

**Strategies for Using Psychopharmacology Data to Improve Quality Of Care in Children's Mental Health: The Maine Experience**

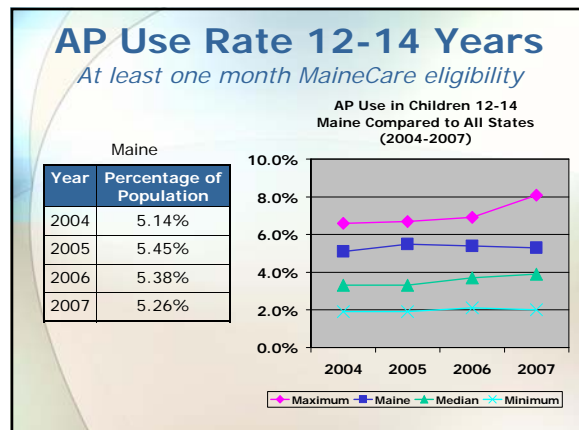
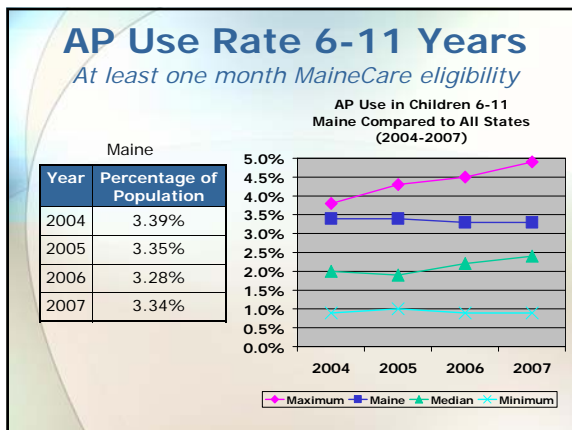
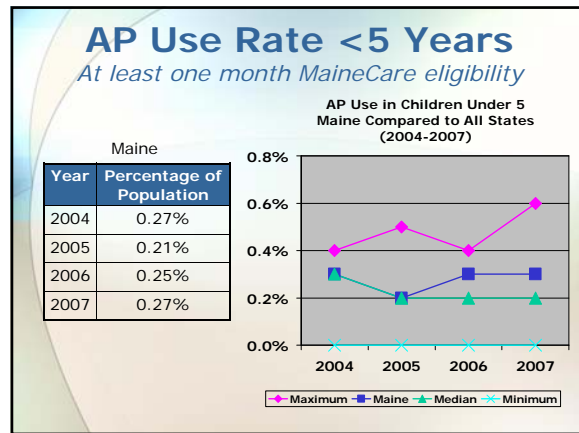
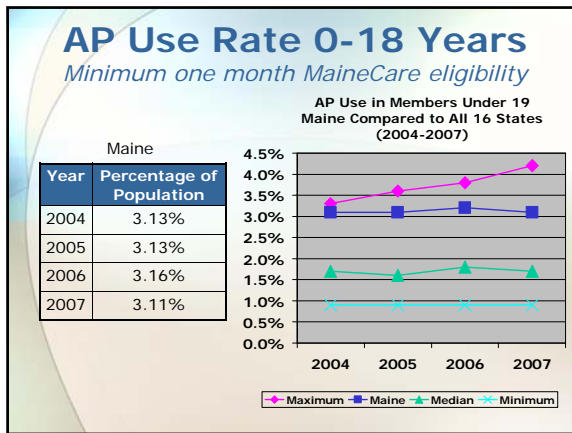
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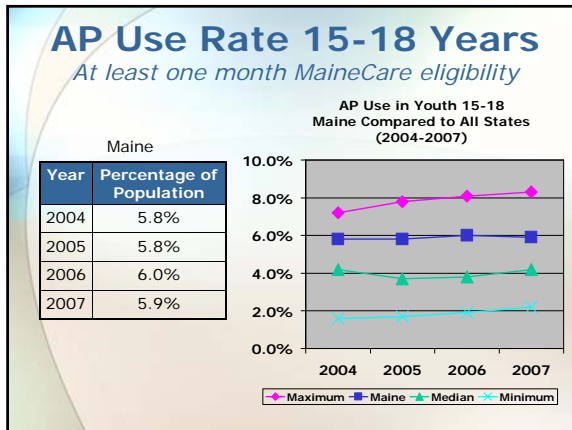
Maine Department of Health and Human Services

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### Medicaid Multi-State Child Antipsychotic Use Project

- 16 State collaborative project sponsored by AHRQ, NASM, NASMHPD and the Medicaid Medical Directors Network
- Data analysis covers four years 2004-2007
- Children ages 0-18 enrolled in Medicaid (not dual eligible)
- Data dictionary developed by consensus among all participating states
- Differences among states may reflect differences in eligibility, benefit design





### Conclusions from Multi-State Study

#### Overall Use: Maine Compared to Other States

- Maine's overall use of antipsychotics is higher than the usage in at least half of the other states
- Overall use of antipsychotics is increasing among the other states, while in Maine, the rate is the same over the four years of the study
- Usage increases with age of children, with at least 1 in 20 MaineCare members ages 12-18 receiving a prescription for an antipsychotic drug
- Access does not appear to be an issue in Maine

### Diagnoses Given to Maine Children on AP's in 2004 and 2007

*Minimum one month eligibility*

Diagnosis	2004 % of AP Users	2007 % of AP Users
Schizophrenia	2.2%	4.9%
Bipolar	10.6%	18.3%
Autism	9.7%	19.2%
Depression	12.7%	22.1%
Anxiety	6.7%	15.6%
ADHD	27.6%	47.7%
Conduct D/O	16.2%	28.8%
Other MI	57.3%	81%
Diabetes	0.2% (n=6)	0.7% (n=30)

### Questions Raised by Diagnostic Data

- Why has the average number of diagnoses per child on AP's increased from 1.5 to 2.4 between 2004 and 2007?
- Why has the percentage in each diagnostic category increased, especially autism, bipolar disorder and schizophrenia, where use of AP's is accepted practice?
- Is this due to children having more co-morbidities, greater awareness of co-morbidities, increased exposure to specialty mental health services, inaccurate diagnoses or inappropriate application of diagnostic codes to justify AP prescribing?
- What are the implications of the largest diagnostic categories being ADHD, Conduct Disorder and Other?
- Is there a relationship between the increased number of youth with diabetes and long term use of atypical antipsychotics?

### Multi-State Study of Variation in Quality

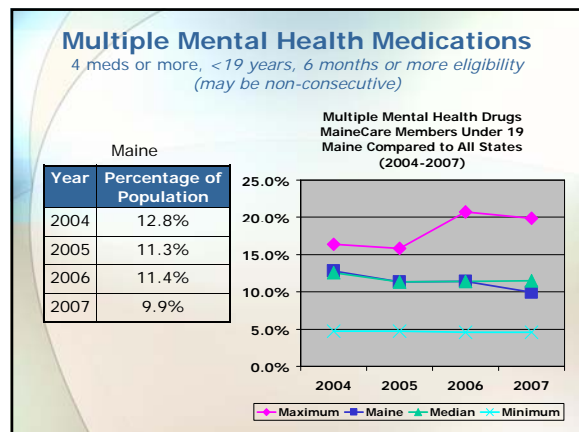
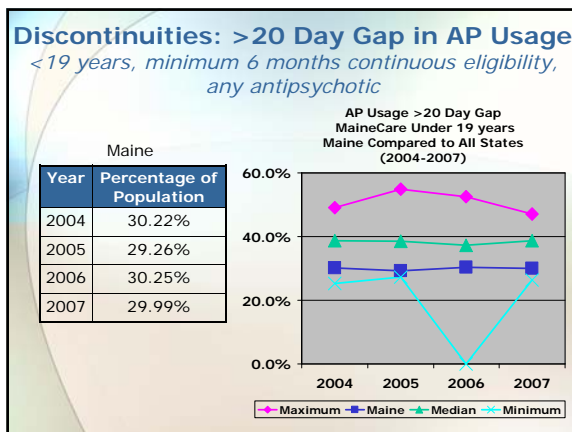
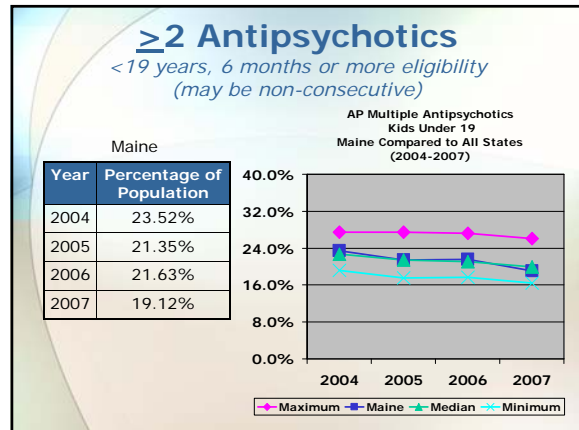
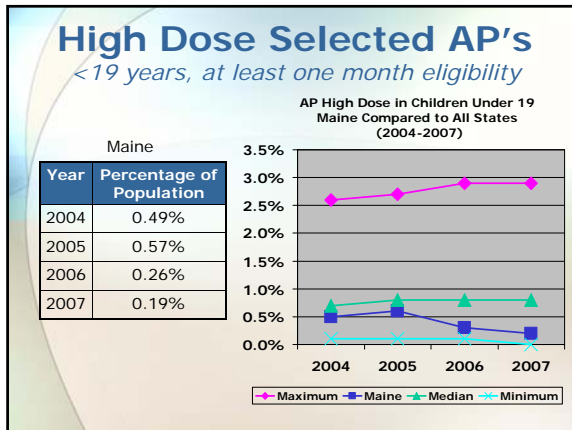
*Quality Indicators:*  
Multiple AP's, high dose of AP's, gaps in prescription refills, multiple mental health drugs

*Underlying assumption:*  
Lower rates reflect better quality

### High Dose Selected AP's

*< 19 years, at least one month eligibility*

- High Dose thresholds based on Texas guidelines
- For children 5 or less, dose greater than or equal to Texas maximum
- For 6-18 year olds, dose greater than 2x Texas maximum



### Conclusions from Multi-State Study Quality Measures: Maine Compared to Other States

- Maine is at or below the median, doing better than half the other states on all quality measures: high dosages of antipsychotics, multiple antipsychotics, multiple mental health drugs and gaps in usage.
- Maine is close to the minimum for gaps in AP usage
- Maine rates are declining over time in prescribing high dosages, multiple antipsychotics and multiple mental health drugs, even as rates are flat or increasing in the other states.
- Maine's good performance on quality parallels introduction of MaineCare's initiating prior approval requirements for multiple drugs from same class and high dosages

### Even Where Maine is Doing Better than Other States: There is Room for Improvement

Although we do not know what the "right" rate of usage is, perhaps it should be a cause for concern that:

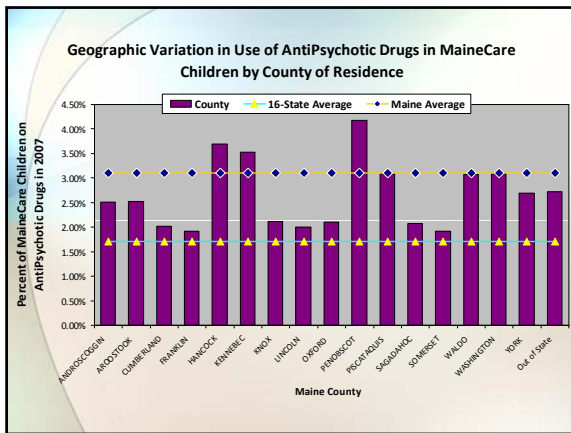
- 1 in 10 MaineCare members under 19 is on 4 or more mental health medications in the course of a year
- Among children/youth prescribed antipsychotics, 30% have gaps in treatment of 20 days or more

### Additional Maine Analyses

- Comparisons to other states not available
- 12 months continuous eligibility for MaineCare to eliminate effect of gaps in insurance coverage
- Some changes in quality definitions, per recommendations of DHHS Psychiatry Work Group

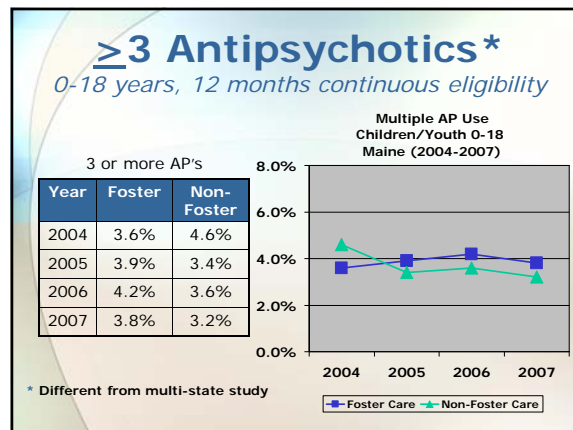
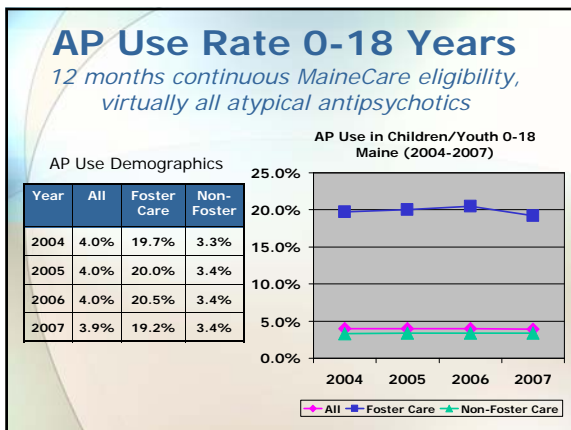
### Geographic Variation in Maine

- Maine's rate of prescribing antipsychotics varies significantly from county to county
- Seven counties are close to the 16 state study average, with relatively lower rates of AP prescribing
- Six counties are at or above the overall Maine rate, contributing significantly to Maine's overall high rate of prescribing
- What are the differences among the counties that can account for these different prescribing practices?
- Differences among children and families, in living and school environments or in prescriber practices?



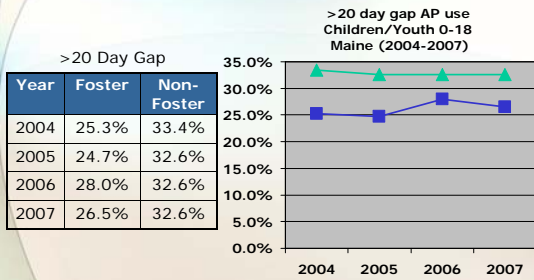
### Antipsychotic Medication Use: Comparison Foster Care and Non-Foster Care Children

- 12 months continuous eligibility for MaineCare to eliminate discontinuities in coverage as explanation for gaps in AP usage
- Foster children defined as having at least one month in foster care



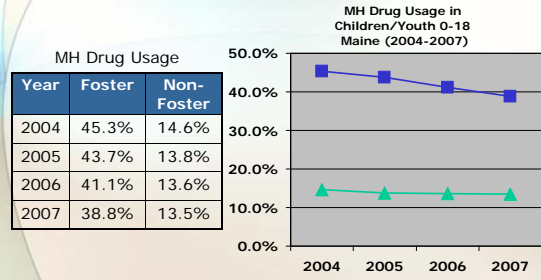
### Discontinuities: >20 Day Gap in AP Usage

*0-18 years, 12 months continuous eligibility*



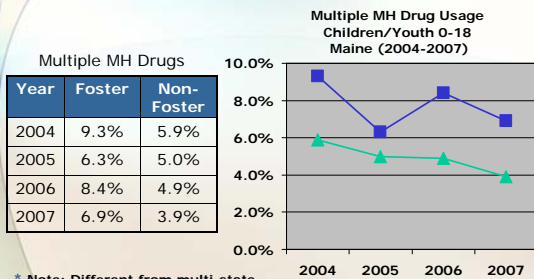
### Mental Health Drug Usage

*0-18 years, 12 months eligibility*



### Multiple MH Drugs (5 or more\*)

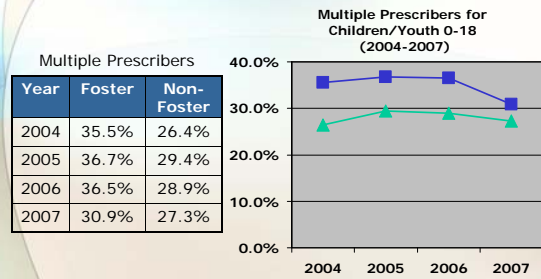
*0-18 years, 12 months continuous eligibility*



\* Note: Different from multi-state comparison, 5 or more definition preferred by Psych Work Group

### ≥3 Different Prescribers of MH Drugs

*0-18 years, 12 months continuous eligibility*



### Summary: Maine Foster and Non-Foster Children

- 1 in 5 foster children are on antipsychotics, 4x times the rate of usage in non-foster children
- 2 in 5 foster children are on mental health drugs, 3x the rate of non-foster children
- Foster children are about the same as non-foster children in prescribing of multiple antipsychotics
- Foster children are more likely to have multiple mental health drugs and multiple prescribers
- Foster children are doing better with regard to discontinuities/gaps

### Questions Raised by Variation Among Foster and Non-Foster Children

- Are differences due to personal differences, due to higher rates of psychiatric illness, behavioral dyscontrol, developmental disabilities, brain injury, trauma, etc.?
- Are there differences in access/utilization for evidence based mental health therapies?
- Differences in prescriber's practice or access to information?
- Differences in living situation or educational placement?
- Differences in youth, parental or guardian participation in shared decision making?

## Next Steps

- DHHS Office of Child and Family Services has convened a multi-stakeholder advisory group to identify strategies to address quality of psychotropic prescribing among foster children and youth

## Some Potential Strategies

- Integrated data systems with regular reports on all aspects of medical, pharmacy, mental health and social service system use in the foster population
- Electronic personal health/mental health/social service record accessible across the system of care
- Identification of high risk groups with development of multi-disciplinary review processes
- Identification/dissemination of guidelines for assessment and evidence based treatments for specific mental disorders.
- Development and implementation of prescribing guidelines
- Workforce/consumer training in shared decision making



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