tr>
<td>4*</td>
<td>Loratadine</td>
<td>Antihistamine</td>
<td>10%</td>
</tr>
<tr>
<td>5</td>
<td>Levothyrozone Sodium</td>
<td>Thyroid Hormone</td>
<td>9%</td>
</tr>
<tr>
<td>6</td>
<td>Risperdal</td>
<td>Antipsychotic</td>
<td>8%</td>
</tr>
<tr>
<td>7</td>
<td>Clonazepam/Klonopin</td>
<td>Anticonvulsant</td>
<td>8%</td>
</tr>
<tr>
<td>8</td>
<td>Simvastatin/Zocor</td>
<td>Cardiovascular</td>
<td>7%</td>
</tr>
<tr>
<td>9</td>
<td>Citalopram/Celexa</td>
<td>Antidepressant</td>
<td>6%</td>
</tr>
<tr>
<td>10</td>
<td>Fluticasone Propionate/Flonase</td>
<td>Corticosteroid</td>
<td>6%</td>
</tr>
<tr>
<td>11</td>
<td>Carbamazepine/Tegretol</td>
<td>Anticonvulsant</td>
<td>6%</td>
</tr>
<tr>
<td>12</td>
<td>Lisinopril</td>
<td>Cardiovascular</td>
<td>6%</td>
</tr>
</tbody>
</table>
Estimated 54-60% of adults on one or more psychotropic medication
MA DDS Analysis (2011)

Average of 1.4 psychotropic medications (including anticonvulsants) filled per adult.

Of people on psychotropics, average of 2.6 different psychotropic medications.

More than half of adults receiving anticonvulsants also received 1 or more other psychotropic medication.

Polypharmacy is also common.
Prescribers are not always well prepared to treat the ID population.

- Majority of medical care from community health care providers.
- Communication difficulties may challenge ability to monitor response to medication.
- Complex medical picture can result in multiple prescribers.
- 2004 CAN survey: 53% of medical school deans did not feel their graduates were competent to treat people with N/ID.
MA Analysis of Prescribers (2005)

- 50% of prescribers of psychotropics were generalists
- 2,637 practitioners prescribed non-anticonvulsant psychotropics

More prescribers = More meds!

The more practitioners prescribing, the more psychotropic medication received!
MASSACHUSETTS DDS APPROACH

Review on 3 Levels:

1. Individual case review through Medication Consultation Team
2. Targeted outreach to prescribing clinicians
3. Broad outreach regarding practice guidelines and specifically, use of psychotropic medications for people with ID
Established Medication Consultation Team with a multi-disciplinary approach

Membership includes:

- Internist
- Psychiatrist
- Gerontologist
- Neurologist
- Registered Nurse & Nurse Practitioner
- Behavioral Psychologists
- Clinical Pharmacist

Meets monthly
Individual Case Review Process

- Referrers submit complete package of documentation 2 weeks in advance. Team members can review before meeting.
- All family, staff, clinicians involved are encouraged to attend meeting.
- Team sends recommendations to DDS Area Office for distribution to involved parties.
- Team may facilitate additional referrals to specialists and follow-up with treating community PCP and psycho-pharmacologist.
- Team follows up in 90 days to determine status and next steps.
Individual Case Reviews
Preliminary Lessons Learned

- Important to stress consultative nature of team to encourage referrals
- Extremely productive to have clinicians from multiple disciplines; enables better coordination and problem solving

Referred people:
- Typically have multiple issues in addition to poly-pharmacy, which may be the “tip of the iceberg”
- May be facing declining health status. Outcomes may focus on quality of life issues.

Role of prescribing physicians:
- May be hesitant to taper medications. Don’t want to make changes
- However well-meaning, tend to add medications when a person is experiencing behavioral or other issues
- Try to be responsive to family and/or direct support staff who may be having significant challenges with supporting a person. May lead to increasing medications
Evaluation of Outcomes

Follow-up form developed to measure short and longer term outcomes

**Short Term**
- ✔ Have recommendations been followed?
- ✔ Satisfaction with consultation process
- ✔ Desired outcomes met?

**Longer Term**
- ✔ Changes to physical, behavioral health
- ✔ Changes to Quality of life
- ✔ Improved management by healthcare provider
- ✔ Caregiver effectiveness in supporting person
Outreach to Clinicians

TWO LEVELS:

1. Targeted outreach to prescribing clinicians
   - Identifies high prescribers and clinicians serving high numbers of people with ID through DDS health care records and Medicaid pharmacy claims data
   - Letter offering consultation from MCT and/or clinical pharmacist

2. More general outreach to clinicians to share resources, articles regarding use of psychotropics with people with ID
Next Steps

- Analysis of data regarding outcomes of individual case reviews
- More in-depth analysis of Medicaid data
- Continued outreach to prescribing clinicians
- More training and support to caregivers, DDS service providers and service coordinators
Psychotropic & Anticonvulsant Medication Use

Individuals Recently Transitioned to the Community (IRTC)

Delmarva Foundation and Georgia Department of Behavioral Health and Developmental Disabilities

Sue Kelly
Eddie Towson

Delmarva Foundation
Georgia Quality Management System
History

- National Core Indicators - National average of psychotropic medications is steadily increasing.
- Georgia has a history of ranking above the national average (higher utilization of psychotropic meds).
- ADA Settlement
Purpose

- Georgia Quality Management System (GQMS) ongoing efforts to assess transition process and health of individuals moving from an institution to the community

- As part of these efforts, examine medication use among individuals with I/DD who are receiving HCBS Waiver services

- Is there a change in medication use subsequent to transitioning from an institution?
Methods

- Compare IRTC v General I/DD population in community—pre and post transition
  - Average utilization
  - Prevalence rates

- Compare prevalence rates by demographics
  - Race/Ethnicity
  - Gender
  - Disability
  - Residential Setting
  - Age Groups
Methods

- Anchor points for pre/post analysis:
  - Transition date for IRTC group
  - July 1, 2011 for Comparison group

- 95% Confidence Levels, +/- 5% used to determine statistical significance
Data

- Adults with I/DD receiving HCBS services who:
  - transitioned to the community between July 2010 and June 2012 (N=325) (IRCT)
  - lived continuously in the community between January 2010 and December 2012 (N=12,722) (Comparison)
Data

- Prescription information taken from the Health Risk Screening Tool (HRST), administered at least annually
- Psychotropic and Anticonvulsant medications
- Demographic data taken from DBHDD Client Information System (CIS)
## Results
### Demographic Distribution

<table>
<thead>
<tr>
<th></th>
<th>IRTC (N=325)</th>
<th>Comparison (N=12,722)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>35%</td>
<td>42%</td>
</tr>
<tr>
<td>Male</td>
<td>65%</td>
<td>57%</td>
</tr>
<tr>
<td><strong>Home Type</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foster Care or Host Home</td>
<td>15%</td>
<td>8%</td>
</tr>
<tr>
<td>Group Home</td>
<td>80%</td>
<td>19%</td>
</tr>
<tr>
<td>Independent Home or Apartment</td>
<td>2%</td>
<td>15%</td>
</tr>
<tr>
<td>Nursing Facility</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Parent or Relative's Home</td>
<td>1%</td>
<td>53%</td>
</tr>
</tbody>
</table>
## Results
### Demographic Distribution

<table>
<thead>
<tr>
<th></th>
<th>IRTC (N=325)</th>
<th>Comparison (N=12,722)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>37%</td>
<td>45%</td>
</tr>
<tr>
<td>White</td>
<td>61%</td>
<td>52%</td>
</tr>
<tr>
<td>Other or Don't know</td>
<td>2%</td>
<td>3%</td>
</tr>
<tr>
<td><strong>Disability</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autism Spectrum Disorder</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>Intellectual Disability</td>
<td>27%</td>
<td>74%</td>
</tr>
<tr>
<td>Profound Intellectual Disability</td>
<td>72%</td>
<td>23%</td>
</tr>
</tbody>
</table>
## Results

### Demographic Distribution

<table>
<thead>
<tr>
<th>Age Group</th>
<th>IRTC (N=325)</th>
<th>Comparison (N=12,722)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-29</td>
<td>12.9%</td>
<td>29.3%</td>
</tr>
<tr>
<td>30-39</td>
<td>12.0%</td>
<td>23.6%</td>
</tr>
<tr>
<td>40-49</td>
<td>24.9%</td>
<td>21.5%</td>
</tr>
<tr>
<td>50-59</td>
<td>31.1%</td>
<td>16.9%</td>
</tr>
<tr>
<td>60+</td>
<td>19.1%</td>
<td>8.8%</td>
</tr>
</tbody>
</table>
Average Number of Medications

Both groups show statistically significant increase

Mean, Comparison (N=4,371)  Mean, IRTC (N=151)
Medication Use Prevalence Rates (Taking >=1)

Both groups show statistically significant increase

Comparison (N=12,722)  IRTC (N=325)
Results by Demographic Categories

African American (AA) v White (W)

- IRTC Group—AA showed a higher prevalence rate, a 7 point difference in the pre and post transition timeframe

- IRTC Group—both demographic groups showed an increase, with a pre to post transition change of 23 percentage points

- Comparison Group—AA showed lower prevalence rate, a 2 to 4 point difference in the pre and post transition timeframe

- Comparison Group—both demographic groups showed an increase of approximately 13 percentage points
Results by Demographic Categories

Female v Male

- **IRTC Group**—males had a higher prevalence rate by approximately 7 percentage points both pre and post transition

- **Comparison Group**—no gender difference

Intellectual Disability (ID) v Profound ID (PID)

- **IRTC Group**—individuals with ID had a higher prevalence rate than individuals with PID, a difference of 9 points pre and 14 points post transition

- **Comparison Group**—individuals with PID had a higher prevalence rate than individuals with ID, but with smaller differences of 3 to 7 points
Results by Demographic Categories

Residential Setting

- 95% of the IRTC group transitioned into a group home (80%), foster home, or host home

- Individuals in the Comparison group, in these residential settings, were significantly more likely to be taking medications, pre and post transition

- Only results showing a significantly lower prevalence rate for individuals who transitioned into the community, pre and post transition
Results by Demographic Categories

Age Group

- As individuals in the IRTC group aged, they were less likely to take one or more medication, pre and post transition.

- As individuals in the Comparison group aged, they were more likely to take one or more medication, pre and post time periods.

- Differences between the oldest and youngest age groups were statistically significant across time for both the IRTC and Comparison groups.
Some Future Work

- Examine reasons for the increased medication use over time for all individuals with I/DD on an HCBS waiver.
- Analyze current transition process and modify as needed to ensure providers are trained and prepared for individuals with complex challenges.
- Explore the demographic disparities identified in this study.
- Determine the percent of medications prescribed to individuals who have no psychiatric diagnosis, and why.
- Identify individuals at high risk who may need medical oversight.
What is your agency doing to reduce med overuse?
Contacts

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