

# Utilization of Psychotropic Medications in Oregon Medicaid Preschool Children

Ann M. Hamer, PharmD, Clinical Pharmacy Specialist, OSU College of Pharmacy

Nhung Thi-Vien Tran, MD, Developmental-Behavioral Pediatrician, OHSU

This draft is intended for review and comments only. It is not intended for citation, quotation, or other use in any form.

# Diagnosis of Mental Disorders in Children <6 Years: Controversial

- The validity and reliability of diagnosing ADHD, mood disorders, and schizophrenia in young children under the age of six has not been demonstrated.
- The accuracy and applicability of using the DSM to diagnosis young children is questionable.
- The State is developing a less definitive, but more age and development appropriate system for labeling childhood mental disorders.

# Psychopharmacotherapy in Children <6 Years: Untested and Uncertain

- The efficacy and safety of psychotropic medications have not been systematically evaluated in this population.
- However, numerous reports indicate that these medications are being used in preschool children.

# Psychopharmacotherapy in Children <6 Years: Untested and Uncertain

- Most studies in preschoolers are epidemiologic, documenting increasing trends of use of APS and ADs.
- Studies on psychotropic treatment in preschoolers are almost nonexistent
  - Some studies note benefit of antipsychotics for aggression in PDD, autism, +/- mental retardation

# Study Questions and Method

- Perform a descriptive review of psychotropic medication utilization in children <6 years.
  - How many preschool children are receiving psychotropic medication?
  - What characteristics are associated with this practice: patient/family, provider, geographic, payer, or other?
  - Analyze encounter and pharmacy claims data from the Office of Medical Assistance Programs

# Criteria

- Subject Claims: 1/1/05 – 8/31/05
- Comparison Claims: 1/1/00 – 8/31/00

# Criteria

- Patient Population
  - Enrolled in OHP (Fee For Service or Managed Care)
  - Age <6 years during study period
  - At least one claim for a targeted psychotropic medication.

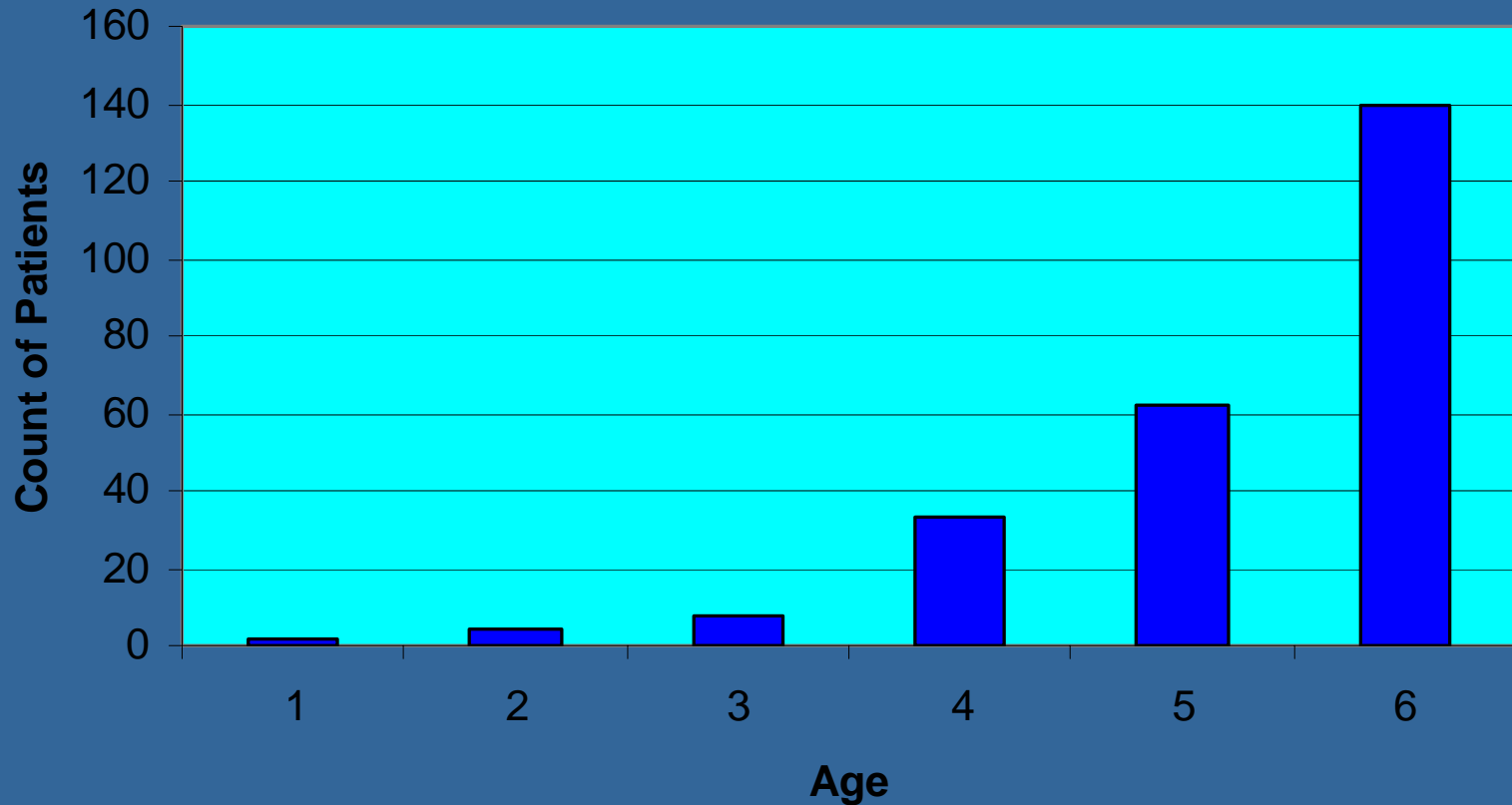
# Initial Findings—Patients

- In August 2005, there were 86,828 children under the age of 6 enrolled in OHP Medicaid.
- During the study period, 15,985 had at least one prescription filled.
- **246** patients under the age of 6 received at least one prescription for an antipsychotic or an antidepressant.
- Relative prescribing incidence:
  - 86,828 -> 15,985 -> 246 : <0.2% of total & 1.5% of those who received any prescription

# Initial Findings—Patients

- 70% male
- 30% female
  
- 74% Caucasian
- 10% African American
- 7% Native American
- 6% Hispanic
- 3% Other

# Initial Findings—Patients



# Initial Findings—Claims

- 1321 claims for antipsychotic or antidepressant prescriptions
- 19.5% of children had only 1 claim within the study period (9 months)
- **13.4%** of children averaged more than 1 claim per month during the study period

# Initial Findings

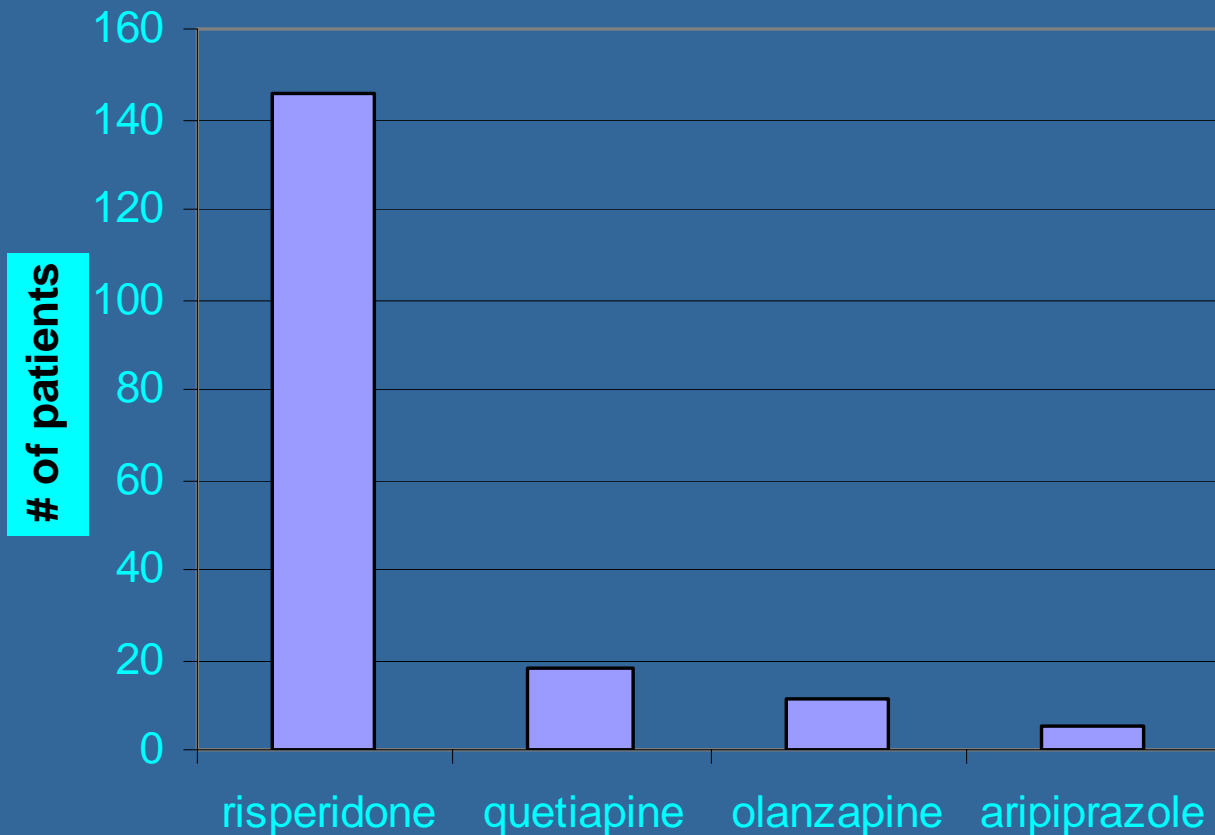
## Antipsychotics

- 165 patients with at least one claim
- 26 patients were <4 years

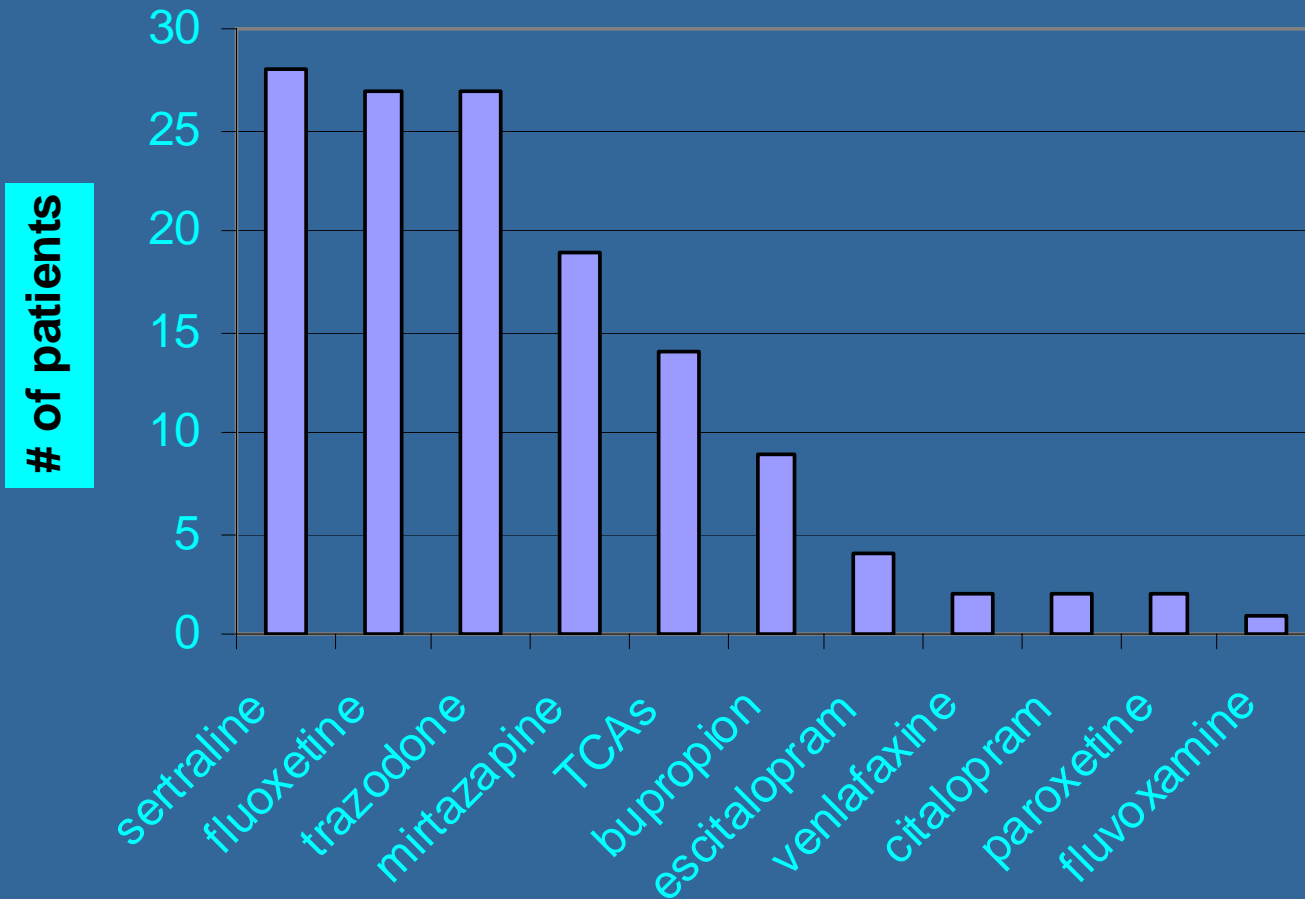
## Antidepressants

- 123 patients with at least one claim
- 27 patients were <4 years

# Initial Findings—Antipsychotics

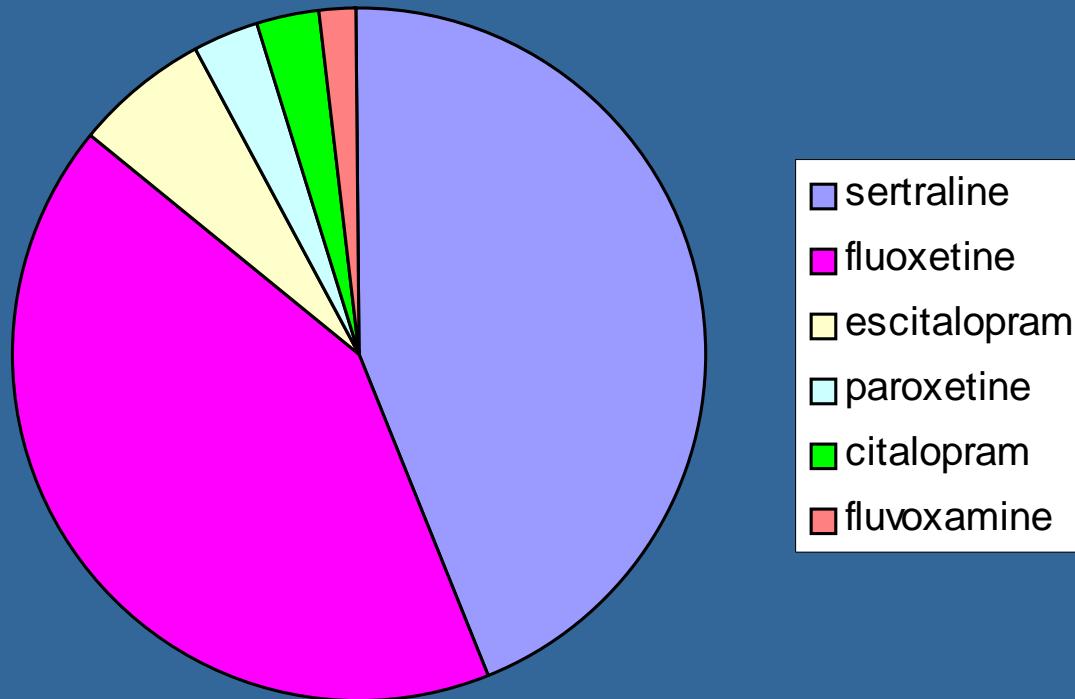


# Initial Findings—Antidepressants



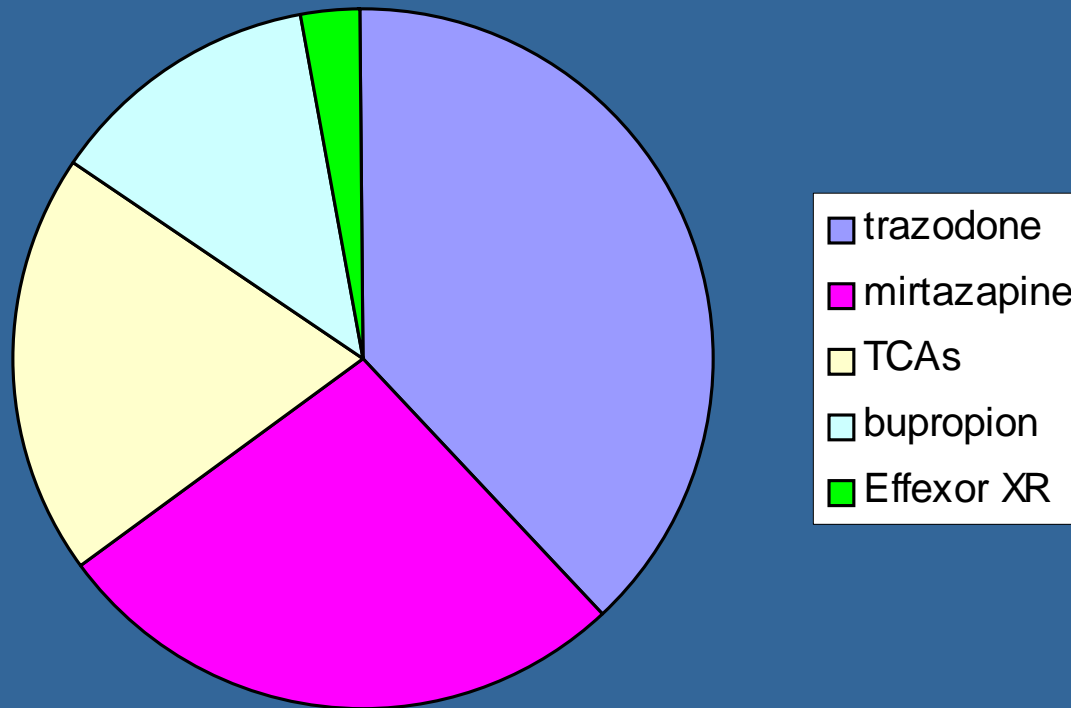
# Initial Findings

- Selective Serotonin Reuptake Inhibitors



# Initial Findings

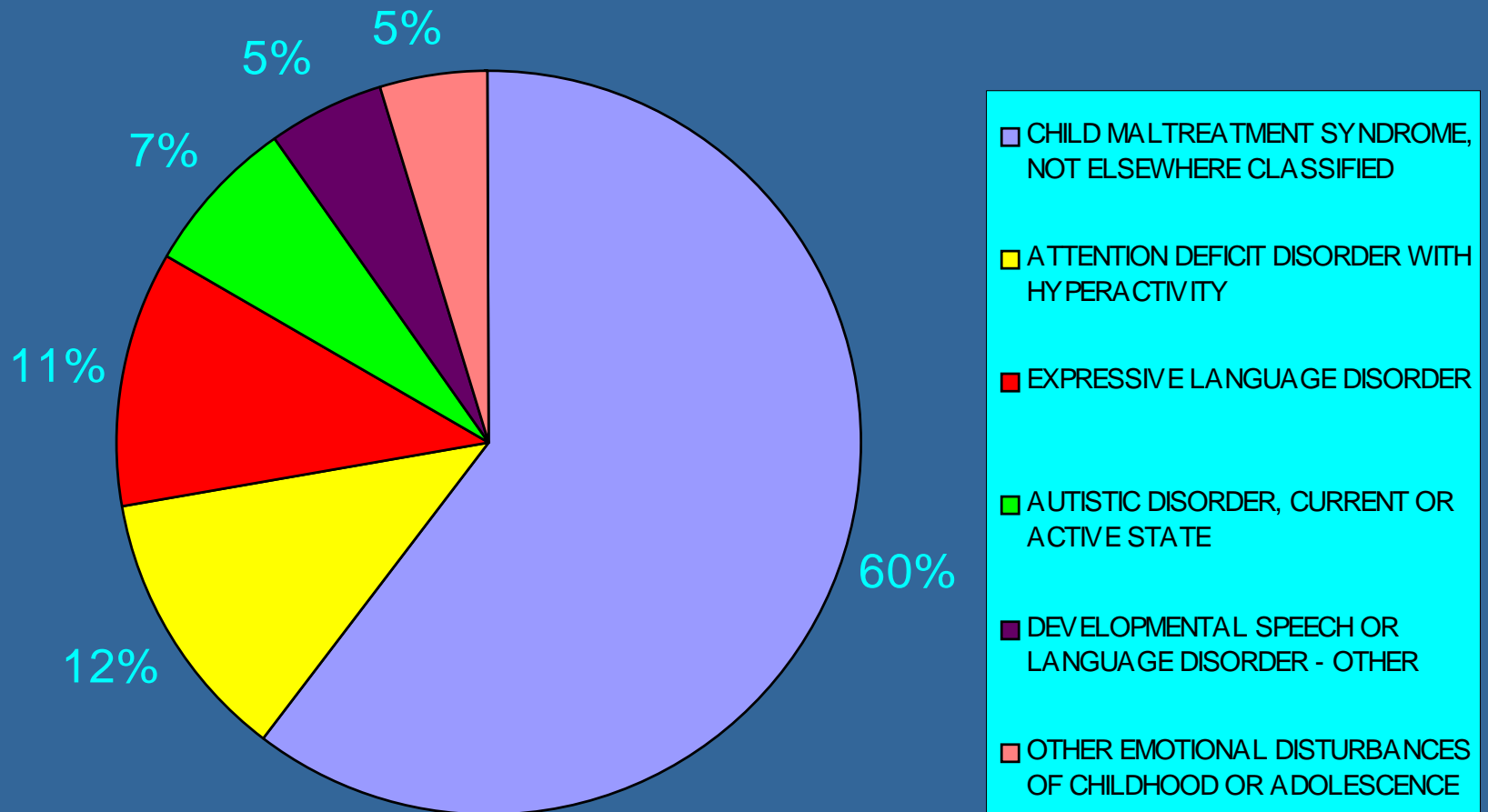
- Other Antidepressants



# Initial Findings

- Other medications of interest
  - 135 patients received *Strattera (atomoxetine)*
  - 29 patients received other ADHD drugs
    - 16 patients received methylphenidate
    - 20 patients received *Concerta or Metadate (methylphenidate SR)*
  - 1 patient received lithium
  - 54 patients received anticonvulsants (typically used for mood disorders)
  - 5 patients received buspirone

# Initial Findings—Diagnosis

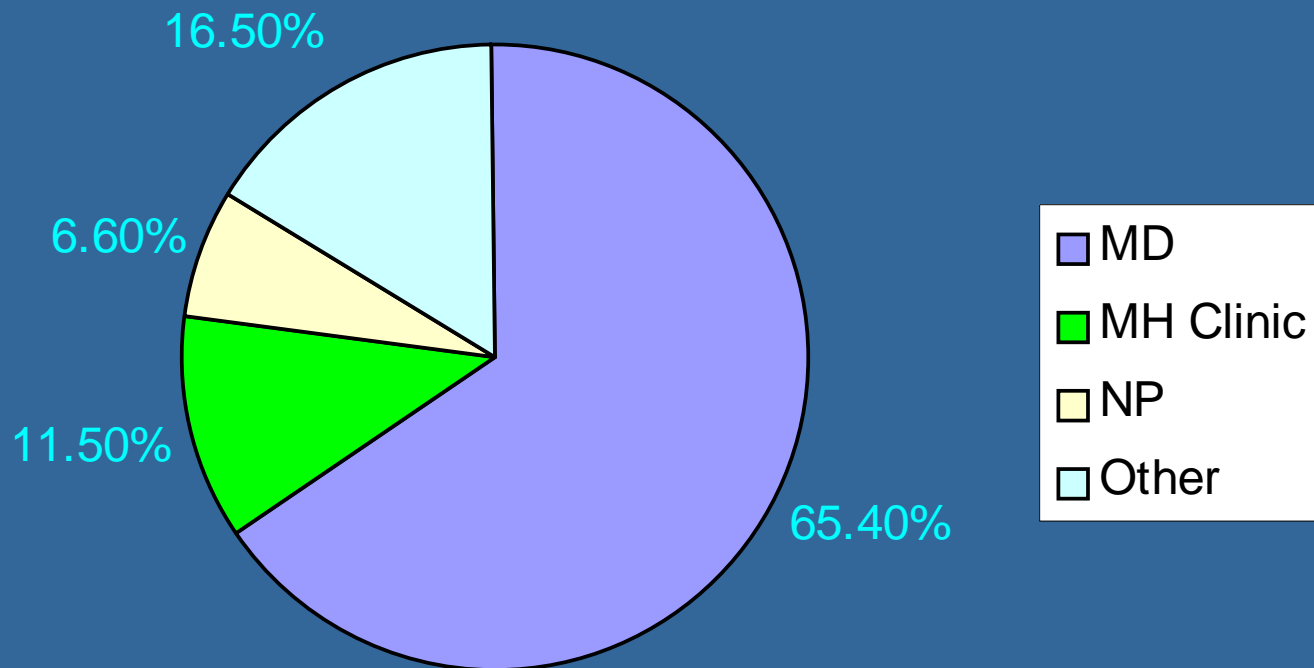


## Initial Findings—Prescribing Providers

- There were 134 unique prescribing providers
- 89% had < 3 targeted patients
- 3% had > 9 targeted patients

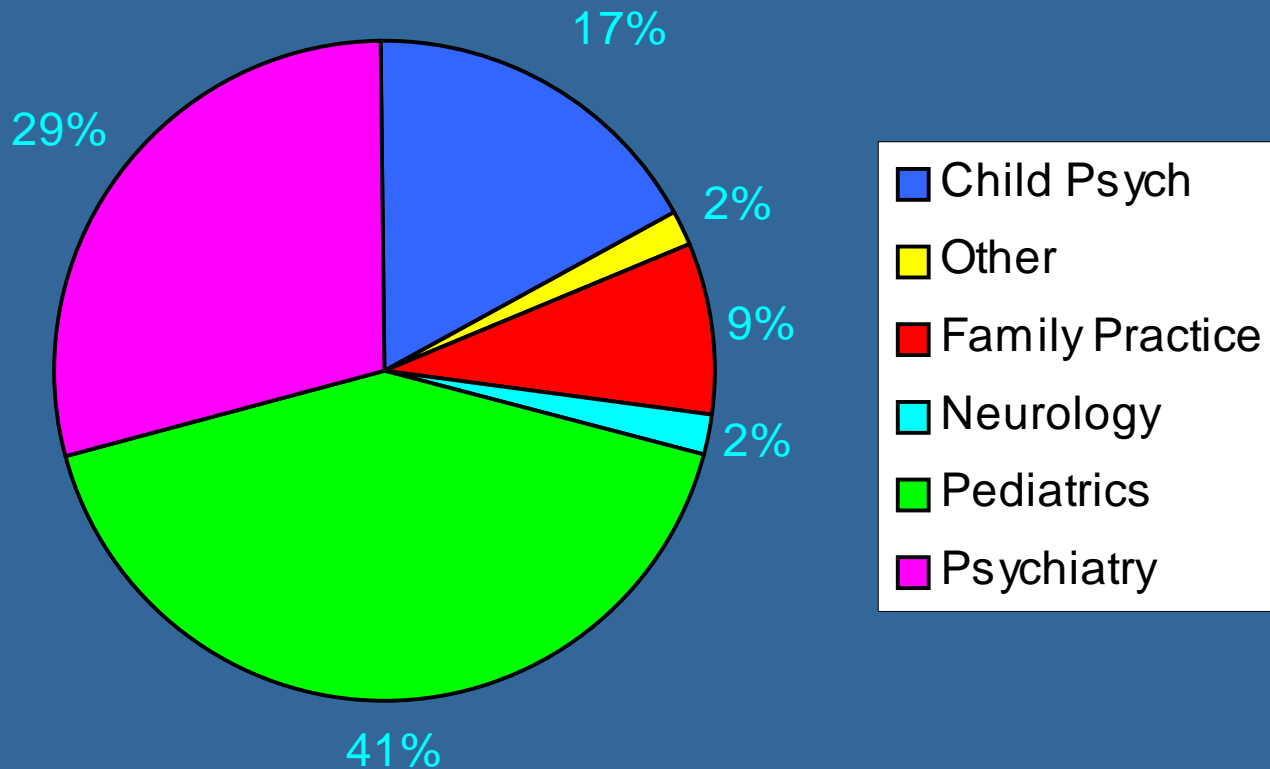
# Initial Findings—Prescribers

- Prescriber Type



# Initial Findings—Prescribers

- Prescriber Specialty



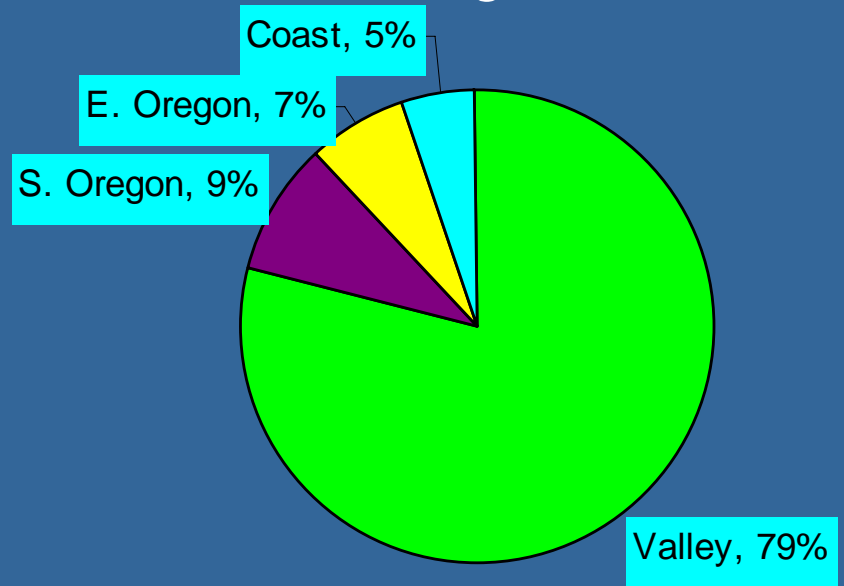
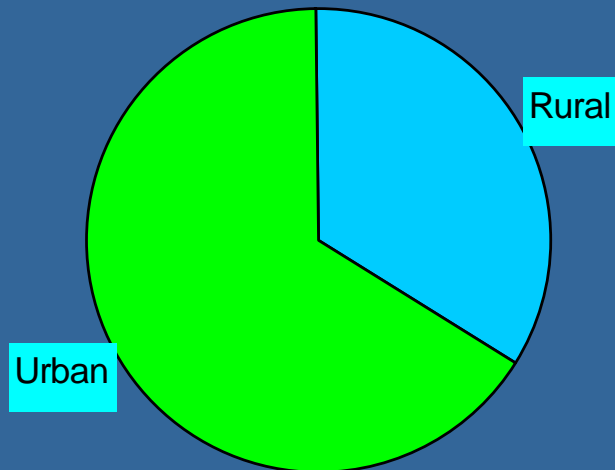
# Initial Findings—Prescribing Providers

- Prescriber Specialty
  - 41.5% of claims written by a pediatrician
  - 29.4% of claims written by a psychiatrist
  - 17.1% of claims written by a child psychiatrist
- 42% of all claims were written by a non-specialist
  - 26% of all identifiable claims were written by a non-specialist

# Initial Findings—Geographic Distribution of Patients

- Geographic Location

- 65% of prescribing providers were from Multnomah, Lane, Marion, and Washington counties



# Preliminary Conclusions

- Despite limited evidence, there seem to be many preschool children receiving an antipsychotic or antidepressant medication.
- We do not know whether these prescribing practices are diagnostically justifiable, effective, or safe.

# Future Study

- Look at comparison group data (from 2000) to generate prescribing trends.
- Other questions of interest include:
  - Overall and psychiatric medication poly-pharmacy
  - Duration of treatment and rate of switching
  - Type of enrollment
  - Diagnostic information
  - Other utilization patterns

# Subsequent Interventions

- Prescribing provider profiling
- Prescribing provider education
  - Academic detailing
  - Diagnostic and treatment assessment tools
- Recommendation of non-pharmacological treatments, e.g., developmental, family, social, and environmental interventions