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Massachusetts Department of Developmental Services
Medication Review

NASDDDS Reinventing Quality
August 7, 2012

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Pharmacy (medication) use among adults in the MA DDS population

DDS Medication Review Committee
- Clinical Reviews
- Population analyses
- Training

Medicaid pharmacy claims analyses (2012)
- Study design and validation.
- Initial results from analysis of data match.
Pharmacotherapy is a common intervention in people with IDD

In MA DDS population analysis, 62% were receiving one or more psychotropic medication (Rate was 47% when anticonvulsants removed)

MA DDS (January 2003 Snapshot ; n=16,212 adults)
## Top 10 Rx’s to ‘DMR’ Population over 7 months (2002-2003)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Brand Name</th>
<th>Class</th>
<th># of Prescriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Depakote</td>
<td>Anticonvulsant</td>
<td>18181</td>
</tr>
<tr>
<td>2</td>
<td>Risperdal</td>
<td>Atypical Antipsychotic</td>
<td>16756</td>
</tr>
<tr>
<td>3</td>
<td>Levoxyl</td>
<td><strong>Thyroid hormone</strong></td>
<td>12181</td>
</tr>
<tr>
<td>4</td>
<td>Zyprexa</td>
<td>Atypical Antipsychotic</td>
<td>11175</td>
</tr>
<tr>
<td>5</td>
<td>Carbamazepine</td>
<td>Anticonvulsant</td>
<td>10743</td>
</tr>
<tr>
<td>6</td>
<td>Zoloft</td>
<td>Antidepressant</td>
<td>9989</td>
</tr>
<tr>
<td>7</td>
<td>Neurontin</td>
<td>Anticonvulsant</td>
<td>8678</td>
</tr>
<tr>
<td>8</td>
<td>Clonazepam</td>
<td>Anticonvulsant</td>
<td>8261</td>
</tr>
<tr>
<td>9</td>
<td>Celexa</td>
<td>Antidepressant</td>
<td>7839</td>
</tr>
<tr>
<td>10</td>
<td>Lorazepam</td>
<td>Anxiolytic</td>
<td>7112</td>
</tr>
</tbody>
</table>
## Top 11-20 Rx’s to ‘DMR’ Population over 7 mo.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Brand Name</th>
<th>Class</th>
<th># of Prescriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Lipitor</td>
<td><strong>Cholesterol</strong></td>
<td>6942</td>
</tr>
<tr>
<td>12</td>
<td>Phenobarbital</td>
<td>Anticonvulsant</td>
<td>6939</td>
</tr>
<tr>
<td>13</td>
<td>Fluoxetine HCl</td>
<td>Antidepressant</td>
<td>6871</td>
</tr>
<tr>
<td>14</td>
<td>Trazodone HCl</td>
<td>Antidepressant</td>
<td>6715</td>
</tr>
<tr>
<td>15</td>
<td>Phenytoin Na Ext</td>
<td>Anticonvulsant</td>
<td>6519</td>
</tr>
<tr>
<td>16</td>
<td>Buspirone HCl</td>
<td>Anxiolytic</td>
<td>6460</td>
</tr>
<tr>
<td>17</td>
<td>Paxil</td>
<td>Antidepressant</td>
<td>6253</td>
</tr>
<tr>
<td>18</td>
<td>Dilantin</td>
<td>Anticonvulsant</td>
<td>5989</td>
</tr>
<tr>
<td>19</td>
<td>Seroquel</td>
<td>Atypical Antipsychotic</td>
<td>5975</td>
</tr>
<tr>
<td>20</td>
<td>Protonix</td>
<td><strong>Ulcer/Reflux Disease</strong></td>
<td>5784</td>
</tr>
</tbody>
</table>

Massachusetts

All 20 Participating States

Indicator: The proportion of people taking medications for mood, anxiety, behavior problems, or psychotic disorders.
Year(s): 2008-09
State: Massachusetts
Filter: None

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Massachusetts

- No: 61%
- Yes: 35%
- Don't Know: 4%

All 20 Participating States

- No: 70%
- Yes: 25%
- Don't Know: 5%

Indicator: The proportion of people taking medications for mood, anxiety, behavior problems, or psychotic disorders.
Year(s): 2008-09
State: Massachusetts
Filter: None
MA DDS analysis (2005):

• Avg. 2.75 psychotropic medications (including anticonvulsants)

• 61% receiving anticonvulsants also received 1 or more other psychotropic medication

• 40% of those on anticonvulsants receive 2 or more types of anticonvulsants concurrently
## Psychotropic Medications per Person over 1 month

<table>
<thead>
<tr>
<th># of Psychotropics</th>
<th># of people</th>
<th>% of population</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>4618</td>
<td>28.5%</td>
</tr>
<tr>
<td>1</td>
<td>3117</td>
<td>19.2%</td>
</tr>
<tr>
<td>2</td>
<td>2939</td>
<td>18.1%</td>
</tr>
<tr>
<td>3</td>
<td>2344</td>
<td>14.5%</td>
</tr>
<tr>
<td>4</td>
<td>1508</td>
<td>9.3%</td>
</tr>
<tr>
<td>5</td>
<td>907</td>
<td>5.6%</td>
</tr>
<tr>
<td>6</td>
<td>456</td>
<td>2.8%</td>
</tr>
<tr>
<td>7</td>
<td>193</td>
<td>1.2%</td>
</tr>
<tr>
<td>8</td>
<td>72</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>9</td>
<td>26</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>10</td>
<td>19</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>&gt;10</td>
<td>13</td>
<td>&lt;1%</td>
</tr>
</tbody>
</table>

Range: 0-11 psychotropic medications
Psychotropic medication use increases risk of health complications

- Weight gain
- Abnormal glucose metabolism (diabetes)
- Cardiovascular disturbances
- Oral health issues
- Extra pyramidal symptoms, TD.

Lunsky & Elserafi (2011) Research in Developmental Disabilities
Prescribers are not always well prepared to treat the IDD 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

![Bar chart showing the average number of prescribers per person with increased medication dosage]

More prescribers = More meds!
MA DDS Behavioral Supports
Current initiatives include:

✓ Positive Behavioral Supports (PBS) training and interventions
✓ Updated curriculum re. restraints
✓ Medication Review Committee
Membership:
PhD psychologists (behaviorists)
Psych. clinical nurse specialist (CNS)
Clinical Pharmacist
Internist (MD)
Gerontologist (MD)
Neurologist (MD)
Psychiatrist (MD)
RNs and NP
Hospitalist (MD)
* All with significant experience treating adults with IDD
Complex Case Consultation available through referral to the Med. Review Committee

- Referral through regional offices
- Treatment team invited to participate
- Average 2 reviews per meeting
- Results sent to regional/area office with request to forward to provider
- Direct consult with health care provider when requested.
Clinical Reviews – impressions:

- Complicated intersection of behavioral and physical issues (e.g. pain)
- Earlier signs of age-related issues (dementia, changes in drug metabolism)
- Practitioners struggling with prescribing in a community setting (caregiver issues, hesitancy to titrate)

Professional-to-professional outreach from team has included direct consultation, phone consultation.
Clinical Reviews: One year follow up

Of those who were reviewed with recommendation to remove medications – general improvement in function and impression of avoided psychiatric events.

Where recommendations were not followed, individual continued to do poorly.

As a group, those who were identified with emerging dementia showed continued decline in function.
Medication Review Committee guides DDS outreach to prescribers

Analyses of DDS Health Care Records to identify ‘top prescribers’ (regionally, by medication, specialty)
Example: identified 191 psychiatric prescribers: 4+ non PRN psychoactive meds in 2012 (11 prescribers serving 15 – 40 people)

Letter sent to prescribers offering consult from clinical pharmacist.
Clinical pharmacist followed up by phone/in person.
2012 Analysis of Medicaid Pharmacy Claims Data is underway

Provides information on a larger, more diverse DDS population.

Evaluating the methodology (data match, using Medicaid claims data) in light of new policy/funding models related to pharmacy.
Several recent policy changes may be influencing prescription and claims patterns in the DDS population:

- Massachusetts Health Reform
  - MassHealth Pharmacy Initiatives
- MMA - Medicare Part D
  - Dual eligible population (~ 65% of adults served)
  - Change in formulary (e.g. benzodiazepines)
- Affordable Care Act – duals integration efforts
- Medicaid Managed Care
- Patient Centered Medical Homes (for adults)
MassHealth payment claims analysis – preliminary questions

How many adults will the dataset ‘match’ methodology identify?

Is Medicaid claims data analysis feasible, since duals would only have record of co-pays (if they are claimed by pharmacies)?
Linked dataset DDS- MassHealth

• Timeline: ~ 10+ months from initial data request for inter-agency data sharing

• Of 20,346 people eligible for Medicaid (from DDS), 15,069 (74%) had 1 or more paid drug claim during the 7 month period.

  Adults without claims include:
  • not on any medications
  • private insurance coverage
  • dually eligible and had a prescription filled at a pharmacy that did not submit for the small Medicaid co-pay.
  • Nursing home, ICF/MR, incarcerated.
Analysis plan and next steps

• Finalize data validation
• Analysis of individual and provider-level prescriptions patterns.
• Targeted outreach to providers whose prescription patterns vary substantially from accepted practice (guidelines).
• Identify individuals who may be in need of medication review.
• Evaluate prescribing practices across service settings for the purpose of planning broader training or outreach interventions.
Conclusion

Massachusetts DDS is pursuing a multi-level approach to ensuring medications are used appropriately to support behavioral needs.

Multidisciplinary team provides expertise for both individual review and for systems’ level interventions.

Analysis of claims data and health records allows targeted outreach.
Contacts:

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**2012 CDDER Pharmacy Analysis**
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